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**Easter Tulloch Wind Farm,
Laurencekirk, Aberdeenshire**

Cultural Heritage

CFA ARCHAEOLOGY LTD

The Old Engine House
Eskmills Business Park
Musselburgh
East Lothian
EH21 7PQ

Tel: 0131 273 4380

Fax: 0131 273 4381

email: info@cfa-archaeology.co.uk

web: www.cfa-archaeology.co.uk

Author	Mhairi Hastie BSc MSc FSA Scot MIfA
Illustrator	
Editor	
Commissioned by	Engena
Date issued	July 2011
Version	
OASIS Reference	cfaarcha1-140995
Planning Application No.	
Grid Ref	NO 762 721

This document has been prepared in accordance with CFA Archaeology Ltd
standard operating procedures.

**Easter Tulloch Wind Farm,
Laurencekirk, Aberdeenshire**

Cultural Heritage

10 CULTURAL HERITAGE

10.1 INTRODUCTION

- 10.1.1 This chapter evaluates the effects of the proposed development on cultural heritage interests. The assessment was undertaken by CFA Archaeology Ltd (CFA), taking into account comments and information provided by Historic Scotland (HS) and Aberdeenshire Council Archaeology Service (ACAS).
- 10.1.2 The assessment was conducted in accordance with the Institute for Archaeologist Code of Conduct (IfA 2010), and Standard and Guidance for Archaeologist Desk-based Assessment (IfA 2008). The specific objectives of the cultural heritage study were to:
- Identify the cultural heritage baseline through desk-based assessment and walk-over reconnaissance field survey;
 - Consider the development in terms of its archaeological and historic environment potential; and
 - Assess the potential and predicted effects of the development on the baseline cultural heritage resource, within the context of relevant legislation and planning policy guidelines.
- 10.1.3 The assessment evaluates the effects of the proposed development on Scheduled Monuments and other archaeological features including Listed Buildings and other buildings of historic or architectural importance, Conservation Areas and Gardens and Designed Landscapes.
- 10.1.4 Figure 10-1 depicts the proposed development area and the locations of cultural heritage sites and features identified by the assessment within the proposed development area. Appendix 12.1 provides a gazetteer of these sites and features and an indication of the relative sensitivity of each.
- 10.1.5 Figure 10-2 shows the development in its wider landscape setting with the zones of theoretical visibility (ZTV) and the locations of key cultural heritage receptors within 10 km of the development that have theoretical views of the turbines, based on the ZTV, and Appendices 10.2 and 10.3 provide a summary of the predicted indirect effects, on a site by site basis.

10.2 STUDY AREA

- 10.2.1 The cultural heritage study area consists of two parts:
- full desk-based assessment and field reconnaissance survey was undertaken on the proposed development area (Figure 10-1). A wider study area, extending to 10 km centred on the proposed turbines provided the study area for the identification of sites with statutory protection (and those with national and regional non-statutory designations) whose settings (indirect effects) may be affected by the proposed development (Figure 10-2).

10.3 PLANNING POLICY AND LEGISLATIVE BACKGROUND

- 10.3.1 The assessment was conducted with reference to the relevant statutory and planning framework for cultural heritage. Legislation includes the Ancient Monuments and Archaeological Areas Act 1979, the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 and the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008. The primary planning guidance comprises the Scottish Historic Environment Policy document (SHEP), Scottish Planning Policy (SPP)

(February 2010), PAN 42 at national level and at the regional and local level, the Aberdeen City and Shire Structure Plan August 2009 and the Aberdeenshire Local Plan (adopted 2006).

National legislation and policy

10.3.2 Scotland's historic environment contributes to the Scottish Government's strategic objectives and to the target of improving the state of Scotland's historic buildings, monuments and environment and is identified as a national indicator and target under the National Performance Framework. The SHEP sets out Scottish Minister's policies for the historic environment and provides policy direction for Historic Scotland and a framework that informs the day-to-day work of a range of organisations that have a role and interest in managing Scotland's historic environment. Through the implementation of the SHEP, Scottish Ministers wish to achieve three outcomes for Scotland's historic environment:

- That the historic environment is cared for, protected and enhanced for the benefit of current and future generations;
- To secure greater economic benefit from the historic environment; and
- That the people of Scotland and visitors value, understand and enjoy the historic environment

10.3.3 Cultural heritage resources include sites with statutory and non-statutory designations as defined in SPP.

10.3.4 Sites with statutory designations include:

- Scheduled Monuments;
- Listed Buildings;
- Conservation Areas; and
- Designated Wrecks.

10.3.5 Sites with non-statutory designations include:

- World Heritage Sites;
- Gardens and Designed Landscapes;
- Historic Battlefields; and
- Other Historic Environment Interests.

10.3.6 Those relevant to this assessment are Scheduled Monuments and other archaeological features, Listed Buildings and other buildings of historic or architectural importance, Conservation Areas, and Gardens and Designed Landscapes.

Sites with statutory designations

Scheduled Monuments

10.3.7 Under the Ancient Monuments and Archaeological Areas Act 1979 (1979 Act), the Scottish Ministers are required to compile and maintain a schedule of monuments considered to be of importance. The consent of the Scottish Ministers is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Monument. In addition, effects of proposed development works upon the setting of a Scheduled Monument form an important consideration in the granting or refusal of planning consent to conduct development works. Further information on development control procedures relating to Scheduled Monuments is provided in the SHEP, SPP and in PAN 42.

Listed buildings

- 10.3.8 Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (1997 Act), the Scottish Ministers are required to compile a list of buildings of special architectural or historic interest. Such buildings are classified into Categories A, B and C(s), in decreasing order of importance. Planning authorities and the Scottish Ministers are required to have special regard for the desirability of preserving Listed Buildings and their settings and any features of special architectural or historic importance they possess.

Conservation areas

- 10.3.9 Under the Planning (Listed Buildings and Conservation Areas) Scotland Act (1997 Act), areas of special architectural or historic interest can be designated by local authorities as Conservation Areas, the character or appearance of which it is desirable to preserve or enhance. Planning authorities are required to consider planning applications affecting the appearance, character or setting of Conservation Areas.

Sites with non-statutory designations

Gardens and Designed Landscapes

- 10.3.10 The impact of a development on a designated Garden or Designed Landscape listed in 'An Inventory of Gardens and Designed Landscapes in Scotland or its Supplements' (Inventory; published by Historic Scotland) is a material consideration in the determination of a planning application, although the designation is non-statutory in effect. Under the provisions of the Town and Country Planning (General Development Procedure) (Scotland) Order 1992 (1992 Order), planning authorities must consult Historic Scotland on any development that may affect a site contained in the Inventory.

Other historic environment interests

- 10.3.11 There is a range of other non-designated archaeological sites, monuments and areas of historic interest, including battlefields, historic landscapes, other gardens and designed landscapes, woodlands and routes such as drove roads that do not have statutory protection. Sites without statutory protection are curated by the local planning authority and SPP and PAN 42 provide national planning policy guidance and advice on the treatment of such resources.

Regional policy

- 10.3.12 The following sections set out the relevant planning policies covering the Local Authority area. Current Regional and Local planning guidance is provided in Aberdeen City and Shire Structure Plan (Adopted 2009), North East Scotland together: Aberdeen & Aberdeenshire Structure Plan 2001-2016 (Adopted 2009), and the Aberdeenshire Local Plan (Adopted 2006).

Aberdeen City and Shire structure plan

- 10.3.13 One of the main aims of the structure plan is to protect and improve the regions valued assets and resources, including the built and natural environment and cultural heritage. The objective is to make sure new development maintains and improves the region's important built, natural and cultural assets to make sure that development improves and does not lead to the loss of, or damage to, built, natural or cultural heritage assets.

North East Scotland Together: Aberdeenshire & Aberdeenshire Structure Plan 2010-2016

- 10.3.14 The structure plan seeks to promote, protect and enhance the rich and varied environment of the North East, giving special protection to international, national and locally designated sites of environmental importance and to foster the natural and built heritage as a whole.
- 10.3.15 Policy 20 states that the built heritage of the North East will be conserved and promoted as a valuable non-renewable resource, and that enhancement, active use, conservation and access to the built heritage should be encouraged wherever possible. The local plans should include policies which:
- Protect the integrity and setting of listed buildings and Scheduled Monuments;
 - Protect other archaeological sites and archaeologically sensitive areas. Where this is not feasible, proper recording and analysis shall take place; and
 - Protect and enhance conservation areas, historic gardens, designed landscapes, town centres and other historic features of value.

Local policy

Aberdeenshire Local Plan (Adopted 2006)

- 10.3.16 The local plan sets out detailed guidance for new development in Aberdeenshire. It conforms to the North East Scotland together: Aberdeen and Aberdeenshire Structure Plan which sets out broader guidance in both Aberdeen and Aberdeenshire, together they form the Development Plan for the region.
- 10.3.17 Policy ENV\17 states that all designated Conservation Areas shall be protected against any development that would have a detrimental effect on their special character or setting by the refusal of planning permission or conservation area consent.
- 10.3.18 Policy ENV\18 states that all Listed Buildings or structures contained in the statutory list of Buildings of Special Architectural or Historic Interest for Aberdeenshire shall be protected against any works which would have a detrimental effect on their listed character, integrity or setting by the refusal of listed building consent and/or planning permission.
- 10.3.19 Policy ENV\19 states that development which would have an adverse effect on an ancient monument or other archaeological site of either national or local importance or on their settings, will be refused unless:
- There are imperative reasons of overriding public interest, including those of a social, environmental or economic nature; and
 - There is no alternative site for the development.
- 10.3.20 When development is approved, satisfactory steps must be taken to mitigate adverse development impacts, at the developer's expense. Similarly, when development is approved and the preservation of the site in its original location is not possible, the excavation and recording of the site will be required in advance of development, at the developer's expense. Where there is doubt, the developer may be required to provide further information on the nature and location of the archaeological feature(s) involved prior to determination of the planning application.

Aberdeenshire Local Development Plan 2010 (Consultation Draft)

- 10.3.21 The proposed new local development plan will set out the ground rules for the development of land under the land use planning acts. The main purpose of the plan will be to set out statements of the policies the Aberdeenshire Council will use for assessing planning applications. In the proposals the plan will also confirm the principle of development on sites across Aberdeenshire.

10.3.22 Draft Policy 13 covers protecting, improving and conserving the historic environment and currently states that the Council will support the protection, improvement and conservation of the historic environment. There will be a presumption against development that would have a negative effect on the quality of these historic assets. It is proposed that detailed policies will be brought forward as Supplementary Planning Guidance.

10.4 METHODOLOGY

Data collection

Consultation

10.4.1 Consultation was undertaken with Historic Scotland and ACAS (Table 12-1).

Table 10.1 Summary of consultation responses

Consultee	Issues raised	Response
Historic Scotland Scoping Response 14 th April 2010	Advised that at this stage (based on an eight wind turbine scheme) they have serious concerns about the potential significant adverse effect from the proposed development on the setting of the Cairn of Shiels, cairn (5315) Scheduled Monument.	The proposed development was reduced from eight turbines to three turbines. The indirect effect of the proposed development on the site is assessed in Section 10.7. Wireframes are provided as requested.
	HS indicated that they had concerns about the potential significant effect of the proposed development on the settings of five additional sites: <i>Scheduled Monument</i> Cairn of Arthurhouse (3339) Erskine’s Knap, burial mound (5168) Tower of Johnston, cairn and tower (6435) <i>Category A Listed Building</i> Arbuthnott House (2880) <i>Garden and Designed Landscape</i> Arbuttnott House GDL	The indirect effect of the proposed development on the sites are assessed in Section 10.7. Wireframes are provided as requested.
Historic Scotland: Consultation with Atmos 23rd February 2011	Historic Scotland welcomed the reduction of the proposed development to three turbines and indicated that they would not be likely to object to a three turbine development at this location.	No further response is required.
	Recommended that there is likely to	The indirect effect of the

	<p>be a significant effect on the setting of a number of Scheduled Monuments in the wider landscape, and requested that the effects of the proposed development on these monuments should be assessed in the ES.</p>	<p>proposed development on the sites is assessed in Section 10.7.</p>
<p>Aberdeenshire Council Archaeology Service (ACAS) 23rd March 2011</p>	<p>Advised that the surrounding area has had considerable significance in the prehistoric period, which is reflected by the considerable number of prehistoric sites including burial cairns and settlement sites, as well as large areas of rig and furrow cultivation.</p>	<p>No further response required.</p>
	<p>Noted that there are three known burial cairns in the immediate vicinity of the proposed development, one of which is a Scheduled Monument, Cairn of Shiels cairn (5315). The nearest turbine to the Scheduled Monument would lie approximately 340 m away, while one of the other two cairns would lie even closer to another turbine. Taking this into consideration the Council advised that the effect of the proposed development on the setting of these cairns would be in their opinion significant.</p>	<p>The indirect effect of the proposed development on the sites is assessed in Section 10.7.</p>
	<p>Noted that CFA Archaeology had carried out an archaeological programme of work for the nearby Hill of Tullo wind farm in 2009 and uncovered a number of prehistoric features and artefacts, including Neolithic pottery. In addition Murray Archaeology maintained an archaeological watching brief during the excavation of a cable trench for SSE on the west side of Cairn of</p>	<p>No further response is required.</p>

	Shiels but no archaeological remains or features were uncovered.	
	Advised that considering there are two wind farms in the area and another two proposed the ES should consider the cumulative effect of the proposed development in combination with other schemes on cultural heritage sites in the vicinity.	The cumulative effect of the proposed development is assessed in Section 10.8

Desk based assessment

- 10.4.2 Details of the locations and extents of Scheduled Monuments, Listed Buildings, Garden and Designed Landscapes were downloaded from the HS Spatial Data Warehouse (<http://hsewsf.sedsh.gov.uk/gisdl.html>). Additional information was provided on known archaeological sites and features within the proposed development area from the Aberdeenshire Scottish Monuments Record (SMR). The data was provided in digital format.
- 10.4.3 Information on the character and condition of known archaeological sites and features within the proposed development area was obtained from the National Monuments Record of Scotland (NMRS) resource maintained by the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS) and HS, or from the SMR records as appropriate.
- 10.4.4 Ordnance Survey maps and other early maps held by the map library of the National Library of Scotland were examined to provide information on sites of potential archaeological significance and historic land-use development.
- 10.4.5 An assessment was made of vertical aerial photograph collections held by the RCAHMS. Sorties dating from 1946 to 1988 were available for examination.
- 10.4.6 Bibliographic references were consulted to provide background and historical information.
- 10.4.7 The online Historic Land-Use Assessment for Scotland (HLAMap) (<http://www.rcahms.gov.uk>), maintained by the RCAHMS, was consulted for information on the historic land use character of the proposed development area.
- 10.4.8 The Scottish Palaeoenvironmental Database (SPAD) (<http://www.geo.ed.ac.uk/spad>), which records the distribution of known palaeoenvironmental sites across Scotland, was consulted for information on palaeoenvironmental data within or adjacent to the proposed development area.

Field survey

- 10.4.9 A reconnaissance field survey was undertaken (5th April 2011) across the whole of the proposed development area (Figure 10-1) with the following aims:
 - To assess the present baseline condition of the known archaeology and cultural heritage features identified through the desk-based assessment.
 - To identify any further features of cultural heritage interest not detected from the desk-based assessment and to identify areas with the potential to contain currently unrecorded, buried archaeological remains.
- 10.4.10 Site locations were recorded using a Global Positioning System (GPS). The grid references provided are accurate to approximately +/- 10 m. No intrusive archaeological interventions have been carried out as part of this assessment.

10.4.11 Field visits to key cultural heritage receptors was also carried out on the same day to assess the character and sensitivity of the settings of cultural heritage receptors within 10 km of the proposed development, and to assess the effects of the proposed development on those settings. Site visits focused on cultural heritage sites most likely to receive significant effects on their settings (i.e. those closest to the development area and those specifically identified as requiring assessment by Historic Scotland). Factors considered included the location and orientation of the site; important views of or from principal facades; the importance, if applicable, of designed settings, and any obvious views or vistas.

Assessment methodology

Assessing significance

10.4.12 The effects of the proposed development on cultural heritage assets are assessed on the basis of their type (direct, secondary, indirect, cumulative), nature (beneficial, neutral or adverse), and longevity (reversible, short-term or long-term; irreversible, permanent). The assessment takes into account the sensitivity of the receptor and the magnitude of effect. Mitigation measures designed to prevent, reduce or offset significant adverse effects are proposed, and residual effects are assessed taking into account the likely effectiveness of the mitigation proposed.

10.4.13 The assessment of sensitivity of archaeological and heritage assets has been determined from the relative weight given to them in SPP and SHEP. Table 10.2 summarises the relative sensitivity of key cultural heritage resources.

Table 10.2 Sensitivity of cultural heritage assets

Sensitivity	Definition / Criteria
High	Sites of national and international importance, including: World Heritage Sites. Scheduled Monuments and sites proposed for scheduling. Undesignated archaeological sites and areas of likely national importance identified in HERs / SMRs. Category A Listed Buildings. Gardens and Designed Landscapes (Inventory sites). Outstanding Conservation Areas. Designated Wreck Sites.
Medium	Sites of regional importance, including: Archaeological sites and areas of distinctive regional importance. Archaeologically Sensitive Areas. Category B Listed Buildings. Conservation Areas. Non-Inventory Designed Landscapes.
Low	Sites of local importance, including: Archaeological sites of local importance. Category C(S) Listed Buildings. Unlisted historic buildings and townscapes with local (vernacular)

Sensitivity	Definition / Criteria
	characteristics.
Negligible	Sites of little or no importance, including: Sites of former archaeological features. Unlisted buildings of minor historic or architectural interest. Poorly preserved examples of particular types of features.

Assessment of direct effects

10.4.14 Criteria for assessing magnitude of a direct effect, which measures the degree of change to the baseline condition of a feature that would result from the construction of one or more element of the proposed development, are presented in Table 10.3.

Table 10.3 Magnitude of direct effects

Magnitude	Definition
High	A fundamental change to the baseline condition of the receptor, leading to total or major alteration of character
Medium	A material, partial alteration of character.
Low	Slight detectable alteration of the baseline condition of the receptor.
Imperceptible	A barely distinguishable change from baseline conditions.

10.4.15 The sensitivity of the receptor and the magnitude of the predicted effect are used to inform the professional judgment of the likely significance of the direct effect. Table 10.4 summarises the criteria for assigning significance of a direct effect. Major and moderate direct effects are considered to be significant in terms of the EIA Regulations. Where a direct effect on a feature is likely the assessment will contain a summary statement of the 'cultural significance' of that feature (following the guidance defined in Annex 1 of SHEP).

Table 10.4 Significance of direct effects

Magnitude of Effect ▼	Sensitivity of Receptor ►			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Imperceptible	Minor	Negligible	Negligible	Negligible

Identification of external receptors and characterisation of their setting

10.4.16 The setting of a heritage site, feature or area is defined as 'the immediate and extended environment that is part of, or contributes to, its significance and distinctive character'

(International Council on Monuments and Sites (ICOMOS) 2005). Beyond the physical and visual aspects, the setting includes interaction with the natural environment; past or present, social or spiritual practices, customs, traditional knowledge, use or activities and other forms of intangible cultural heritage aspects that created and form the space as well as the current and dynamic cultural, social and economic context. In HS's recent guidance document 'Managing Change in the Historic Environment: Setting 2010 it is noted that 'setting can be thought of as the way in which a historic structure's surroundings contribute to how it is experienced, understood and appreciated'.

- 10.4.17 Current HS guidance (2010) notes that the setting of a receptor could be affected by the introduction of a new development into its surroundings, even if that new development will not be directly visible from the receptor. The setting of a site often extends beyond the property boundary, or 'curtilage', of an individual historic asset into a broader landscape context and can include other, less tangible factors.
- 10.4.18 Details of previously recorded cultural heritage sites, monuments and landscape features with statutory and non-statutory designations, undesignated archaeological sites of likely national importance, within the landscape surrounding, the proposed development area were obtained. A Zone of Theoretical Visibility (ZTV) map, generated for the proposed development, was used to identify those cultural heritage receptors within 10 km of the proposed development from where there is theoretical intervisibility with one or more wind turbine. Beyond 10 km it is considered that the three proposed turbines would not be a dominant feature in the surrounding landscape and that the effect on the setting of heritage assets, beyond 10 km, would not be significant.
- 10.4.19 The baseline setting of each relevant receptor or related group of receptors was then characterised on a case-by-case basis. Characterisation of setting of a receptor was based upon its properties and location and took into account the factors identified in the guidance issued by HS (2010). The baseline setting of each receptor was characterised principally in terms of the:
- Archaeological / historical context of the receptor;
 - Current landscape and visual surroundings of the receptor;
 - Aesthetic and experiential properties of the receptor within its surroundings; and
 - Social value (actual or potential) of the receptor as a recreational / leisure or educational resource.
- 10.4.20 The outcome of this work was an understanding, involving the application of professional judgement, of the key characteristics that define the setting of each receptor.

Assessment of effects on setting (indirect effects)

- 10.4.21 For each receptor where a potential effect on setting has been identified, the assessment of possible effects adopts a four-stage approach:
- Identification of the characteristics of the setting of the receptor;
 - Assessment of the sensitivity of that setting;
 - Identification of how the presence of the proposed development would affect that setting (magnitude of effect); and
 - Assessment of significance of effect.

Criteria for assessing sensitivity of setting

- 10.4.22 Sensitivity of setting has been assessed by considering two factors:
- The relative weight which statute and policy attach to the receptor and its setting; and

- The degree to which the baseline setting contributes to the understanding and/or appreciation and, hence value of the receptor.
- 10.4.23 The relative weight that statute and policy attach to the receptor and its setting is determined using the sensitivity of archaeological and heritage resources set out in Table 10.2. Where individual designated receptors are present within larger designated areas (e.g. Listed Buildings within a Conservation Area; the sensitivity is stated as the higher of the two designations).
- 10.4.24 The degree to which the baseline setting contributes to the understanding and/or appreciation of the receptor has been assessed according to the criteria set out in Table 10.5.

Table 10.5 Contribution of setting to understanding and appreciation of a cultural heritage receptor

Contribution	Definition
High	A setting which makes a strong positive contribution to the understanding and/or appreciation of the siting and/or historical/archaeological/architectural context of a receptor. (e.g. a prominent topographic location; surroundings that include related monuments in close association; surroundings that are believed to be little changed from those when the receptor was created).
Moderate	A setting which makes some positive contribution to the understanding and/or appreciation of the siting and/or historical/archaeological/architectural context of a receptor. (e.g. surroundings that complement the siting and appearance of a receptor, such as the presence of a feature of the rural past within a more recent farming landscape containing little or no urban or industrial development).
Low	A setting which makes little positive contribution to the understanding and/or appreciation of the siting and/or historical/archaeological/architectural context of a receptor. (e.g. where surroundings only partially complement the siting and appearance of a receptor, such as the presence of a feature of the rural past within a partly urbanised or industrialised landscape).
Negligible	A setting which does not contribute positively to the understanding and/or appreciation of the siting and/or historical/archaeological/architectural context of a receptor. (e.g. immediate surroundings such as, of a commercial coniferous single species woodland or industrial development, that are not relevant to understanding the context of the receptor).

- 10.4.25 These two criteria (sensitivity of receptor and contribution to setting) are combined to assess the overall sensitivity of a setting, as set out in Table 10.6.

Table 10.6 Sensitivity of setting of a receptor

Sensitivity of Receptor ▼	Contribution of Setting ►			
	High	Moderate	Low	Negligible
High	High	High	Medium	Low
Medium	High	Medium	Low	Low
Low	Medium	Low	Low	Low

Identification of magnitude of effect on setting

- 10.4.26 Where it has been established that the setting of a receptor is such that there is no potential for it to be affected by the presence of the development, the receptor will not be considered further in the assessment. Examples may occur where the setting of a receptor is localised and does not include the development area or, the setting of a cultural heritage asset may not include all land visible from the asset, since distant views alone are not necessarily sufficient to raise concerns about adverse effects on setting.
- 10.4.27 For the remaining sites, the magnitude of effect on setting has been assessed according to the thresholds in Table 10.7.

Table 10.7 Magnitude of effects on setting

Level of Magnitude	Definition
High	Fundamental effects obviously changing the surroundings of a receptor, such that its baseline setting is substantially or totally altered
Medium	Effects discernibly changing the surroundings of a receptor, such that its baseline setting is partly altered.
Low	Slight, but detectable effects that do not alter the baseline setting of the receptor materially
Imperceptible	A very slight and barely distinguishable change from baseline conditions.

Assessment of effect significance

- 10.4.28 The significance of an effect on setting depends on both the magnitude of the effect and the sensitivity of the setting of the receptor. Table 10.8 presents a matrix that has been used to inform the assessment in combination with professional judgment

Table 10.8: Significance of effects on setting

Magnitude of Effect	Sensitivity of Setting
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High	High	Medium	Low
Medium	Major	Major	Minor
Low	Minor	Minor	Negligible
Imperceptible	Negligible	Negligible	Negligible

1) A non-material change to baseline conditions cannot by its nature lead to a significant effect. A significant effect arises from a material change to baseline conditions. This distinction explains why this particular significance assessment finding is not 'moderate'

Assessment of effect significance

10.4.29 Significance of effects is classified as major, moderate, minor or negligible, as defined in Table 10.9. Major and moderate effects are considered significant in accordance with the EIA Regulations.

Table 10.9 Significance criteria

Level of Magnitude	Definition
Major	A change to the fabric or setting that leads to a substantial effect on the character, quality or context of a receptor.
Moderate	Changes to the fabric or setting that lead to a material effect on the character, quality or context of a receptor.
Minor	Changes to the fabric or setting that lead to a detectable but non-material change effect on the character, quality or context of a receptor.
Negligible	Changes to the fabric or setting that lead to, at most, a negligible effect on the character, quality or context of a receptor.

10.5 BASELINE CONDITIONS

Cultural heritage assets within the survey area

10.5.1 Two sites of cultural heritage interest and areas of former rig and furrow cultivation have been identified within the proposed development area. Appendix 10.1 provides a detailed gazetteer of information on the character and baseline condition of each site identified by the study. Numbers in brackets, in the following sections, refer to site numbers identified on Figure 10-1 and listed in Appendix 10.1.

10.5.2 There are no Scheduled Monuments or Listed Buildings within the proposed development area and no part of the proposed development would lie within a Conservation Area or Garden and Designed Landscape.

10.5.3 The NMRS and Aberdeenshire Council SMR contain records for one burial cairn (1) and possible remains of hut-circles (2), along with former areas of rig and furrow remains (shown in light brown on Figure 10-1), recorded from past aerial photographs, within the proposed development area.

- 10.5.4 Examination of historical maps provided additional information on the sites and features recorded in the NMRS and SMR.
- 10.5.5 Examination of aerial photographs provided additional information on the extent of former rig and furrow remains recorded by the NMRS and SMR.
- 10.5.6 The Scottish Palaeoenvironmental Database (SPAD) provided no relevant information specific to the proposed development area.
- 10.5.7 Field reconnaissance survey (5th of April 2011) allowed the character and condition of the sites located through desk-based assessment to be assessed and identified. No further sites or features were recorded. .
- 10.5.8 Consultation of the HLAMap indicates that the proposed development area consists principally of 19th-20th century rectilinear fields surrounding the farms at Shiels Croft and The Shiels, along with areas of moorland on the upper slopes of the Cairn of Shiels, parts of which have been enclosed to form rough grazing fields during the late-20th century

Character of the cultural heritage within the study area

- 10.5.9 A summary is of the character of the cultural heritage sites within the proposed development area (Figure 10-1) is provided below. Detailed information on the character and baseline condition of the individual sites and feature are provided in Appendix 10.1.

Prehistoric features

- 10.5.10 The remains of one possible Bronze Age burial cairn (1) are present on the upper slopes of Cairn of Shiels, within the southern half of the proposed development area. The cairn lies in an area or former moorland that has been enclosed during the late-20th century and ploughed to improve the land for animal grazing. It is much denuded and survives only as a low-relief feature. It is completely turf covered and the eastern side has been disturbed by a later farm access track. Two modern post and wire fences also run across the eastern half of the cairn, running along either side of the farm track. As the cairn is not well-preserved or unusual for the period it represents, individually, it is considered to be of local importance and low sensitivity. However, the monument forms part of a small cluster of burial cairns recorded on the upper slopes of Cairn of Shiels, including the well-preserved Cairn of Shiels burial cairn (5315), which is a Scheduled Monument and collectively these sites may be regarded as of regional importance.
- 10.5.11 The SMR records the possible presence of a number of hut circles (2) along with rig and furrow remains, within an area of improved pasture approximately 600 m to the southeast of Shiels Croft. The hut circles were visible on past aerial photographs but no further details to the extent or location of the features are provided in the SMR. No up-standing hut-circles, other structures or rig and furrow remains were recorded in this area during the field survey; the area having recently been ploughed. The features are of unknown sensitivity; however, if buried remains still survive then they would be considered potentially of local importance and low sensitivity. The actual extent, location, condition and date of any surviving buried remains are presently unknown.

Medieval or later cultivation remains

- 10.5.12 Two further areas of former rig and furrow cultivation are visible on aerial photographs ((1946 & 1993), shown on Figure 10-1 in light brown). The cultivation remains cover the north and northwest facing slopes of Cairn of Shiels, in areas of moorland. Today the moorland has been enclosed and ploughed to create areas of improved pasture grazing and none of the rig and furrow remains survive as surface remains, having been ploughed

away. The areas of former rig and furrow are considered to be of lesser importance and of negligible sensitivity.

Assessment of archaeological potential of the proposed development area

- 10.5.13 The proposed development occupies an area of improved farmland to the east of The Shiels Farm on the northwest facing slopes of Cairn of Shiels ranging between 195 m-260 m AOD. The land-use of the development area has not been substantially changed in recent times and has largely retained the character and field pattern depicted on mid 19th century Ordnance Survey maps. Roy's map (1747-55) depicts the area as open, uncultivated hill ground, while the area is recorded as forming part of 'Common' land on Garden's map (1797) and Thomson's map (1832). Later Ordnance Survey maps indicate that the area was partially enclosed during the 18th and 19th century, particularly the land around the settlements of 'The Shiels' and 'Upperton'; and this land improvement has continued into the 20th century. Today the northern and northwest half of the proposed development area forms a series of improved pasture and arable fields demarcated by modern post and wire fences. While the upper slopes of Cairn of Shiels, which is partially enclosed, are used for grazing.
- 10.5.14 There is evidence of prehistoric activity both within the area: burial cairns (1) on the upper slopes of Cairn of Shiels and hut circles at the northern end of the proposed development area (2), and in the wider landscape. The SMR holds records of prehistoric hut-circles and a burial cairn (SMR Ref: NO77SE0029) 400 m from the eastern boundary of the proposed development, and the NMRS record numerous find-spots of prehistoric artefacts, including a number of barbed and tanged arrowheads and a carved stone ball, (NMRS Ref: NO77SE 23) discovered at Tullo Farm, in the 1970's. Numerous prehistoric funerary remains are also recorded in the wider landscape
- 10.5.15 An archaeological watching brief and subsequent excavation (Kirby 2009) carried out during ground-breaking works for the adjacent Tullo Wind Farm, immediately south of the proposed development, uncovered a cluster of five pits and recovered fragments of prehistoric pottery and a quartz scarper from one of these.
- 10.5.16 Given the large number of prehistoric sites and features recorded in proximity to the proposed development and the historic land-use, it is considered that the potential of as yet, undetected, buried remains and sites to survive within the proposed development area is high. However, taking into account the limited land-take required by the separate elements of the proposed development the probability of encountering hitherto undiscovered sites of archaeological importance during the course of the construction work is judged to be moderate.

10.6 ASSESSMENT OF EFFECTS

- 10.6.1 The assessment of predicted effects has been carried out with reference to the proposed development layout shown on Figure 10-1 and is structured as follows:
- Direct (construction) effects;
 - Indirect (operational) effects; and
 - Cumulative Effects.
- 10.6.2 Where the development infrastructure would potentially affect cultural heritage sites of local or greater importance appropriate mitigation will be proposed to avoid or reduce disturbance (see Section 10.6).

Direct (construction) effects

- 10.6.3 The layout of the wind farm, including the positioning of the turbines, access tracks and other infrastructure elements, was determined through a series of iterative stages to develop the best layout within the context of all environmental and technical constraints. The layout shown on Figure 10-1, therefore, embeds design based mitigation which has ensured that none of the previously identified and recorded features will be significantly directly affected by the construction works.
- 10.6.4 Any ground breaking activities associated with the construction of the proposed development (such as those required for turbine bases and crane hardstandings, access tracks, cable routes, compounds, etc.) have the potential to disturb or destroy features of cultural heritage interest. Other construction activities, such as vehicle movements, soil and overburden storage and landscaping also have the potential to cause direct, permanent and irreversible effects on the cultural heritage.
- 10.6.5 Using the criteria detailed in Tables 10.2 to 10.4, Table 10.10 summarises the predicted direct effects on the cultural heritage sites and features identified by the study within the proposed development area.

Table 10.10 Predicted direct effects on cultural heritage features within the proposed development area

Site no	Site name	Sensitivity of receptor	Predicted effect	Magnitude of effect	Significance of effect
2	Possible hut-circles / former rig and furrow remains	Low	The proposed access track to the development is likely to cross an area previously recorded to contain hut-circles, although the exact location and extent of these features is unknown.	Medium	Minor

Indirect (Operational) effects

- 10.6.6 A list of those external receptors within 10 km of the proposed development area and predicted by the ZTV to have theoretical views to one or more turbines is provided in Appendices 10.2 and 10.3 and their locations are shown on Figure 10-2. Appendices 10.2 and 10.3 provide a summary assessment of the predicted indirect effects on a site-by-site basis.
- 10.6.7 The assessment of the magnitude of effects provided in Appendices 10.2 and 10.3 has been based on the analysis of the blade tip ZTV, taking into account the:
- distance of the assessed site from the proposed wind farm;
 - the number of blade tips visible; and
 - the present baseline setting of each site.
- 10.6.8 The ZTV model is, however, a coarse predictive tool based on bare-earth surface topography and maximum blade-tip heights. It takes no account of obstructions to

intervisibility caused by existing forestry and other vegetation or buildings and other man-made features. Therefore, professional judgement has been used to assess the significance of effects informed by the ZTV and field survey. Sites identified by HS to be specifically assessed in the EIA and those judged to have the most sensitive settings have been assessed in more detail using wireframes (Table 10.11).

Table 10.11: Cultural heritage wireframe viewpoints

Site no	Status	Wireframe no
Cairn of Shields (5315)	Scheduled Monument	Wireframe: Figure 10-3
Tower of Johnston, cairn and tower (6435)	Scheduled Monument	Wireframe: Figure 10-6
Arbuttnott House	Garden and Designed Landscape	Wireframe: Figure 10-7

- 10.6.9 Scheduled Monuments, Category A and B Listed Buildings, Conservation Areas, and Inventory Gardens / Designed Landscapes within 10 km of the proposed development; and Category C(S) Listed Buildings within 5 km of the proposed development are assessed. The limit of the study area has been set taking into account the guidance provided in PAN45: 'Renewable Energy Technologies'.
- 10.6.10 Analysis of the ZTV indicates that there would be theoretical visibility of the turbines from 21 Scheduled Monuments, two of which are also Category B Listed, three Category A Listed Buildings; 53 additional Category B Listed Buildings; 13 Category C(S) Listed Buildings; three Inventory Gardens and Designed Landscapes, and two Conservation Area.
- 10.6.11 The Aberdeenshire Council Archaeologist also requested that the effect of the development on NSR site, hut-circles and cairns (SMR Ref: NO77SE0029), which is considered to be of regional importance, also to be assessed as part of the ES.

General observations

- 10.6.12 The proposed development would stand on the upper slopes of Cairn of Shields approximately 500 m to the east of The Shields Farm and immediately northwest of the operational Tullo Wind Farm. Cairn of Shields is a prominent hill within the landscape just northwest of Laurencekirk and the ZTV indicates that the proposed development would be visible in the wider landscape, particularly in an arc from Muirton of Ballochry, in the southwest, to Drumlithie, in the north; while the natural rising topography of hills to the southeast would limit views of the proposed development from the coast. The proposed wind turbines would be seen together, effectively as one slightly larger wind farm, with the operational Tullo Wind Farm, that lies immediately to the south of the proposed development boundary.

Significant effects

- 10.6.13 No significant effects have been predicted on the setting of any of the cultural heritage receptors in the wider landscape.

Non significant effects

10.6.14 Historic Scotland scoping opinion (14th April 2010) identified six sites over which they had concerns regarding the potential impact on their settings arising from the proposed development. In subsequent consultation (23rd February 2011), following a reduction in the number of proposed turbines, from eight to three, Historic Scotland indicated that they would not be likely to object to a three turbine development at this location. The six sites over which Historic Scotland originally expressed concern are discussed individually below.

Scheduled monuments

Cairn of Shiels, cairn (5315)

10.6.15 The remains of a large burial cairn are situated on the upper slopes of Cairn of Shiels in an area of rough pasture. There are open views to the surrounding landscape in all directions. The existing Tullo Wind Farm is located immediately east of the monument, the closest operational turbines being approximately 200 m from the cairn. The proposed wind turbines would be present as a small additional row immediately north of the operational turbines; being seen as an extension of the existing Wind Farm, with the nearest turbine being approximately 300 m from the cairn. Their presence would result in a slightly wider arc of turbines that would be visible from the cairn to the northeast/east. The presence of the operational Tullo Wind Farm has already affected the setting of the cairn and taken against the current baseline the proposed turbines would only have a minimal effect on the setting of the monument; none of the proposed turbines being closer to the cairn than the nearest Tullo Wind Farm turbines. It is, therefore, assessed that the proposed development would have a low magnitude effect on the setting of the cairn resulting in an effect of minor significance.

Erskine's Knap, burial mound (5168)

10.6.16 No upstanding remains of the burial mound survive today, the area having been substantially ploughed and the monument is only visible as a cropmark site on aerial photographs. The setting of the site, which lies in flat modern farmland to the east of the proposed development, adds little to its value or significance. It is assessed that the proposed development would have no more than an imperceptible magnitude effect of negligible significance on its setting.

Tower of Johnston, cairn and tower (6435)

10.6.17 The substantial remains of a prehistoric burial cairn are located on the summit of Garvock Hill in an area of improved pasture. A 19th century tower or folly has been erected on top of the cairn remains. The tower is a prominent feature in the surrounding landscape and is visible in long distant views from the coast and the A90. Panoramic views are gained from the cairn out to the surrounding landscape in all directions. Such monuments often have intervisibility between similar features in the wider landscape and there are several possible contemporary burial cairns in the surrounding landscape which may have theoretical intervisibility with the monument, for instance Cairn of Shiels cairn (5315), to the northeast, and The Cloch cairn (5143) and Bridgeton Hill cairn (5318), to the east. However, any intervisibility between Cairn of Shiels cairn (5315) and the monument is now screened by intervening woodland shelterbelts.

10.6.18 The proposed development would be present to the northeast of the cairn and tower, the nearest turbine lying approximately 3.6 km away. The proposed turbines would be seen along with the operational Tullo Wind Farm, in the same arc of view, and would appear as only one slightly larger wind farm. Although the proposed turbines would be additional industrial elements in the surrounding landscape, they would be seen as a small extension

of the operational wind farm and it is considered that their presence would have only a minimal affect on the current baseline setting of the cultural heritage features. In addition, the proposed turbines would not be seen in views to the tower from the surrounding landscape. It is assessed that the proposed development would have a low magnitude effect of minor significance on the setting of the cairn and tower.

Cairn of Arthurhouse (3339)

- 10.6.19 This well-preserved prehistoric burial cairn lies 2.3 km to the north northeast of the proposed development. The burial cairn stands in a woodland shelterbelt on the edge of a flat arable field, 300 m west of Thornylea Farm. The cairn is surrounded by trees which are also growing on top of the cairn; nevertheless, the monument is still apparent and can be appreciated in its immediate surroundings. However, the woodland shelterbelt in which the cairn sits limits views out to the surrounding landscape and separates the cairn from its wider landscape context and thus the current setting of the monument adds little to its understanding. Views of the proposed turbines will be limited by the surrounding woodland and their presence will not affect the immediate setting of the cairn; the effect on its setting being of imperceptible magnitude effect and of negligible significance.

Other Scheduled Monuments

- 10.6.20 A further 17 Scheduled Monuments within 10 km of the proposed development are predicted by the ZTV to have theoretical visibility of the turbines.
- 10.6.21 Seven of these are burial cairns dating to the Neolithic (long cairns: 547, 4534) and Bronze Age (round cairns: 4754, 4778, 4820, 5143, 5318). Two additional burial mounds potentially of late prehistoric date are also present (4961, 4996), set within woodland shelterbelts. Many of these monuments are situated on the summit of hills surrounding the proposed development. Such sites tended to have long views out to the surrounding landscape and intervisibility between them. Most of these monuments lie over 6 km from the proposed development. The proposed turbines would be visible as part of the operational Tullo Wind Farm, that lies immediately south of the proposed development, and would not be prominent additional features in the wider landscape. In addition, the proposed turbines would not intervene with intervisibility between the sites. It is assessed that the proposed development would have a minimal effect on the setting of these individual sites; the effects on each being of imperceptible magnitude and negligible significance.
- 10.6.22 A further eight Scheduled Monuments, including: Fordoun homestead (2231); the ruins of Benholm Castle (985) and Kincardine Castle (988); Drumnagair ring enclosure (2834); Green Castle earthworks (4264); a section of the 'Deer Dyke' (7882); St Pallidus Chapel (9723), and the ruins of St Cyrus Old Parish Church (9743), are predicted to have theoretical views of the proposed development. The majority of these sites are situated within woodland/covered by trees and this limits views out to the surrounding landscape. Two sites, St Pallidus Chapel (9723) and St Cyrus Old Parish Church (9743) have enclosed village settings. All have localised settings and the presence of the proposed development would not detract from the appreciation or understanding of these sites. The effect of the proposed development on the setting of these individual sites is assessed as being of imperceptible magnitude and of negligible significance.

Other sites

10.6.23 The remains of two hut circles and a possible burial cairn (NO77SE0029), considered to be of regional importance by ACAS, are situated on an east facing slope above Treehead Farm and approximately 200 m to the east of the proposed development. Little survives of the hut-circles and cairn, which now lie in an improved pasture field that has been substantially ploughed. The features are ephemeral and difficult to distinguish and it is hard to gain an understanding of the layout of the site in its current state of preservation. The site has little aesthetic value. The operational Tullo Wind Farm is visible in close proximity to the features, and although the proposed turbines would be additional industrial elements in the surrounding landscape, they would be seen as a small extension of the operation wind farm. It is considered that their presence would have no additional affect on the current baseline setting of the cultural heritage features. It is, therefore, assessed that the effect of the proposed development on the setting of the hut-circles and cairn is of low magnitude and of negligible significance.

Listed Buildings

10.6.24 The majority of the listed buildings within the study area (principally Category B and Category C(S) Listed Buildings) are principally historical country houses and farm buildings which sit in small designed landscapes or enclosed farmsteads. The setting of these various historic buildings is the group of related farm buildings or the designed landscape of which they are an integral part. The presence of the proposed development would not materially affect those relationships and the character of the landscape in which they lie would remain unaffected. It is assessed that the effects on the settings of these buildings would be no more than of low magnitude and no more than of minor significance.

10.6.25 Other listed buildings within the study area lie within the built up areas of Laurencekirk and Aucehblae. All of the listed buildings in Auchenblae form part of the Conservation Area (discussed below). These buildings all lie in the enclosed settings of the towns; and views from them are concentrated on the surroundings streets; none have extensive views out to the surrounding areas and the architectural qualities of each are appreciated at best at close quarters. In each case the predicted effect is assessed as being of imperceptible magnitude and of negligible significance.

Conservation Areas

10.6.26 Two Conservation Areas within 10 km of the proposed development, Auchenblae and Fettercairn, are predicted by the ZTV to have theoretical visibility of the proposed wind turbines.

10.6.27 Auchenblae Conservation Area is situated approximately 6.8 km to the northeast of the proposed development. The Conservation Area is located to the east of the Luther Water and includes over 70 Listed Buildings, of which the majority are small residential buildings concentrated along and looking out onto the main street of the town. The proposed development would be visible in the far distance from the Conservation Area, visible together with the operational Tullo Wind Farm. At this distance the turbines would not be prominent new elements in the surrounding landscape, being seen as a small addition alongside the operational Tullo Wind Farm and it is assessed that the effect on the setting of the conservation area as a whole would be of imperceptible magnitude and of negligible significance.

10.6.28 Fettercairn Outstanding Conservation Area is clustered around the confluence of the Crichie Burn, Cauldcross Burn and Dowrie Burn, approximately 9.8 km to the west of the proposed development. The Conservation Area contains over 20 Listed Buildings, including the

Category A Listed Market Cross. The majority of listed buildings are small residential properties or shops spread along the main street of the village. At over 9 km away the proposed development would not be a prominent new feature in the landscape being seen as a small addition alongside the operational Tullo Wind Farm. The effect on the setting of the Conservation Area is assessed as being of imperceptible magnitude and of negligible significance.

Garden and Designed Landscapes

- 10.6.29 There are three Inventory Gardens and Designed Landscapes (GDLs), Arbuthnott House, Glenbervie House and Fasque House, within 10 km of the proposed development that are predicted by the ZTV to have visibility of the proposed turbines.

Arbuthnott House GDL

- 10.6.30 Arbuthnott House GDL, comprised of woodland and parkland policies spread over an area of approximately 250 hectares, is situated in the valley of the Bervie Water to the northeast of the proposed development and approximately 4 km from the nearest proposed wind turbine. The GDL forms the setting for several historic buildings and structures, including the North Bridge (31), which is a Category A Listed Building, and Arbuthnott House (2880), Ice House (2881), Sundial (2838), Garden House (2837) and Mains Farm (2839), which are all Category B Listed. The Grampian Mountains are visible in distant views to the west from the GDL; however, views of the immediate surrounding landscape are restricted due to the GDLs valley setting and surrounding estate woodlands. Terraced Gardens are present to the south of Arbuthnott House (2880) and these are open to the public. Views over to parkland policies, to the southwest, enclosed by Birnie Hill and Crow woods form an important backdrop to views from these terraced gardens (Historic Scotland Inventory of Gardens and Designed Landscapes).

- 10.6.31 The proposed development would lie to the southwest of the GDL. The surrounding woodland policies of the GDL and its valley setting restrict views out to the surrounding landscape in that direction and only limited views of the proposed turbines would be visible from the GDL, the turbines being viewed together with the operational Tullo Wind Farm. The proposed turbines would be visible in a small arc, together with the operational Tullo Wind Farm, in views from the estate's northern access road of the roofs of Arbuthnott House and its surrounding woodland policies. From this location the proposed turbines would be seen as a small extension to the operational Tullo Wind Farm. The proposed turbines would not be visible in views from the GDL's terraced gardens over to the woodland policies, which lie to the southeast. Although, the proposed turbines would introduce a new and detectable element in the surrounding landscape their presence would not significantly detract from the GDL as a whole, nor will they affect the relationship of the buildings and other features sited within it. It is assessed that the proposed development would have an imperceptible magnitude effect on the setting of the GDL, resulting in an effect of negligible significance.

Fasque House GDL

- 10.6.32 The GDL lies to the west of the proposed development and just within the 10 km study area. At this distance the proposed development would not be a prominent feature in the surrounding landscape and would not have a significant effect on the setting of the GDL or its associated historic buildings and other structures, including Category A Listed Fasque House, which stand in its woodland policies. The effect of the proposed development on

the designed landscape is assessed as being of imperceptible magnitude and of negligible significance.

Glenbervie House GDL

- 10.6.33 The ZTV indicates that only very limited views of the proposed turbines will be afforded from the north eastern edge of Glenbervie House GDL, which lies over 8 km to the north of the proposed development. None of the historic buildings or other elements of the designed landscape, including Glenbervie House, would have views of the proposed wind turbines and their settings would not be affected. The effect of the development on the designed landscape is therefore assessed as being of imperceptible magnitude and of negligible significance.

10.7 MITIGATION

- 10.7.1 A potential direct impact is predicted where the access track crosses the area of previously recorded hut circles (SMR). Mitigation proposal is set out below to address the possibility of encountering remains during track construction operations. It is likely that there are buried remains of the hut circles and possibly of associated features in this area.
- 10.7.2 Two indirect effects of minor significance are predicted on the settings of the Cairn of Shiels (5315) and Johnston Tower and Cairn (6435). There is no mitigation available to reduce these impacts.
- 10.7.3 The remains of a burial cairn (1) will be visibly marked off during construction work to avoid any accidental damage occurring to the remains during construction activities carried out in close proximity.

Watching Briefs / Evaluation

- 10.7.4 The scope of any watching brief will be agreed in advance of development with the Aberdeenshire Council Archaeologist. This will be set out in the WSI. Site mitigation work may be required along the proposed access track route and at proposed turbine locations, for example.
- A watching brief will be carried out during ground breaking for the proposed access track to the turbines where it crosses and an area containing previously recorded hut-circles (2). The purpose of this watching brief would be to identify and record any surviving remains of the hut-circles or associated features should they be uncovered.

Post-Excavation

- 10.7.5 If significant discoveries are made during archaeological monitoring, provision would be made for the excavation, where necessary, of any archaeological remains encountered. This provision would include the consequent production of written reports on the findings, with post-excavation analyse and publication of the results of the works, where appropriate
- 10.7.6 Written Guidelines will be issued for use by all construction contractors, outlining the need to avoid causing unnecessary damage to sites. That document will contain arrangements for calling upon retained professional support in the event that buried archaeological remains of potential archaeological interest (such as human remains, artefacts etc) should be discovered in areas not subject to archaeological monitoring. The guidance will make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

10.8 RESIDUAL EFFECTS

- 10.8.1 The completion of the programme of archaeological mitigation works set out above would offset the loss of the archaeological resources that will occur as a result of the construction of the proposed development. Taking the mitigation into account, no significant residual effects are anticipated in relation to cultural heritage resources within the proposed development area.
- 10.8.2 There will be no significant effects on the setting of any key cultural heritage assets within the wider landscape; therefore, the proposed development will not have a significant residual effect on the setting of any of these sites.

10.9 CUMULATIVE EFFECTS

- 10.9.1 Cumulative effects on the cultural heritage resource result from changes to the current baseline setting of the resource caused by the proposed development in conjunction with other developments that occurred in the past or are likely to occur in the foreseeable future (Landscape Institute 2002). Figure 10-3 shows the proposed development, the location of cultural heritage receptors from which there would be predicted views of the development, and other schemes included in the cumulative assessment
- 10.9.2 The proposed turbines stand on the upper northwest facing slopes of Cairn of Shiels Hill and immediately west of the operational Tullo Wind Farm, which comprises of seven turbines. The proposed turbines would be visible along with the operational Tullo scheme and would appear as a small extension to the existing wind farm. From all locations the proposed development would always be visible in the context of the Tullo Wind Farm; the developments being seen as one scheme of eleven turbines. Together these developments would have the most effect on the setting of monuments in closest proximity to them, particularly the Cairn of Shiels cairn (5315) which lies immediately south of the proposed development (discussed below).
- 10.9.3 The development would also be visible in combination with other wind farms in the surrounding landscape. In the wider 10 km study area there are three further approved wind farms (Chapelfield Farm, Herscha Hill and St John's Hill), eight wind farms in planning (Dendoldrum, Nether Benholm, Jackston Farm, Biddrie, Smiddyhill Farm, South Balmakelly, Blackiemuir and Droop Hill), and one scheme at the scoping stage (Greenleys). The majority of the schemes are single turbine developments, which would not have a significant cumulative effect. One larger scheme, the approved St John's Hall, is approximately 8 km to the northeast of the proposed turbines. Both developments will be seen in different arcs of views from the majority of external receptors. Where views do take in all three developments (the proposed development, operational Tullo Wind Farm and approved St John's Hall scheme), principally views from the southwest (Figure 10-3), the St John's scheme would be seen in the far distance, behind the proposed turbines; the cumulative effect being only minimal.
- 10.9.4 Taking the operational, consented and other submitted applications within the 10 km study area it is judged that the cumulative effect on key cultural heritage receptors from the proposed development would be of minor significance.

Cairn of Shiels cairn (5315)

- 10.9.5 The greatest cumulative effect on this site would arise from the proposed development in combination with the operation Tullo Wind Farm (seven turbines), which lies immediately south of the proposed development on the south facing slopes of Cairn of Shiels.

10.9.6 There would be a cumulative effect on the Cairn of Shiels cairn (5315) which is situated just outside the boundary of both schemes, around 200 m from the nearest Tullo turbine. The two developments would be visible as one continuous arc of turbines, running around the eastern side of the cairn and would be clearly visible in views from the cairn out in this direction. The operational Tullo Wind Farm has already affected the setting of the cairn, introducing a prominent industrial element into the surrounding landscape, and the addition of the proposed development, three additional turbines, would result in a small cumulative effect on the cairns setting. Nevertheless, it is considered that this cumulative effect would be of low magnitude resulting in a minor cumulative effect and not significant.

10.10 CONCLUSION

10.10.1 Two sites of cultural heritage interest, the remains of a cairn (1), and possible hut-circles (2), along with small areas of former rig and furrow cultivation were identified within the proposed development area. The cairn (1) is considered individually to be of local importance and low sensitivity. The hut-circle (2) is of unknown importance, although if buried remains survive they may be considered as of local importance.

10.10.2 One direct effect of unknown significance is predicted, for the area within which hut-circles (2) have been previously recorded and are likely to survive as buried remains; the exact location, extent and condition of any potential buried remains being unknown. Mitigation has been put forward to ensure that any remains encountered are identified and properly recorded, the effect of which would be to reduce the potential impact to negligible significance.

10.10.3 Taking into account the limited extent of the proposed ground disturbance generated by the elements of the proposed development the likelihood of encountering remains of archaeological significance is considered to be moderate.

10.10.4 No significant effects have been identified as likely to adversely affect the settings of any Scheduled Monuments, Listed Buildings, Inventory status Gardens and Designed Landscapes or Conservation Area.

10.10.5 The cumulative effect of the proposed development in combination with other wind farm developments in the vicinity is considered to be of minor significance.

CHAPTER 10 CULTURAL HERITAGE

10.11 REFERENCES

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CHAPTER 10 CULTURAL HERITAGE

APPENDIX 12.1 – Cultural heritage sites and features within the proposed development area

Ref no	Site name / type	NMRS No / SMR No	Easting	Northing	Source	Site description	Sensitivity	Predicted Effect	Magnitude of Effect	Significance of Effect
1	The Shiels, Burial cairn	NO77SE 28 / NO77SE0028	37515	77223	NMRS, SMR; Field survey	<p>The NMRS records that a cairn is situated on the northeast end of Hill of Garvock 1.3 km ESE of The Shiels Farmhouse. It measures 6m in diameter by 0.4m high. The east side of the cairn has been clipped by a track.</p> <p>The SMR records that the remains of a possible burial cairn lie approximately 600 m northeast of Cairn of Shiels.</p> <p>Field survey identified the cairn as previously recorded by the NMRS. The cairn is poorly preserved and only survives as a low-relief feature in an area of rough pasture.</p>	Low	None	None	None

CHAPTER 10 CULTURAL HERITAGE

SHIELS WIND FARM ENVIRONMENTAL STATEMENT

Ref no	Site name / type	NMRS No / SMR No	Easting	Northing	Source	Site description	Sensitivity	Predicted Effect	Magnitude of Effect	Significance of Effect
2	Hut-circles (possible) / rig and furrow cultivation	NO77SE0024	37547	77294	SMR	<p>The NMRS and SMR record that an area of rig and furrow remains are visible on past aerial photographs on the north facing slopes above Shiels Farm. Several possible hut-circles were also recorded as being visible on the aerial photographs, although no further information on their location or extent is provided by the SMR.</p> <p>No visible surface remains of the rig and furrow remains or the hut-circles as previously recorded by the SMR were identified during the field survey. The area has recent been ploughed.</p>	Low	Direct effect: the proposed access track to the development would cross the area.	Medium	Minor
Shaded brown on	Former rig and furrow cultivation	NO77SW 53 / NO77SW0039	-	-	NMRS; SMR; Aerial Photographs	The NMRS and SMR record that an area of rig and furrow remains are visible on	Negligible	None	None	None

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SHIELS WIND FARM
ENVIRONMENTAL STATEMENT

Ref no	Site name / type	NMRS No / SMR No	Easting	Northing	Source	Site description	Sensitivity	Predicted Effect	Magnitude of Effect	Significance of Effect
Figure 11a						<p>past aerial photographs on the north facing slopes of Cairn of Shiels at NO 747 723.</p> <p>Examination of aerial photographs from 1946 identified a further area of rig and furrow cultivation visible approximately 250 m to the northeast of the area recorded by the NMRS.</p> <p>No surface trace of the rig and furrow survive, the area has been substantial ploughed to improve the land.</p>				

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Appendix 12.2. Key Cultural Heritage Receptors within 5 km of the Proposed Development

Site no	Site name	Status	Easting	Northing	No of turbines visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
2231	Fordoun, homestead moat	Scheduled Monument	373548	777030	3	4.8	High	Remains of a possible medieval moated site situated at the edge of an arable field and 200 m east of Fordoun House. The remains of the site are surrounded by a small shelterbelt of trees.	Moderate	High	Imperceptible	Negligible
3339	Cairn of Arthurhouse, 260m W of Thornylea	Scheduled Monument	376133	774752	3	2.3	High	Remains of a large burial cairn situated within a woodland shelterbelt on the edge of an arable field. Trees cover the cairn remains.	Moderate	High	Imperceptible	Negligible
5168	Erskine's Knap, burial mound 600m SE of Scotston	Scheduled Monument	373799	773455	3	1.7	High	Cropmark site in arable farmland.	Low	Medium	Imperceptible	Negligible
5315	Cairn of Shiels, cairn	Scheduled Monument	374743	771754	3	0.3	High	The remains of a large burial cairn situated on the upper slopes of Cairn of Shiels approximately 900 m southeast of The Shiels Farm. Open views out to the surrounding landscape in all directions. The existing Tullo Wind Farm is located immediately east of the monument	High	High	Low	Minor
6435	Tower of Johnston, cairn and tower	Scheduled Monument	372672	769182	3	3.6	High	The substantial remains of a Bronze Age burial cairn situated at the summit of Garvock Hill in open improved pasture. In 1812 a high tower (folly - 9 m high) was erected on top of the cairn by James Farquhar. The cairn and tower are prominent features in the surrounding landscape.	High	High	Low	Minor
NO77SE029	Hut-circles and cairn	NSR Site (of Regional Importance)			3	0.2	Medium	The poorly preserved remains of two possible hut-circles and a cairn situated on an east facing slope above Treehead Farm. Little survives of the hut-circles and cairn previously recorded by the NMRS in 1982, the area has been substantially ploughed. Surrounded by open arable farmland.	Low	Low	Low	Negligible
31	Arbuthnott House, North Bridge over Arbuthnott Burn	Category A Listed	379504	775146	3	4.9	High	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
9124	Garvock Parish Church	Category B Listed	374448	770473	2	1.6	Medium	Late 17th century church standing in small graveyard. Situated approximately 100 m to the southeast of Collardo farmstead comprising of several modern barns. Woodland shelterbelt present immediately north and northeast of church limiting views out. Surrounded by open arable farmland.	High	High	Low	Minor

Site no	Site name	Status	Easting	Northing	No of turbines visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
2809	Muirton Farmhouse	Category B Listed	378035	768801	3	4.5	Medium	Farmhouse. Enclosed farm setting. Large woodland (Muirton Wood) immediately west of the farm. Surrounded by open arable farmland.	High	High	Imperceptible	Negligible
2837	Arbuthnott House - Garden House	Category B Listed	379318	775034	3	4.6	Medium	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
2838	Arbuthnott House Sundial	Category B Listed	379432	775043	3	4.7	Medium	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
2839	Arbuthnott House Mains Farm	Category B Listed	379347	775359	3	4.9	Medium	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
2842	House of Kairs	Category B Listed	376876	776511	3	4.2	Medium	Country House. Standing in small designed landscape. Woodland shelterbelt to S limited views out in this direction. Surrounded by open arable farmland.	High	High	Imperceptible	Negligible
2843	House of Kairs - Mains Farmhouse	Category B Listed	376967	776795	3	4.5	Medium	Farmhouse. Standing at edge of modern farmstead. Surrounded by open arable farmland. Immediately north of House of Kairs	High	High	Imperceptible	Negligible
2844	House of Kairs - Lodge	Category B Listed	376345	775719	3	3.3	Medium	Small lodge for Redhall Country House (9652). Situated next to public road surrounded by shelterbelts.	High	High	Imperceptible	Negligible
2880	Arbuthnott House	Category B Listed	379498	775071	3	4.8	Medium	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
2881	Arbuthnott House - Ice House	Category B Listed	379530	775065	3	4.8	Medium	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
6752	Johnstone Lodge, Gardener's Cottage	Category B Listed	372220	770123	3	3.2	Medium	19th century cottage surrounded by modern farmsteading. Surrounded by open arable farmland. Main orientation to northeast and southwest.	Moderate	Medium	Imperceptible	Negligible
9524	Johnston Lodge	Category B Listed	371756	770161	2	3.6	Medium	Country House. Standing in small designed landscape surrounded by woodland shelterbelts. Entrance to house from south. Surrounded by open arable farmland.	High	High	Low	Minor
9635	Fordoun House	Category B Listed	373277	777016	3	4.9	Medium	Country House. Enclosed farm setting. Surrounded by woodland and modern farm buildings.	Moderate	Medium	Imperceptible	Negligible
9636	Bridge of Keir over Bervie Water	Category B Listed	376255	775662	3	3.2	Medium	Road bridge. River setting.	High	High	Imperceptible	Negligible
9650	Pitarrow Dovecot	Category B Listed	372649	774942	3	3.6	Medium	Early-18th century dovecot standing on the east banks of the Luther Water at the corner of an improved pasture field and immediately south of public road running from Westerton Farm to Pittarrow Farm. River setting.	Moderate	Medium	Imperceptible	Negligible
9652	House of Redhall	Category B Listed	374314	776802	3	4.4	Medium	Country house. Woodland shelter belt on east and south sides limits views out in these directions. Open views out to the east overlooking flat arable farmland and the Fordoun disused airfield which is now used as a storage area for pipes and drilling equipment used in the North Sea Oil Fields.	Moderate	Medium	Imperceptible	Negligible

Site no	Site name	Status	Easting	Northing	No of turbines visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
								Large modern barn and courtyard present just 80 m to the north.				
37229	Laurencekirk Parish Kirk	Category B Listed	371811	771625	3	3.1	Medium	Forms part of Laurencekirk Village. Enclosed village setting.	High	High	Imperceptible	Negligible
37232	Frogfield, off Station Road	Category B Listed	371630	771543	3	3.2	Medium	Forms part of Laurencekirk Village. Enclosed village setting.	High	High	Imperceptible	Negligible
37234	Johnston Lodge - Beattie Lodge	Category B Listed	371641	770770	3	3.4	Medium	Forms part of Laurencekirk Village. Enclosed village setting.	High	High	Imperceptible	Negligible
43643	4-6 Alma Place, Laurence's	Category B Listed	371814	771511	3	3.1	Medium	Forms part of Laurencekirk Village. Enclosed village setting.	High	High	Imperceptible	Negligible
43684	1 Alma Place and 17 High Street	Category B Listed	371804	771526	3	3.1	Medium	Forms part of Laurencekirk Village. Enclosed village setting.	High	High	Imperceptible	Negligible
47653	Laurencekirk Railway Station including Canopy	Category B Listed	371702	771812	3	3.1	Medium	Forms part of Laurencekirk Village. Enclosed village setting.	High	High	Imperceptible	Negligible
9525	Johnston Lodge - Mains Farmhouse	Category C(S) Listed	372138	770180	3	3.3	Low	Old farmhouse, 18th century. Standing on edge of modern farmstead. Enclosed setting; surrounded by woodland.	High	High	Imperceptible	Negligible
9528	Mill of Conveth	Category C(S) Listed	372876	774304	3	3.0	Low	Former mill of mid-19th century date. No longer in use; has been gutted and now forms part of a farmsteading. Enclosed setting.	Moderate	Low	Imperceptible	Negligible
9529	Mains of Haulkerton Bridge over Luther Water	Category C(S) Listed	371218	772628	3	3.7	Low	Road bridge. River setting.	High	Medium	Imperceptible	Negligible
9649	Pitarrow Bridge over Luther Water	Category C(S) Listed	372636	774950	3	3.6	Low	Road bridge. River setting.	High	Medium	Imperceptible	Negligible
9653	House of Redhall Lodge	Category C(S) Listed	374246	776687	3	4.3	Low	Small lodge for Redhall Country House (9652). Situated next to public road within woodland.	High	Medium	Imperceptible	Negligible
37230	Gardenstone Arms Hotel, High Street	Category C(S) Listed	371868	771575	3	3.0	Low	Forms part of Laurencekirk Village. Enclosed village setting.	High	Medium	Imperceptible	Negligible
37231	"East View", Formerly Parish Kirk Manse	Category C(S) Listed	371776	771660	3	3.1	Low	Forms part of Laurencekirk Village. Enclosed village setting.	High	Medium	Imperceptible	Negligible
37233	High Street, Adjoining High Street At Corner of Charters Avenue	Category C(S) Listed	371677	771409	3	3.2	Low	Forms part of Laurencekirk Village. Enclosed village setting.	High	Medium	Imperceptible	Negligible
37235	Johnston Lodge, - West Lodge Gates	Category C(S) Listed	371049	770671	3	4.0	Low	Forms part of Laurencekirk Village. Enclosed village setting.	High	Medium	Imperceptible	Negligible
43682	13-15 (Odd No.s) High Street	Category C(S) Listed	371807	771536	3	3.1	Low	Forms part of Laurencekirk Village. Enclosed village setting.	High	Medium	Imperceptible	Negligible
43683	11 Alma Place	Category C(S) Listed	371818	771493	3	3.1	Low	Forms part of Laurencekirk Village. Enclosed village setting.	High	Medium	Imperceptible	Negligible
49842	Scotston Farmhouse including Ancillary Buildings	Category C(S) Listed	373308	773852	3	2.4	Low	Early to mid 19th century farmhouse and associated buildings. Enclosed setting, surrounded by woodland. Situated immediately west of A90 carriageway. Forms part	High	Medium	Low	Minor

Site no	Site name	Status	Easting	Northing	No of turbines visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
								of a village present on either side of the A90 carriageway.				
	Arbuthnott House	GDL	379105	774977	3	4.4	High	Situated in the valley of the Bervie Water which forms a steep sided valley at this location. There are distant views to the Grampain Mountains to the west. Views from the immediate surrounding landscape are restricted due to the valley setting and surrounding estate woodlands. House stands on the north banks of the Bervie Water. The estate buildings are enclosed by a stone wall. Beyond the river on a north facing slope the parkland enclosed by Birniehill and Crow woods forms an important backdrop to views across the terraced gardens. The GDL includes several listed buildings including Arbuthnott House (2880). The house and other associated structures, such as lodges, and significant garden features including an ice house and gardeners cottage are surrounded by woodland which limits views out to the surrounding landscape.	High	High	Imperceptible	Negligible

Appendix 12.3. Key Cultural Heritage Receptors within 5-10 km of the Proposed Development

Site no	Site name	Status	Easting	Northing	No of turbine visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
547	Gourdon Hill, long cairn	Scheduled Monument	381809	770657	3	6.7	High	Remains of a long cairn on the summit of Gourdon Hill. Surrounded by open arable fields. Main focus to the east out to the coast.	High	High	Imperceptible	Negligible
985	Benholm Castle, tower	Scheduled Monument	380409	770428	3	5.5	High	A ruinous castle tower situated on a spur overlooking the Bervic Water. The castle comprises of a 15th century tower with later 16th century cape-house. A later mansion house was built on the south side of the tower in the early-19th century. The tower is also a Category A Listed Building (2807) together with the other castle buildings. Situated within a small designed landscape and surrounded by woodland.	High	High	Imperceptible	Negligible
988 / 6770	Kincardine Castle	Scheduled Monument / Category B Listed	367103	775102	3	8.3	High	The remains of a castle, not much more than the foundations surviving, standing on a natural wooded hillock 100 m northeast of Castleton of Kincardine Farm. Covered in trees.	Low	Medium	Imperceptible	Negligible
2834	Drumnagair, ring enclosure 300m SE of	Scheduled Monument	368335	768334	3	7.5	High	Cropmark site in arable farmland.	Low	Medium	Imperceptible	Negligible
4264	Green Castle, earthwork	Scheduled Monument	366888	776500	3	9.1	High	The earthwork remains of a possible medieval castle situated on a small natural knoll overlooking the Devilly Burn to the west. Covered in trees.	Low	Medium	Imperceptible	Negligible
4534	Hillhead, long cairn 320m SW of Upper Craighill	Scheduled Monument	379560	776807	3	6.0	High	The remains of a long cairn situated on the summit of Hill head. Situated in a flat arable field. Surrounded by open arable farmland. Open views out to the surrounding landscape in all directions.	High	High	Imperceptible	Negligible
4754	Montgoldrum, cairns & hut circle 400m E of	Scheduled Monument	381702	777205	3	7.8	High	The remains of at least six burial cairns and a possible hut-circle at the summit of Camp Hill (Mount Goldrum). Situated in a rou pasture clearing in woodland. Open views out to the south. Other views limited by woodland.	High	High	Imperceptible	Negligible

Site no	Site name	Status	Easting	Northing	No of turbine visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
4778	Droop Hill, cairns 1250m SW of Inches	Scheduled Monument	375557	781517	3	9.0	High	A group of at least 30 cairns sitting on the summit of Droop Hill, some of which may be burial cairns. Situated in rough pasture. Surrounded by open arable farmland.	High	High	Imperceptible	Negligible
4820	Montgoldrum, cairn 750m ENE of	Scheduled Monument	382018	777352	3	8.2	High	The remains of a cairn situated on the northeast-facing slopes of Camp Hill (Mont Goldrum). Situated in an area of rough pasture. Surrounded by open arable farmland. Views to west limited by a rise in topography. Open views out in all other directions.	High	High	Imperceptible	Negligible
4961	Fettercairn House, burial mound 450m SW of	Scheduled Monument	365329	773615	3	9.6	High	The remains of a burial mound situated in a small area of woodland on the edge of a flat arable field at the edge of Fettercairn Village.	Low	Medium	Imperceptible	Negligible
4996	Fettercairn House, burial mound 650m NNW of	Scheduled Monument	365335	774597	3	9.8	High	The remains of a burial mound situated in woodland immediately southeast of the B947 public road.	Low	Medium	Imperceptible	Negligible
5143	The Cloch, cairn 1700m W of Mains of Brotherton	Scheduled Monument	378120	767942	3	5.2	High	Remains of a burial cairn on the summit of Cloch Hill. Situated in improved pasture. Surrounded by open arable fields.	High	High	Imperceptible	Negligible
5318	Bridgeton Hill, cairn 900m ENE of Mains of Bridgeton	Scheduled Monument	378140	767473	3	5.6	High	Remains of a burial cairn just south of the summit of Bridgeton Hill. Situated in improved pasture. Surrounded by open arable fields.	High	High	Imperceptible	Negligible
7882	Kincardine Deer Dyke and settlements N of Burn of Garrol	Scheduled Monument	364170	778184	3	12.3	High	A short section of a dyke that once defined the boundary of the Deer Park created by William the Lion in the 12th century. The dyke is situated at the northeast end of Hunters Hill immediately west of a public road and just outside a commercial forestry plantation.	Moderate	High (localised)	Imperceptible	Negligible
9723 / 10726	St. Palladius' Chapel	Scheduled Monument / Category B Listed	372616	778417	3	6.5	High	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
9743	St Cyrus, Old Parish Church	Scheduled Monument	375048	764779	3	7.3	High	The limited remains of the old church of Cyrus. All that remains of this church is the south aisle (now a burial-enclosure), which stands in the burial ground, immediately east of the present parish church. The church remains are also a	Moderate	High	Imperceptible	Negligible

Site no	Site name	Status	Easting	Northing	No of turbine visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
								Category B Listed building with the current Parish Church of Garvock-St Cyrus (16317)				
2807	Benholm Castle	Category A Listed	380405	770430	3	5.4	High	A ruinous castle that is situated on a spur overlooking the Bervic Water. The castle comprises of a 15th century tower with later 16th century cape-house and an early-19th century mansion which was built on the south side of tower. The castles tower is also a Scheduled Monument (985). Situated within a small designed landscape and surrounded by woodland.	High	High	Imperceptible	Negligible
9646	Phesdo House	Category A Listed	367586	775634	3	8.1	High	Country House. Standing in small designed landscape. Surrounded by a number of shelterbelts. Main elevations orientated northwest and southeast.	High	High	Imperceptible	Negligible
2808	Benholm Castle - Doocot	Category B Listed	380448	770667	3	5.4	Medium	Situated in scrub land at the northern end of the designed landscape that surrounds Benholm Castle (2807). Immediately south of Benholm Farm and a series of large modern farm buildings. Surrounded by woodland.	High	High	Imperceptible	Negligible
2841	Arbuthnott House - East Gate	Category B Listed	379479	775712	3	5.2	Medium	Forms part of Arbuthnott House GDL.	High	High	Imperceptible	Negligible
9344	"The Holm" Kinmonth Road	Category B Listed	378552	780987	3	9.0	Medium	Forms part of Drumlithie Village. Enclosed village setting.	High	High	Imperceptible	Negligible
9507	Fettercairn House	Category B Listed	365583	773990	3	9.5	Medium	Country House situated in small designed landscape. Surrounded by trees.	High	High	Imperceptible	Negligible
9508	Fettercairn House Garden Wall	Category B Listed	365639	773961	3	9.4	Medium	Walls of large garden set out in front of Fettercairn House (9507). Forms part of a small designed landscape that surrounds the house. Surrounded by trees.	High	High	Imperceptible	Negligible
9509	Fettercairn Village Parish Church and Churchyard of Fettercairn	Category B Listed	365115	773515	3	9.8	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
9527	Blackiemuir Mill Bridge over Luther Water	Category B Listed	369824	771506	3	5.0	Medium	Road bridge. River setting.	High	High	Imperceptible	Negligible
9637	Mill of Kincardine Farmhouse	Category B Listed	367290	775962	3	8.5	Medium	Farmhouse. Enclosed farm setting. Situated to	High	High	Imperceptible	Negligible

Site no	Site name	Status	Easting	Northing	No of turbine visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
								the northwest of Phesdo House (9646) and on the edge of a small designed landscape that surrounds the country house.				
9643	Monboddo House	Category B Listed	374466	778243	3	5.8	Medium	Country house. Standing in small designed landscape. Surrounded by trees and later housing estate.	High	High	Imperceptible	Negligible
9645	Bridge of Mondynes over Bervie Water	Category B Listed	378216	779666	3	7.7	Medium	Road bridge. River setting.	High	High	Imperceptible	Negligible
9647	Phesdo House Stables	Category B Listed	367609	775822	3	8.2	Medium	Forms part of small designed landscape surrounding Phesdo House (9646). Courtyard setting. Surrounded by parkland.	High	High	Imperceptible	Negligible
9648	Phesdo House Dovecot	Category B Listed	367429	775886	3	8.4	Medium	Forms part of small designed landscape surrounding Phesdo House (9646). Situated in an improved pasture field to the northwest of the house. Surrounded by a number of woodland shelterbelts.	High	High	Imperceptible	Negligible
10691	Auchenblae Village Fordoun Parish Church Auchenblae Village	Category B Listed	372605	778448	3	6.5	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10723	Kintore Cottage 1-2 off High Street Auchenblae	Category B Listed	372774	778826	3	6.8	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10727	Fordoun Parish Church Manse including Steading Auchenblae	Category B Listed	372586	778379	3	6.5	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10729	Kirkton Farmhouse Auchenblae	Category B Listed	372544	778415	3	6.5	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10732	Balmashanner Burnett Street Auchenblae	Category B Listed	372744	778426	2	6.4	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10734	Den Mill Burnett Street Auchenblae	Category B Listed	372666	778521	2	6.6	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10740	Auchcairnie Farmhouse	Category B Listed	368965	775504	3	6.8	Medium	Farmhouse. Enclosed farm setting. Surrounded by woodland.	High	High	Imperceptible	Negligible
10749	The Hollies High Street Auchenblae	Category B Listed	372653	778802	3	6.8	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
10773	Fern Lea Inverurie Street Auchenblae	Category B Listed	372653	778964	3	7.0	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible

Site no	Site name	Status	Easting	Northing	No of turbine visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
13002	Auchenblae High Street, K6 Telephone Kiosk	Category B Listed	372671	778792	1	6.8	Medium	Forms part of Auchenblae Conservation Area. Enclosed town setting.	High	High	Imperceptible	Negligible
16281	Hatton Mains House	Category B Listed	367597	767541	3	8.5	Medium	Country House. Standing in small designed landscape immediately next to large modern farmsteading.	High	High	Imperceptible	Negligible
16282	Hatton Mains, Garden Walls and Garden Building Now Double Garage	Category B Listed	367651	767506	3	8.5	Medium	Forms part of the small designed landscape surrounding Hatton Mains House. Surrounded by woodland.	High	High (localised)	Imperceptible	Negligible
16283	Hatton Mains Steading, Former Stables and Coachhouses Forming Front of South-East Section of Steading Only	Category B Listed	367537	767506	3	8.6	Medium	Enclosed farm setting.	High	High (localised)	Imperceptible	Negligible
16284	Hatton Dovecot	Category B Listed	367553	767103	3	8.8	Medium	Roofless ruins of dovecot standing in flat arable field. Surrounded by open arable fields.	High	High (localised)	Imperceptible	Negligible
16294	Caldhaim Bridge	Category B Listed	366864	768558	3	8.7	Medium	Road bridge. River setting.	High	High	Imperceptible	Negligible
16295	Thornton Castle	Category B Listed	368754	771818	3	6.1	Medium	Country House. Stands in small designed landscape. Surrounded by woodland shelterbelts.	High	High	Imperceptible	Negligible
16317	Parish Church of Garvock-St Cyrus, including Area Walls, Churchyard Gates and Railings, and Remains of Previous Church.	Category B Listed	375012	764774	3	7.3	Medium	Forming part of Cyrus Town. Enclosed town setting.	High	High	Imperceptible	Negligible
16318	St Cyrus School	Category B Listed	374976	764725	3	7.3	Medium	Forming part of Cyrus Town. Enclosed town setting.	High	High	Imperceptible	Negligible
16323	Ecclesgreig House including Terraces, Steps, and Garden Ornaments	Category B Listed	373825	765824	3	6.3	Medium	Country House. Standing in small designed landscape. Surrounded by open arable farmland. Main elevations orientated northwest and southeast.	High	High	Imperceptible	Negligible
18981	Luthermuir, Main Street, K6 Telephone Kiosk	Category B Listed	365773	768591	3	9.7	Medium	Enclosed village setting.	High	High (localised)	Imperceptible	Negligible
	Glenbervie House	GDL	377222	780440	3	8.1	High	Situated east of the confluence of the Pilketty Burn and the Bervie Water on the edge of the Howe of Mearns. Surrounded by arable landscape. No significant views out expect to	High	High	Imperceptible	Negligible

**CHAPTER 10
CULTURAL HERITAGE**

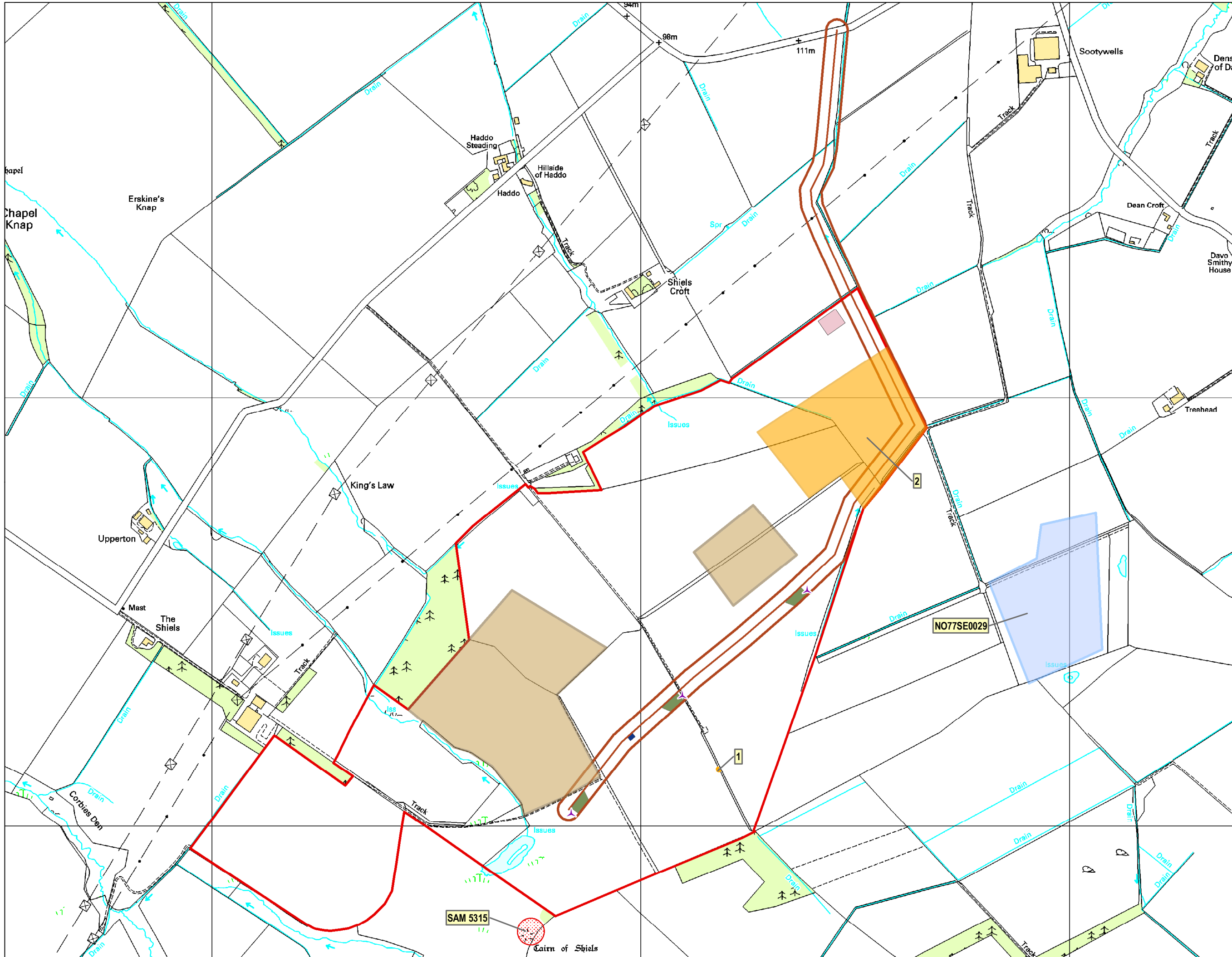
SHIELS WIND FARM
ENVIRONMENTAL STATEMENT

Site no	Site name	Status	Easting	Northing	No of turbine visible	Distance to nearest turbine (km)	Sensitivity of Receptor	Setting	Contribution of Setting	Sensitivity of Setting	Impact Magnitude	Significance of Predicted Impact
								the east across the parkland.				
	Fasque House	GDL	364681	775418	3	10.7	High	Situated N of the village of Fettercairn. Set on the lower part of Brunt Hill. Views from the house of Strathmore and the Mearns. Enclosed in woodland shelterbelts. The walls, policy woodlands and the parkland make a major contribution to the surrounding scenery and are highly visible from the nearby roads.	High	High	Imperceptible	Negligible
	Fettercairn	Outstanding CA	365125	773450	3	9.8	High	Conservation Area comprising of over 20 listed buildings including the Category A Listed Market Cross and Category B Listed St John Forbes Fountain. Small village concentrated around the confluence of the Crichtie Burn, Cauldcross Burn and Dowrie Burn. The majority of the listed buildings are located along the main street of the village. Enclosed village setting.	High	High	Imperceptible	Negligible
	Auchenblae	CA	372602	778753	3	6.8	Medium	Conservation Area including over 70 listed buildings, all of which are either residential properties or shops concentrated along either side of the main street. Town located to east of Luther Water. Enclosed village setting.	High	High	Imperceptible	Negligible



Key:

- Site Boundary
- ▲ Turbine Location
- Construction Compound
- Crane Hardstanding
- Control Building
- Access Track Boundary
- Access Track
- Scheduled Monument
- Cultural Heritage Site (Linear)
- Cultural Heritage Site (Area)
- NSR Site
- Areas of former rig and furrow cultivation



CFA ARCHAEOLOGY LTD
 CFA ARCHAEOLOGY LTD
 The Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 t: 0131 273 4380
 f: 0131 273 4381
 e: info@cfa-archaeology.co.uk
 w: www.cfa-archaeology.co.uk

Fig. No: **12.1** Revision:

Title:
Cultural Heritage Constraints within the Proposed Development Area

Project:
The Shields Wind Farm

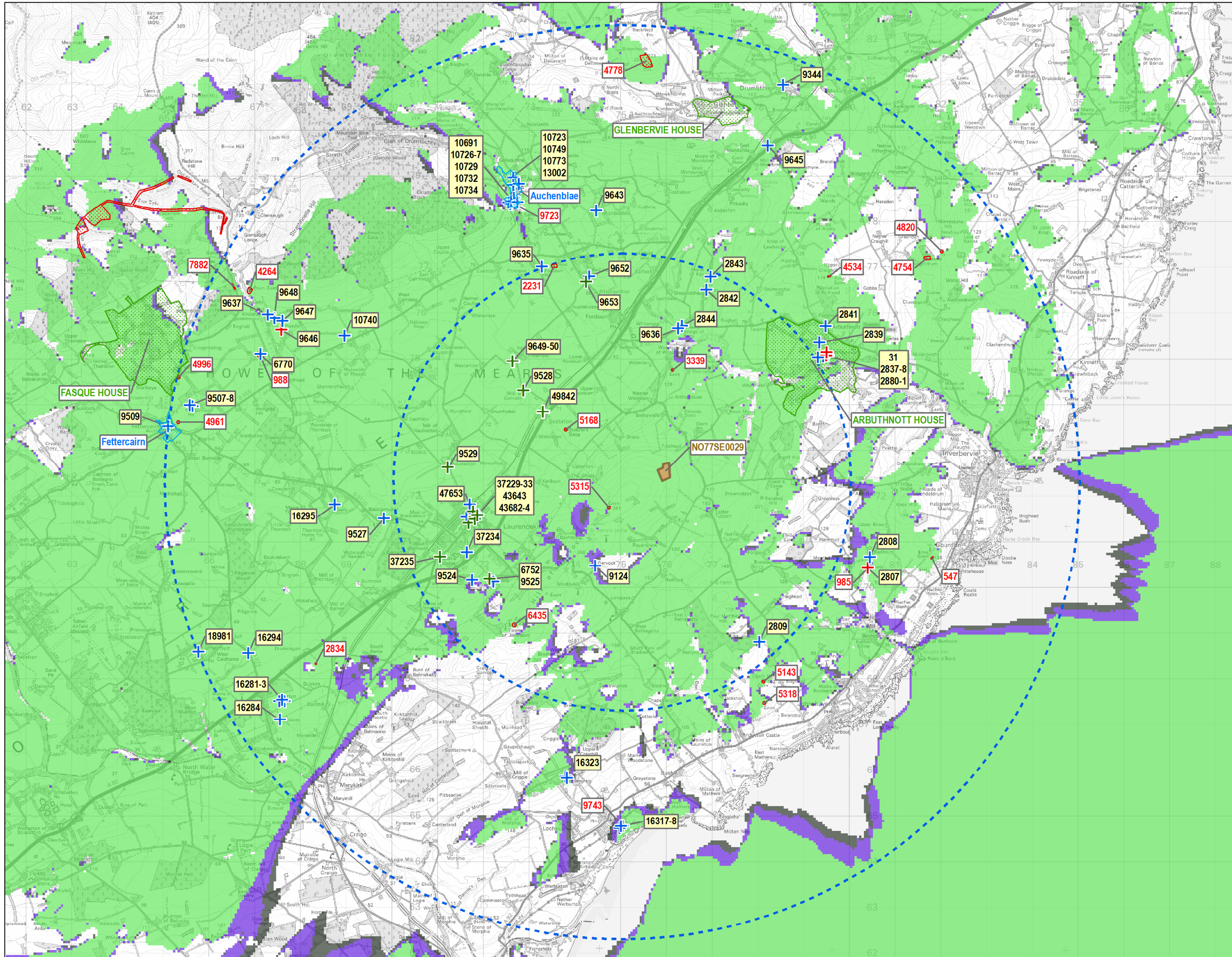
Scale:
1:8,000 A3

Client:
Atmos Consulting

Drawn by: **SW** Report No:

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- Key:**
- Scheduled Monument
 - Listed Building Category A
 - Listed Building Category B
 - Listed Building Category C(S)
 - Garden and Designed Landscape
 - Conservation Area
 - NSR Site
 - 5 and 10km Buffers

- No of Turbines Visible**
- 1
 - 2
 - 3

CFA ARCHAEOLOGY LTD
 The Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 t: 0131 273 4380
 f: 0131 273 4381
 e: info@cfa-archaeology.co.uk
 w: www.cfa-archaeology.co.uk

Fig. No: 12.2 Revision:

Title:
Cultural Heritage: External Receptors and ZTV

Project:
The Shields Wind Farm

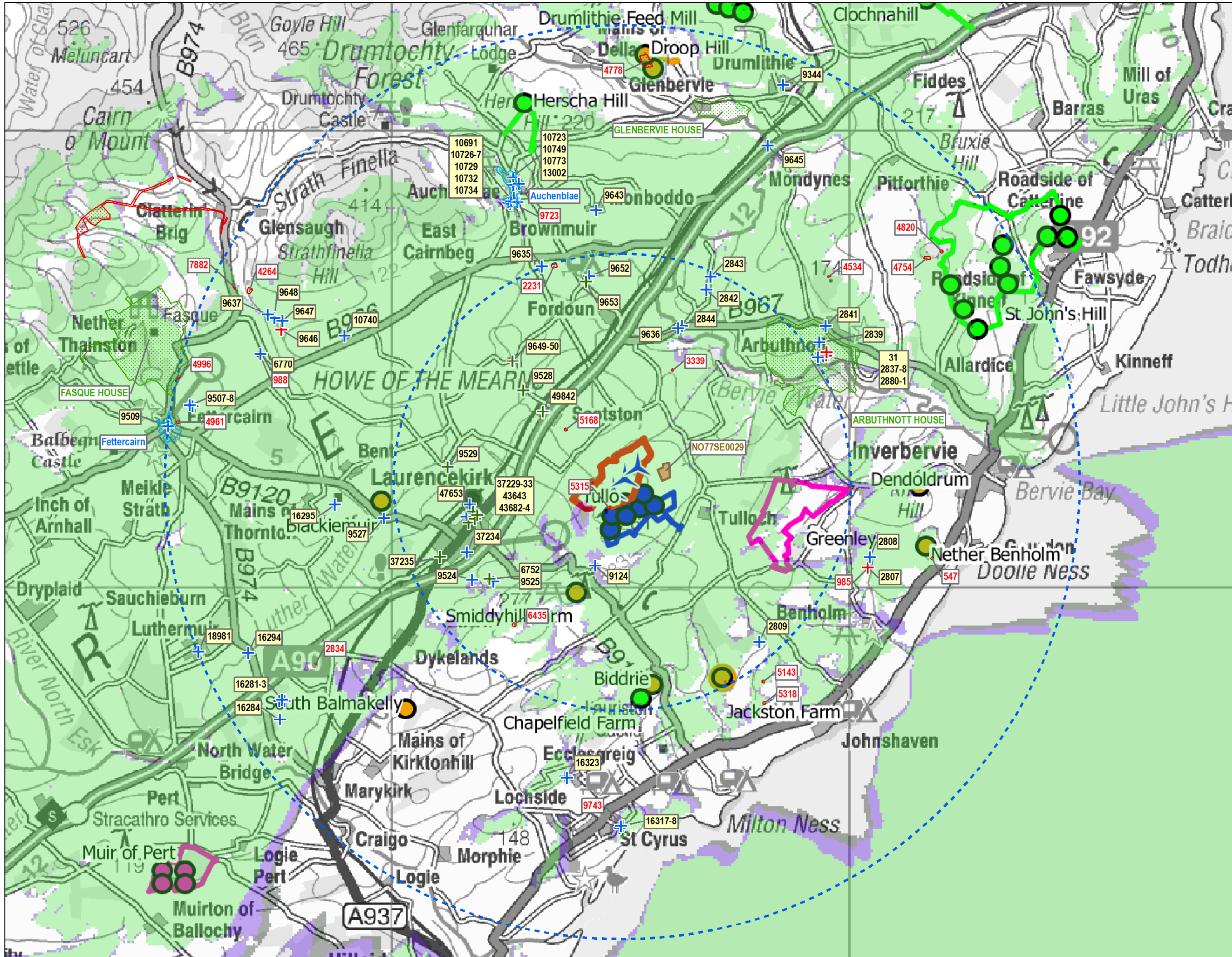
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Drawn by: SW Report No:



- Key:**
- Scheduled Monument
 - Listed Building Category A
 - Listed Building Category B
 - Listed Building Category C(S)
 - Garden and Designed Landscape
 - Conservation Area
 - NSR Site
 - 5 and 10km Buffers
- No of Shields Turbines Visible**
- 1
 - 2
 - 3
- Turbine in scoping
 - Turbine in planning
 - Approved turbine
 - Installed turbine
- Site in scoping
 - Site in planning
 - Approved site
 - Installed site

CFA ARCHAEOLOGY LTD
 The Old Engine House
 Eskmills Park
 Musselburgh
 East Lothian, EH21 7PQ
 t: 0131 273 4390
 f: 0131 273 4381
 e: info@cfa-archaeology.co.uk
 w: www.cfa-archaeology.co.uk

Fig. No: 12.3 Revision:

Title:
Cultural Heritage: External Receptors, ZTV and Cumulative Developments

Project:
The Shiel's Wind Farm

Scale:
1:75,000 A3

Client:
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