

Dene Leazes Farm Wind Turbine
Peterlee, County Durham

Cultural Heritage Assessment



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Cotsford Grange Listed farm buildings

Dene Leazes Farm Wind Turbine

Cultural Heritage Assessment

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EXECUTIVE SUMMARY

A cultural heritage assessment was commissioned by GFW Renewables Ltd on behalf of Mr E. Stephenson in order to assess the potential effects of a single wind turbine on the cultural heritage resource of the surrounding area. The proposed development site is centred on agricultural land at NZ 44379 38946 c.1.3km south of Peterlee and c. 0.6km north of Hesleden, at an altitude of c.180m OD. In addition to the turbine mast itself, the proposed development also includes a length of new trackway c.230m in length to provide access from the existing network of tracks. Following advice from Durham County Council the direct and indirect effects of the proposed turbine (effects on setting) have been assessed in relation to Scheduled Monuments and Grade I and II Listed Buildings where they lie within 5km of the proposed turbine site and fall within the Zone of Theoretical Visibility (ZTV) of the turbine, and Grade II Listed Buildings and non-designated heritage assets within 2km.*

There are a number of known heritage assets in the immediate vicinity of the proposed turbine site, almost all of which relate to post-medieval ridge and furrow field systems mapped from aerial photography and now ploughed flat by subsequent modern agriculture. It is considered likely that the post-medieval agriculture extended across the proposed turbine site and, although there is some inherent low significance in remains of this type, the level of survival is likely to be poor. The presence of significant prehistoric lithic scatters within the wider study area, and the local topography which is considered to be favourable for early prehistoric settlement or land exploitation, suggest a low-medium potential for Mesolithic activity, usually characterised by the presence of stone artefacts and, very rarely, by in-situ archaeological features.

An assessment of potential indirect effects (effect on setting) was undertaken using a combination of desk-based 'Zone of Theoretical Visibility' (ZTV) analysis, and on-site photography. Within the ZTV of the proposed turbine there were two main areas of designated assets within the core study area and a further two locations in the wider study area. For the majority of sites assessed, there would be no effect on setting for the majority given the distance to the proposed turbine, the lack of any intervisibility due to intervening obstacles and local screening, and the fact that the proposed turbine would not disrupt the coherence of any groups of heritage assets where such spatial relationships form a component of their setting. The Grade II Listed farm structures at Cotsford Grange in Horden will have minor views to the proposed turbine, forming a minor component of the view in one direction due principally to distance, but also to some local screening.

Of those heritage assets which are closest to the proposed turbine site, Hardwicke Hall and the associated Grade II Listed walling which bounds the gardens will have views to the turbine, partially or totally screened by an existing mature tree belt for the majority of the hall and its grounds. The primary way in which the setting of Hardwicke Hall contributes to its significance is in the preservation and coherence of its immediate gardens and grounds, though there has been some disturbance to this through the modern developments associated with the adjacent farm. The proposed turbine will have no effect on this aspect of the hall's setting. The overall indirect effect of the proposed turbine on the setting of the Hardwicke Hall Listed structures is considered to be low to moderate, and to be low to negligible on the setting of the other designated heritage assets assessed.

In terms of direct effect the identified potential relates to both a low potential for scattered Mesolithic artefacts and a high potential for post-medieval agriculture of low to negligible significance. Both of these potential effects can be mitigated through archaeological monitoring during groundworks in accordance with an agreed specification, which would be proportionate to the potential loss of significance and represent a "balanced judgement" as required by paragraph 135 of NPPF (CLG 2012, 31). The presence or absence of post-medieval ploughing remains does not affect the viability of conditioned monitoring as mitigation, particularly given the



relatively small area of impact, and therefore it is considered that the information submitted as part of this assessment is sufficient and proportionate to satisfy the requirements of paragraph 128 of NPPF without the need for additional field evaluation prior to determination.

As potential indirect effects are considered to be low to negligible, and in the specific case of Hardwicke Hall low to medium, no additional mitigation in relation to the setting of heritage assets is recommended.



1. INTRODUCTION

1.1 PROJECT BACKGROUND

This report has been commissioned by GFW Renewables Ltd on behalf of Mr E. Stephenson to accompany a planning application for the erection of a single wind turbine, measuring 50.9m to hub and 77.9m to tip, on land east of Dene Leazes Farm, c.1.3km south of Peterlee, County Durham. The purpose of this cultural heritage desk-based assessment (CHA) is to provide baseline information on the cultural heritage resource in the proposed development site and surrounding area and to assess any potential effects of the proposed development on that resource.

1.2 SITE LOCATION

The proposed turbine location is centred at NZ 44379 38946 c.1.3km south of Peterlee and c. 0.6km north of Hesleden, at an altitude of c.180m OD (Fig. 1). In addition to the turbine mast itself, the proposed development also includes a length of new trackway c.230m in length to provide access from the existing network of tracks.

In relation to the consultation of lists of both designated and non-designated heritage assets the study area for the CHA is divided into a core study area and a wider study area in line with advice from Durham County Council. The core study area is defined as a circle of radius 2km and the wider study area a circle of radius 5km both centred on the proposed turbine site.

1.3 AIMS OF THE STUDY

The aims of the study are:

- To assess the known cultural heritage resource within the proposed development area and the wider study area
- To assess the potential effects of the proposed development upon the known and potential cultural heritage resource
- Make recommendations based upon this assessment as to any potential requirement for evaluation and/or mitigation and off-setting which may be required.

2. POLICY AND GUIDANCE FRAMEWORK

2.1 LEGISLATION

National legislation which applies to the consideration of cultural heritage within development and the wider planning process is set out in Table 1 below.

Table 1 Legislation relating to cultural heritage in planning	
Title	Key Points
Ancient Monuments and Archaeological Areas Act 1979 (amended by the National Heritage Act 1983 and 2002)	Scheduled Monuments, as defined under the Ancient Monuments and Archaeological Areas Act (1979), are sites which have been selected by a set of non-statutory criteria to be of national significance. Where scheduled sites are affected by development proposals there is a presumption in favour of their physical preservation. Any works, other than activities receiving class consent under The Ancient Monuments (Class Consents) Order 1981, as amended by The Ancient Monuments (Class Consents) Order 1984, which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering-up a Scheduled Monument require consent from the Secretary of State for the Department of Culture, Media and Sport.
Planning (Listed Building and Conservation Areas) Act 1990	Buildings of national, regional or local historical and architectural importance are protected under the Planning (Listed Buildings and Conservation Areas) Act 1990. Buildings designated as 'Listed' are afforded protection from physical alteration or effects on their historical setting.
Hedgerows Regulations 1997	The Hedgerow Regulations (1997) include criteria by which hedgerows can be regarded as historically important (Schedule 1 Part III).

2.2 POLICY

2.2.1 NATIONAL

The principal instrument of national planning policy within England is the National Planning Policy Framework (NPPF) (CLG 2012) which outlines the following in relation to cultural heritage within planning and development:

Table 2 Key passages of NPPF in reference to cultural heritage	
Paragraph	Key Points
7	Contributing to protecting and enhancing the historic environment is specifically noted as being a part of what constitutes 'sustainable development' – the "golden thread" which, when met, can trigger presumption in favour.
17	A core planning principle is to "conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for the contribution to the quality of life of this and future generations".
128	During the determination of applications "local planning authorities should require an applicant to describe the significance of any heritage assets affected, including

	any contribution made by their setting". This information should be proportionate to the significance of the asset and only enough to "understand the potential impact of the proposal on their significance". The normal minimum level is expected to be a desk-based assessment of proportional size "and, where necessary, a field evaluation".
129	Paragraph 129 identifies that Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.
132	It is noted that significance – the principal measure of inherent overall heritage worth – can be harmed or lost through development within its setting. Heritage assets are an irreplaceable resource and any adverse effects require "clear and convincing justification" relative to the significance of the asset in question.
135	At paragraph 135 it states that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
139	At paragraph 139 it states that non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.
141	In paragraph 141 amongst other matters it states that planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

2.2.2 LOCAL

Under planning law, the determination of an application must be made, in the first instance, with reference to the policies of the local development plan. For the proposed development this is represented by saved policies from the Easington District Local Plan (2001) until they are superseded by the County Durham Plan, currently in consultation. Within the Easington Local Plan, a number of heritage policies have been cancelled or have lapsed, but the following are extracts from the saved policies relevant to cultural heritage, and in particular to this assessment:

Table 3 Key passages of Easington District Local Plan in reference to cultural heritage	
Policy	Text
22	<p>"The Council will seek to preserve or enhance the character, appearance or setting of the district's Conservation Areas by:</p> <ul style="list-style-type: none"> • Not allowing development which would detract from the character, appearance or setting of the Conservation Area; • Only permitting development within, adjoining or affecting conservation areas where it is appropriate in terms of its siting, site coverage, height, roof style, detailed design and materials; • Protecting important views into and out of the conservation area; • Protecting trees, hedgerows, open spaces and other landscape features which contribute to the character or appearance of the conservation area and its



	setting.” (Easington District Council 2001, 33).
24	“Any developments which adversely affect the character, appearance, special architectural features or setting of a listed building will not be approved...”

2.3 GUIDANCE

2.3.1 NATIONAL

National Planning Policy Guidance (NPPG) has been recently published in consultation format and is currently undergoing review prior to full publication, at which point extant guidance will be cancelled. During the assessment and preparation of this document, the following guidance documents have been referred to, where relevant:

Table 4 National guidance documentation consulted	
Document	Key Points
PPS5 Practice Guide (CLG/DCMS/EH 2010)	Until the publication of NPPG, English Heritage have advised that the Practice Guide released to accompany Planning Policy Statement 5 (PPS5) in 2010 should be considered extant and applicable as many of the processes outlined relate to similar policies within NPPF.
Conservation Principles, Policies and Guidance (EH 2008)	This document sets out the guiding principles of conservation as seen by English Heritage and also provides a terminology for assessment of significance upon which much that has followed is based.
Wind Energy and the Historic Environment (EH 2005)	This document represents a statement of English Heritage’s position on the potential effects of wind energy development in relation to heritage assets and the historic environment, and seeks to address some of the conflicts between implementing sustainable renewable development and conserving archaeological sites and historic buildings.
The Setting of Heritage Assets (EH 2011)	This document represents the latest statement by English Heritage as to best practice for the assessment of potential effects of development upon the setting of heritage assets. It provides a loose framework for this assessment, and until such time as specific guidance is released on the application of NPPF, this document is normally held to be industry best practice. It advocates a staged process of assessment outlined in the appropriate section below.
Standard and Guidance for Historic Environment Desk-Based Assessment (IfA 2012)	This document represents non-statutory industry best practice as set out by the Institute for Archaeologists. This assessment has been undertaken to these standards, as subscribed to by Solstice Heritage.

3. METHODOLOGY AND SOURCES

3.1 METHODOLOGY

The following tasks were undertaken as part of this assessment:

- Consultation of local authority Historic Environment Record and local archives
- Compilation of all appropriate desk-based and online resources including National Heritage List for England
- Creation of a bespoke geographical information system (GIS) to allow for the storage and analysis of all data
- Site visit to establish ground conditions and assessment of potential effects on setting of specific designated heritage assets within the wider study area
- Synthesis of sources consulted and preparation of an assessment of known and potential direct and indirect effects (this document).

3.2 ASSESSMENT OF SIGNIFICANCE

Significance can be defined using a number of criteria derived from varied sources, all of which can contribute useful factors to the process. Where assessment of significance is necessary, particularly in determining potential effects of the development, the following criteria have been adopted in part or in whole, depending on what can best articulate the nature of the heritage asset being described:

Table 5 Criteria for assessment of significance	
Source	Significance Criteria
Conservation Principles, Policies and Guidance (English Heritage 2008)	This document highlights four 'values' contributing to significance: <ul style="list-style-type: none"> • Evidential • Historic • Aesthetic • Communal
PPS5 Practice Guide (CLG/DCMS/English Heritage 2010)	Within the now-cancelled PPS5 and the still-extant Practice Guide, the assessment of significance is based upon four 'interests' and their relative 'importance': <ul style="list-style-type: none"> • Archaeological • Architectural • Artistic • Historic
Ancient Monuments and Archaeological Areas Act 1979	This act gives guidance on the criteria considered during the decision to provide designated protection to a monument through scheduling. The criteria are: <ul style="list-style-type: none"> • Period or category • Rarity • Documentation (either contemporary written records or records of previous investigations) • Group value • Survival/condition • Fragility/vulnerability • Diversity (importance of individual attributes of a site) • Potential



3.3 SOURCES

3.3.1 NATIONALLY DESIGNATED SITES

The National Heritage List was consulted to allow an assessment of designated heritage assets, including:

- Scheduled Monuments
- Listed Buildings
- Registered Parks and Gardens
- Registered Battlefields
- Protected Wreck Sites
- Conservation Areas

In line with consultation with Durham County Council this assessment has considered all Scheduled Monuments and Listed Buildings (Grade I and II*) within the 5km wider study area, with a full assessment of potential effects on those lying within 2km of the proposed turbine. Scheduled Monuments and Grade I and II* Listed Buildings lying between 2-5km from the proposed turbine are included in the assessment where an initial appraisal suggests there may be an effect on setting. Grade II Listed Buildings are assessed where they lie less than 2km from the proposed turbine. A list of these assets is reproduced in the gazetteer in Appendix 2 below.

3.3.2 HER

The Durham Historic Environment Record (DHER) was consulted for the core study area, and any prehistoric remains within a further 500m buffer of the core study area were also included as a specific request by the DCC Archaeology Officer. Information relating to the immediate vicinity of the proposed turbine site relates to the assessment of potential direct effects, whereas information relating to the study area was consulted to allow both an assessment of the general archaeological and historic character of the area, and also to feed into the assessment of setting, over and above any potential effects on designated heritage assets.

3.3.3 CARTOGRAPHIC SOURCES

Assessment of relevant mapping held in the local archives and digital mapping available online was undertaken to provide information on the archaeological potential of the proposed turbine site and its historic development.

3.3.4 AERIAL PHOTOGRAPHY

The proposed turbine site lies on the edge of a county-wide aerial photograph transcription focusing on aggregate-bearing geologies and undertaken as part of the English Heritage-funded National Mapping Programme (Hewitt *et al.* 2011). This information was obtained from the DHER and has been included in discussion below. Online digital vertical aerial imagery was also consulted (e.g. Google Earth).

3.3.5 PUBLISHED AND UNPUBLISHED SOURCES

In addition, relevant published and unpublished sources were consulted, relating both to specific sites of interest, and also to the general archaeological and historic character of the wider study area. Unpublished reports of previous archaeological interventions (grey literature) were consulted online where relevant.

3.4 CHRONOLOGY

Where chronological and archaeological periods are referred to in the text, the relevant date ranges are broadly defined as follows:

- Palaeolithic (Old Stone Age): 1 million – 12,000 BP (Before present)
- Mesolithic (Middle Stone Age): 10000 – 4000 BC
- Neolithic (New Stone Age): 4000 – 2400 BC
- Bronze Age: 2400 – 700 BC
- Iron Age: 700 BC – AD 43
- Roman/Romano-British: AD 43 – 410
- Anglo-Saxon/Anglo-Scandinavian: AD 410 – 1066
- Medieval: AD 1066 – 1485
- Post-medieval: AD 1485 – 1750
- Industrial: AD 1750 – 1900
- Modern: AD 1900 – Present

3.5 ASSUMPTIONS AND LIMITATIONS

Data and information obtained and consulted in the compilation of this report has been derived from a number of secondary sources. Where it has not been practicable to verify the accuracy of secondary information, its accuracy has been assumed in good faith. The information accessed from the County Durham HER and national lists of designated heritage assets represents a record of known assets and their discovery and further investigation. Such information is not complete and does not preclude the future discovery of additional assets and the amendment of information about known assets which may affect their significance and/or sensitivity to development effects. All statements and opinions arising from the works undertaken are provided in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

3.6 COPYRIGHT

Solstice Heritage will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

4. BASELINE: SOURCES

4.1 GEOLOGY AND GEOMORPHOLOGY

The proposed turbine site lies on an undulating plateau between Castle Eden Dene to the north and Hesleden Dene to the south. The East Durham coastal landscape is defined by the steep-sided denes which form due to the properties of the underlying Magnesian Limestone bedrock and glacial till superficial geology (BGS2013). The denes represent part of the drainage system of the East Durham plateau which complements the large rivers such as the Tees to the south and the Wear to the north. Many of them were formed with the release of glacial meltwater at the end of the Devensian glaciation resulting in the distinctive 'v'-shaped profile and can be considered as immature valleys (Griffiths and Charlton 2002, 2).

4.2 HERITAGE ASSETS WITHIN THE DEVELOPMENT AREA

4.2.1 DESIGNATED (FIG. 2)

There are no designated heritage assets within the footprint of the proposed turbine and infrastructure or in their immediate vicinity.

4.2.2 NON-DESIGNATED (FIG. 3)

There are no known non-designated heritage assets within the footprint of the proposed turbine. The known heritage assets which are closest to the proposed turbine relate to the medieval and post-medieval ridge and furrow remains known from aerial photography, but which are now almost entirely levelled. The known ridge and furrow remains do not extend into the footprint of the proposed turbine and associated infrastructure.

4.3 HERITAGE ASSETS IN CORE AND WIDER STUDY AREA

4.3.1 DESIGNATED (FIG. 2)

Beyond the footprint of the proposed development but within the 2km core study area there are: one Scheduled Monument, one Grade II* Listed Building, fifteen Grade II Listed Buildings, one nationally designated Registered Park, one designated Conservation Area and one locally listed Registered Garden; these are split into three distinct groups: Castle Eden, Hardwicke Hall and Cotsford Grange in Horden.

The largest concentration of designated heritage assets is associated with Castle Eden and includes the Registered Park of Castle Eden Dene which encompasses most of the geographic extent of the dene. On the south side of the dene approximately 1.2km west of the proposed turbine site the eastern extent of the Castle Eden Conservation Area, built around the Grade II* Listed castle, includes a further eleven Listed Buildings. Although the Scheduled Monument relates to the earlier medieval settlement with original castle and moated site, the currently known sites relate to the Post-medieval redevelopment of Castle Eden (see chronological overview below).

The cluster of sites around Hardwicke Hall is smaller but closer to the proposed turbine. It comprises a locally designated garden providing the setting for two Grade II Listed Buildings: Hardwicke Hall itself and a boundary wall to its west. The significance and setting of the Hardwicke Hall cluster of assets is discussed more fully in the setting assessment below. The final two Grade II Listed Buildings in the core study area form a coherent early Post-medieval farm group at Cotsford Grange preserved within

a modern estate in Horden north of Castle Eden Dene c.1.9km north-north-east of the proposed turbine site. The significance of the farm group is discussed in greater detail below in the setting assessment.

Within the 5km wider study area (and beyond the core study area) there are a further four Scheduled Monuments, all of which relate to medieval activity. The scheduled area denoting the core of the medieval settlement of *Yoden* sits on land between the successor settlements of Horden and Peterlee c.3km north-north-west of the proposed turbine and consists of earthworks of boundaries, housing and associated agriculture. Similar remains comprise the scheduled medieval village of Sheraton c.4km south of the proposed turbine site.

The final two Scheduled Monuments within the wider study area encompasses a series of earthwork fishponds and the site of a medieval hall or great house at Hart c.4.6km south-south-east of the proposed turbine. These two Scheduled Monuments form a coherent group of significant medieval heritage assets along with the Grade I Listed church of St Mary Magdalene and a Grade II* Listed boundary wall.

Final designated assets known within the wider study area comprise two Grade II* Listed Buildings: the 17th century Horden Hall at the north edge of Horden, and the Apollo Pavilion which is set within a Registered Park. The Apollo Pavillion, also known as the Pasmore Pavilion after its designer and sculptor Victor Pasmore, is a piece of cast-concrete public art which formed the centrepiece for the 'new town' of Peterlee. The significance and setting of the Apollo Pavilion is discussed in the setting assessment below.

4.3.2 NON-DESIGNATED (FIG. 3)

There are a total of 47 records within the HER for the 2km core study around the proposed turbine site, and a further 4 prehistoric records within a further 500m buffer of the core study area. Of these 51 records, 6 represent prehistoric findspots: 3 Mesolithic, 2 Neolithic and 1 Bronze Age. Of these finds the most significant are the Mesolithic; although only sparsely scattered they represent activity during the hunter-gatherer period in a part of the landscape which was particularly rich in natural resources. This is discussed more fully in the chronological overview below.

There are no late prehistoric or Romano-British non-designated sites known in the study area, and only a single early medieval record relating to a burial at Castle Eden excavated in 1775 and containing an early medieval glass vessel. Six of the HER records relate to medieval settlement and religious foundations (principally chapels, some now demolished and lost), and the remaining 39 non-designated assets are either random finds of unknown date or are associated with the Post-medieval settlement and agriculture of the area. The heritage assets include the development of the village of Castle Eden since the 18th century as well as more recent sites such as the railway associated with the Blackhall Colliery and a World War II crash site in the vicinity of Castle Eden Dene.

4.4 CARTOGRAPHIC SOURCES

Consultation of the historic mapping showed that whilst there are a number of early pictorial maps of the area none of these are at a sufficient scale to provide any detail of the proposed development site. Of the accurate measured maps consulted, ranging from the 1st Edition OS 25", all showed only minimal changes in the field boundaries surrounding the proposed development, up to the present day. Given the mapping did not show any features or development of historical or archaeological



interest, it was not considered necessary to reproduce it within this report. Ordnance Survey mapping consulted is outlined in the table below:

Table 6 Historic mapping consulted	
Date	Map
1857	Ordnance Survey 1 st Edition 25"
1897	Ordnance Survey 2 nd Edition 25"
1919	Ordnance Survey 1 st Revision 25"
1938	Ordnance Survey 2 nd Revision 25"
1970	Ordnance Survey Revision
1972	Ordnance Survey Revision
1977	Ordnance Survey Revision
2009	Ordnance Survey Revision

4.5 AERIAL PHOTOGRAPHY (FIG. 4)

Substantial parts of the aggregate-bearing geologies of County Durham, including the area around the proposed turbine site had aerial photograph assessment and mapping undertaken as part of the English Heritage-funded National Mapping Programme (NMP) (Hewitt *et al.* 2011). The resultant mapping for the wider study area is reproduced as Fig. 4 below and shows that the majority of archaeological sites visible from aerial photography are medieval to post-medieval ridge and furrow. The majority of the mapped medieval and post-medieval agriculture have been subsequently levelled and this is illustrated on the figure below. It is likely that the Post-medieval agriculture evident on the aerial photography will have extended across the site of the proposed turbine.

An assessment of the currently available digital vertical aerial photography on Google Earth did not show any additional unknown features within the immediate vicinity of the proposed turbine.

4.6 PREVIOUS WORK

Within the core study area, there have been eight previous archaeological assessments or interventions:

Table 7 Previous archaeological interventions within 2km of proposed turbine		
Code	Intervention	Information where relevant
3125	Disused Structures along the Durham Coastline	Part of a wider archaeological survey of remains on the coastline undertaken as part of the Turning the Tide Project which focused on the reclamation of coastal areas predominantly associated with previous coal extraction.
3737	Castle Eden, St James Church	Assessment of the archaeological potential of the church including a report on the structural and architectural history of the church, its fixtures and fittings and the churchyard with its sepulchral monuments.
6310	Additional structures on Durham Coast	Part of a wider archaeological survey of remains on the coastline undertaken as part of the Turning the Tide Project which focused on the reclamation of coastal areas predominantly associated with previous coal

		extraction.
6637	Geophysical and topographical surveys, The Castle, Castle Eden, 2003	Surveys undertaken by Archaeological Service Durham University (ASDU) in advance of road construction. Possible remains of trackways, ridge and furrow and a moat feature were identified.
8260	Hardwick	Evaluation of an 'L'-shaped cropmark postulated as part of a late prehistoric enclosure.
33552	Assessment of Dene Community Technology School, Horden, County Durham, 2009	Rapid desk-based assessment for new construction at Dene Community Technology School undertaken by Durham County Council Archaeology Section. Concluded low archaeological potential for the site.
43451	Desk Based Assessment of the proposed site of the Sheraton Wind Farm 2011	Cultural heritage desk-based assessment carried out by AECOM to accompany application for a wind farm to the south of the proposed turbine site.

4.7 HISTORIC LANDSCAPE CHARACTERISATION

The Durham Historic Landscape Characterisation (HLC) data characterises the proposed turbine site as “Enclosed Land, Enclosed Land (Post-medieval), Post-medieval fossilised strips”, as are the surrounding fields in the immediate vicinity. This accords with the preservation of medium-sized fields visible from the earliest Ordnance Survey mapping and the narrow ridge and furrow remains visible on early-mid 20th century aerial photography, though now almost entirely levelled and no longer extant.

4.8 CHRONOLOGICAL OVERVIEW

4.8.1 PALAEOLOGIC TO MESOLITHIC

Ice Age and earlier (Palaeolithic) finds and sites are extremely rare across northern Britain, due in part to the ice sheets which extended across much of the North making substantial areas uninhabitable until much later than in parts of Southern Britain. The majority of potential late glacial finds and sites within County Durham are known from either a coastal or off-shore context, or from the southern extremes of the County around Teesdale and the Stainmore Pass in the North Pennines (e.g. Jacobi 1976; Coggins *et al.* 1989).

Following the retreat of the glaciers, the Mesolithic period, or Middle Stone Age is characterised by a recolonisation of the tundra landscape, though still as part of a mobile hunter-gatherer-fisher subsistence lifestyle. Coastal areas in particular represent attractive settlement locales during the Mesolithic period, and many recent significant sites of the period have been found in settings which provide a combination of freshwater, terrestrial and coastal marine resources e.g. Howick, Northumberland (Waddington 2007) or East Barns, Dunbar (Goeder 2007), two sites which are broadly contemporary with the radiocarbon dates from Fillpoke Beacon c.5km south-east of the proposed turbine site. The Fillpoke Beacon site comprised a significant assemblage of lithic material with a radiocarbon date placing it at the start of the Later Mesolithic period (c.7000-6500BC), and the site was used in a new model of understanding Mesolithic settlement in Britain postulated in the 1970s and now widely accepted as accurate (see Jacobi 1976; Passmore and Waddington 2012). The landscape setting offered by the denes on the East Durham Coast – steep valley cut into Magnesian Limestone, freshwater and marine resources, terrestrial resources, accessible raw materials – is similar to known foci for Mesolithic sites across Britain and there is a potential for lithic artefacts and localised areas of activity to be found within the study area, over and above the three known scatters recorded in the HER.



4.8.2 NEOLITHIC

The Neolithic, or New Stone Age, coincided with the introduction of agriculture and sedentism as well as the emergence of a package of diverse material culture and the long-range trade networks to support this vibrant new cultural drive. The Neolithic in County Durham is perhaps best represented by the extensive monuments of the Wear Valley which, as with their counterparts in other regions, suggest the emergence of a centralised society developing complex systems of ritual and social interaction. The remains of the settlements that accompanied these monuments, as in many other parts of the country, remain elusive and evidence is sparse and scattered (Harding 1970, 191). There are two recorded sites relating to the Neolithic period in the core study area, both representing findspots. A stone axe was found near Castle Eden and a flint scatter is recorded as coming from near Monk Hesleden.

4.8.3 BRONZE AGE

Despite a well-researched and reasonably extensive Bronze Age upland archaeology in North East England more generally, the known remains of Bronze Age occupation and activity are more scattered within the lowlands of County Durham (Hewitt *et al.* 2011, 47). As with the remains of earlier periods, it has been demonstrated that where extensive Bronze Age settlement has been identified in Northern Britain, it can often comprise dispersed post-built structures and recent examples have principally been identified where it has been possible to strip topsoil from large areas, such as at Cheviot Quarry, Northumberland (Johnson and Waddington 2008), though in other places it has proved ephemeral. A single findspot of a flint arrowhead represents the only known record of Bronze Age activity within the core study area.

4.8.4 IRON AGE

There is a growing corpus of known sites relating to the Iron Age within the North East, ranging from the hillfort sites of the Cheviots, though also including the notable upland enclosure of Eston Nab on the coast, through to lowland enclosures and land divisions recognised principally through aerial photography, but also increasingly through excavation. Recent work to characterise the settlement archaeology of the Iron Age in the North East is providing a more nuanced picture of a populated landscape teeming with farmsteads and small hamlets or villages, though with some apparent cultural regional differences (see Sherlock 2012, 102). There are no Iron Age sites or finds known from within the study area.

4.8.5 ROMANO-BRITISH

The North East fell under Roman occupation following the advance of Petilius Cerialis in the early AD70s, a military campaign which crushed the Brigantian hegemony over much of the Pennine belt and the North. As with many areas of Britain, the native and rural population of Roman Britain remains largely invisible given the energies previously devoted to investigating the Roman military sites of note, and also the often ephemeral remains of wood-built structures. It is notable that there are a significant number of enclosure sites known from aerial photography across County Durham which may represent Romano-British settlement, and it is likely that, as demonstrated by the excavations at Thorpe Thewles among others, many of the extensive Iron Age rural settlements continued in use through the Roman occupation (Heslop 1987). Analysis of the Iron Age settlement in the area by Sherlock (2012, 121) has concluded that the process of Romanisation of the native population was very different in the North East, with changes to the rural settlements not visible until the 2nd century AD. There are no known Roman or Romano-British sites or findspots within the study area.

4.8.6 ANGLO-SAXON

As is the case with many areas of northern England, there is relatively little known about the study area, and indeed the wider region of County Durham and Teeside, for the Anglo-Saxon and Anglo-Scandinavian periods prior to the Norman Conquest (Cramp 1970, 199). This is certainly true when compared to the extensive archaeological resource for the medieval and later periods. Following a period of dramatic instability after the Roman withdrawal, County Durham ultimately became a part of the heartland of the Anglo-Saxon Kingdom of Northumbria following the union of the Kingdoms of Bernicia (originally based at Bamburgh) and Deira (originally north and east Yorkshire). A single, presumably Anglo-Saxon burial was excavated in c.1775 at Castle Eden, dated to the early medieval period through the find of a glass vase of central European origin (Griffiths and Charlton 2002, 15). In the wider study area there is a record of a second early medieval burial mentioned in Etherington *et al.* (2001, 5), described as lying within a cist on the cliff top. The burial was a young person laid full length on their side facing out to sea and the burials indicate the presence of early medieval settlement on the coast in this part of east County Durham.

Normally, a good indication of the late Saxon settlement of an area can be gleaned from the extent of land holdings recorded in Domesday Book, but unfortunately for this area, descriptions of Northumberland, County Durham and Cumbria are largely absent from this 11th century record (Darby 1962, 419).

4.8.7 MEDIEVAL

The development of the medieval landscape around the proposed turbine site is illustrated by the scattered ridge and furrow cultivation remains dating to the medieval and post-medieval periods and recorded through aerial photography. Given the later intensification of land use within and around the study area, there are almost no extant examples, with the small triangle of land to the south of Hardwicke Hall being a notable exception. It should be noted, however, that the majority of the ridge and furrow remains are recorded as being of narrow Post-medieval type and only fragmentary medieval earthworks survive, and generally only within the areas of scheduled medieval villages noted above.

Depopulation of rural settlements was common during certain parts of the medieval period, and many such sites are often tied to the Black Death of the mid-14th century, though the reasons for depopulation are more complex than the ravages of disease including such factors as the gradual movement of people to the growing urban centres, or possibly pressure on agricultural land as the common fields started to be made into single larger units. Within the local area there are three Scheduled shrunken medieval villages illustrating the overall pattern of settlements has not changed as dramatically since the medieval period as in other parts of the county. Even the 'new town' of Peterlee had a medieval precursor – *Yoden* – with the earthwork remains of the village core preserved as a Scheduled Monument. The medieval period is also represented in the local area by some of the surviving churches and chapels, though in a pattern common to a number of parts of the industrialised and semi-industrialised North East, many have been extended and altered during later centuries. For example the original church of St. James at Castle Eden is known to be a Norman foundation and the original moated 'castle' site lasted until 1500, both since hidden or altered by their Post-medieval replacements (Monck 1980, 28).

4.8.8 POST-MEDIEVAL – MODERN

The post-medieval archaeology of County Durham and Teeside, and indeed the low-lying areas of the North East as a whole, is dominated by the expansion of industry, and in particular the exploitation of



natural resources. Due to the rich geology of the area, there have been significant extractive and processing industries which have left their archaeological imprint including iron ore, lead, zinc, sand, gravel, clay, limestone, sandstone, dolerite and most importantly for this study area, coal (Hewitt 2011, 88). Many of the more recent developments and expansion of settlements within the study area relate to the redevelopment of the landscape in response to the Blackhalls Colliery and the other smaller-scale pits along this section of the coast.

The Post-medieval agriculture, the remains of which are recorded on aerial photography as no-longer-extant ridge and furrow earthworks, covered many of the fields in the core study area. It is likely that the same agricultural regime extended across the field containing the proposed turbine site. The modern landscape and settlement patterns within the study area are almost entirely the product of the coal industry of the industrial and modern periods, with the exception of some preserved elements of medieval landscape. Indeed, the Castle Eden Conservation Area may have an earlier medieval settlement at its core but its current form is based on the post-medieval redevelopment of the estate, itself placed to make the most of the natural beauty of the dene.

The other key area where the post-medieval and modern periods are represented within the historic environment is in the local buildings, largely in vernacular styles, though also represented by the Listed Buildings in polite style such as the aforementioned Castle Eden church and castle. Also included within this category in the wider study area are other local civic structures associated with the growth of the pit villages.

Contemporary with the decline of much of the North East, particularly those areas heavily reliant on extraction and industry, the increasing urbanisation of the coast changed the character of the denes and the local area. The most obvious change in the wider study area is the creation of the new town of Peterlee which has absorbed the core of several earlier medieval and post-medieval settlements, fragments of which now stand in stark contrast to the modern housing which surrounds them. The most-recent heritage asset within the wider study area – the Apollo or Pasmore Pavilion – speaks of the optimism of the new town movement where it was hoped that substantial public art could act as a cultural hub to the estates, creating an almost instant sense of heritage. The disagreements over the legacy of the Apollo Pavilion continue to illustrate that the relationship between culture, heritage and place is not a simple one.



5. BASELINE: SITE AND SETTING

5.1 SITE CONDITIONS

A site visit was undertaken on the 16th January in cold, but fair and bright conditions. The proposed turbine site is currently a large field under arable cultivation within a landscape of medium-large arable fields. The topographic setting of the proposed turbine site is on a gently rolling plateau which ultimately dips eastwards towards the coast. The plateau is bordered to the north and south by the deeply incised Castle Eden Dene and Hesleden Dene respectively. No previously unknown archaeological features or other heritage assets were noted as part of the site walkover.

5.2 SETTING STUDY

5.2.1 METHODOLOGY – ASSESSING SIGNIFICANCE AND CONTRIBUTION

Assessment of setting begins with identifying the significance of a heritage asset. The varied nature of heritage assets mean that there cannot be an objective ‘scoring’ of significance and there will always be an element of interpretation and professional judgement within such an assessment.

As outlined in *The Setting of Heritage Assets* (English Heritage 2011) and the extant PPS5 Guidance documentation (CLG/DCMS/EH 2010), setting is defined as “the surrounding in which an asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance, or may be neutral” (English Heritage 2011, 2).

Once the significance of a heritage asset is established, and the contribution that setting makes to that significance, it is possible to assess how the proposed development may change that setting, and therefore its contribution to significance. This change can also be positive, negative or neutral. Key criteria for the assessment of change to setting are given in the *PPS5 Planning Guide*, and can be linked to a number of the criteria for assessing general significance outlined in Table 4 above:

Table 8 Additional criteria for assessment of change to setting	
Criteria	Description
View	Views are often considered the most influential factor in change to setting, and assessment of that change can also be based on clear and repeatable evidence. Potential change relating to views can include intervisibility between a heritage asset and the proposed development, a proposed development interposing between two intervisible heritage assets, and the inclusion of a proposed development within a view that also incorporates one or more heritage assets.
Environmental Factors	Change to setting through environmental factors includes those potential effects often assessed as part of Environmental Impact Assessment such as dust, vibration or noise.
Spatial Associations	Buildings or archaeological sites that are in close proximity but not visible from each other may have a historic or aesthetic connection that amplifies the experience of the significance of each. They would be considered to be within one another’s setting. Also, the setting of a heritage asset can enhance its significance whether or not it was designed to do so. This aspect of setting is closely related to the group value criteria noted above
Public	Public appreciation of a heritage asset is an important part of how setting

Appreciation	can contribute to significance, and public value can raise the significance of a heritage asset over and above its material worth or inherent archaeological or architectural interest. It should be noted, however, that a lack of public appreciation – for example through little knowledge of a site or lack of access – can make a negative contribution to significance; this is discussed more fully below.
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The changing nature and mutability of setting is acknowledged in its definition, and therefore an assessment of setting can only consider its current contribution to significance. It is not appropriate to ‘second-guess’ future changes to the setting beyond the potential effects of a proposed development or associated mitigation and off-setting, as this would render an objective assessment meaningless. This axiom also helps resolve an apparent contradiction within the extant guidance (CLG/DCMS/EH 2010, 34) which states that “setting is the surroundings in which an asset is experienced” and also that “the contribution that setting makes to the significance does not depend on there being...an ability to... experience that setting”.

With certain heritage assets, there is no requirement to access a site physically to experience it, but with the majority of archaeological sites in particular, physical access is necessary to experience them as they can be largely invisible or even completely buried. In such cases the asset has a setting, as stated in the guidance (CLG/DCMS/EH 2010), but access to a site and knowledge of its existence are prerequisites to ‘experiencing’ it. The resolution to this anomaly lies in the application of a second part of the definition of setting: “elements of a setting may make a positive or negative contribution to the significance of an asset”. Acknowledging this, “the contribution that setting makes to the significance does not depend on there being...an ability to... experience that setting” (CLG/DCMS/EH 2010, 34), it is just that the lack of access to that asset is likely to make a negative contribution to its current setting.

5.2.2 METHODOLOGY – PRACTICAL ASSESSMENT

Preliminary assessment of any potential change to the setting of the chosen heritage assets was undertaken through production of a Zone of Theoretical Visibility (ZTV) within a GIS environment. A Digital Elevation Model (DEM) was created using Ordnance Survey 10m contour data for a 20km square area centred on the proposed development site. A multiple ZTV was then created based upon ground level, hub height and tip height viewpoints at the proposed turbine site (Fig. 5). As it is derived from contour data alone, the ZTV produced for this assessment assumes that there are no intervening obstacles to site such as tree cover or existing buildings, though the ZTV produced for the preceding Landscape Visual Impact Assessment incorporated a model of intervening terrain (JBA Consulting 2013, Fig. 2c). During the setting assessment additional photomontages were undertaken specifically to address viewpoints from key heritage assets: Hardwicke Hall and the Church of St. James in Castle Eden. These additional photomontages have been included in the revised Landscape Visual Assessment and also were considered for the assessment given below (see JBA Consulting 2013).

Following preliminary desk-based analysis of the ZTV, those heritage assets where there were potential visual or other setting effects were identified and a ground survey of these locations was undertaken to test the potential visibility to the proposed turbine site. Digital photography was taken with a Fujifilm S7000 DSLR.

5.2.3 SETTING ASSESSMENT

Given the methodology employed, and the specific guidance given through an application response from Durham County Council, an assessment of potential effects on setting was undertaken for all



Scheduled Monuments, Grade I Listed Buildings and Grade II* Listed Buildings within 5km, and all Grade II Listed Buildings within 2km, that fell within the ZTV of the proposed development (Fig. 6). In addition, where there were extant non-designated heritage assets within 2km of the proposed turbine, and falling within the ZTV, these have also been included. These heritage assets, an assessment of the current contribution of setting to their significance, and potential effects of the proposed development on setting are tabulated below:

Table 9 Assessment of potential effect of the proposed development on setting of heritage assets

UID	Site	Current contribution of setting to significance	Potential effect of proposed development on setting
1158947 1323084	Hardwicke Hall Group (Grade II Listed, locally listed gardens)	<p>This group of designated heritage assets includes the Grade II* Listed hall itself and also the bounding wall of the immediate grounds to the west which is a Grade II Listed structure. The listing notes that the hall is probably mid-late 18th century though potentially retaining a 16th century core (not now clear or visible). The listing only highlights the architectural interest of the asset. There is clearly some aesthetic value in the hall, though more-recent alterations have masked some of the original form and a reasonable proportion of the 18th century stone and brickwork. The group value of the hall and its bounding wall add to the significance of each.</p> <p>The immediate setting of the hall, defined by its gardens, grounds and clearly delineated boundaries, make the greatest positive contribution to its overall significance. The wider landscape setting of the hall is not a prominent part of its setting, predominantly due to the substantial planting of trees around the boundary of the property which screen views in and out, and also the proximity of adjacent modern agricultural developments which ‘crowd’ the north side of the hall and grounds.</p>	<p>There are limited views to the proposed turbine from certain parts of the hall and its grounds. During the setting assessment it was noted that views would be at least partially screened by existing mature trees, and during summer months when the trees are in foliage it is likely that the screening would be total for the majority of the hall and grounds. (see Landscape Visual Assessment Photomontages). Far enough removed from the proposed development to experience no adverse environmental effects, nor will there be any effect inhibiting the public appreciation of the hall. The proposed turbine will not break the coherence of the group value of the listed hall with its gardens and grounds and will not affect the immediate setting of the hall. Overall the potential effect of the proposed development on the setting of the hall is considered to be low to moderate.</p>
1120940	Church of St. James, Castle Eden (Grade II Listed)	<p>The principal contributing factors to the significance of the Listed church are its historic value, some intrinsic architectural interest and aesthetic value, and also its current setting makes a high contribution to its significance. The value of this current setting lies principally in the group value of the church as a focal point of a group of Listed Buildings within the Castle Eden Conservation Area. The coherence of this group of buildings is one of the principal aims of the Conservation Area. The position of the church as a spiritual and social part of a community also means that the experiential setting and public appreciation of the monument contributes positively to its significance.</p>	<p>No views to and from the proposed development due to local topography and intervening obstacles (see Landscape Visual Assessment Photomontages). Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the coherence of the historic buildings within Castle Eden and the Conservation Area.</p>
1120939 1120941 1120942 1120943 1158883 1323120 1323121 1323122	Eight Grade II Listed structures within the south of the Castle Eden Conservation Area	<p>The contribution of current setting to the significance of these heritage assets is high – the buildings are generally of some aesthetic and historic value and have inherent architectural interest, but the coherence of a the Castle Eden village within the confines of the Conservation Area, and their association with the dene (spatial association as part of setting), makes a substantial positive contribution to the significance of the buildings within the Conservation Area.</p>	<p>No views to and from the proposed development due to local topography and intervening obstacles (Fig. 6). Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the coherence of the historic buildings within Castle Eden and the Conservation Area.</p>



1120937 1323118 1323908	Castle Eden castle and associated Listed Buildings (Grade II* and Grade II Listed)	As with the other Listed structure within the Castle Eden Conservation Area the current setting of the castle makes a strong positive contribution to its setting, principally through the coherence of the structures within the Conservation Area and the proximity of Castle Eden Dene. In addition to this the significance of the castle and its associated structures also lies in a combination of their historic, architectural and aesthetic interest.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the coherence of the historic buildings within Castle Eden and the Conservation Area.
1400364	Apollo (Pasmore) Pavilion (Grade II* Listed Building and Designated Park)	The current setting of the Apollo Pavilion is very close to its original setting and is a key contributing factor to its significance. Removal of the artwork, or alteration of that setting, would diminish its intended significance, as a central focal point of the surrounding estate and the whole 'new town' of Peterlee. The Apollo Pavilion also has inherent aesthetic and historic interest, but it must also be noted that public appreciation of the monument has been mixed over the last half century, and it's inherent significance has not always been augmented by the opinions of local people.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the intended and current setting as a focal point of the surrounding estates.
1311278 1323123	Cotsford Grange farmhouse and outbuildings, Horden (Grade II Listed)	The significance of these buildings lies principally in their historic value as an example of post-medieval vernacular architecture associated with the agriculture in the area. It also has some architectural value. The current setting of the farm makes a neutral contribution to its significance. The immediate setting of the farm is stark and incongruous as it survives as a small group of early 19 th century agricultural buildings with some fine architectural features, surrounded by modern housing estates and now divorced from anything like its original setting. The balance of this negative contribution is that this juxtaposition highlights the age of the farm buildings and the necessity of its preservation.	There are likely limited views from the heritage asset to the proposed turbine due principally to distance (Fig. 7). It is considered there will be a minor effect on the visual aspect of setting of the heritage asset. The asset is far enough removed from the proposed development to experience no adverse environmental factors. There will be no effect on the coherence of the farm group and its immediate setting.
49344	St. John's Church, Hesleden (Non-designated)	The principal contributing factors to the significance of this building are its historical value and its intrinsic architectural interest and aesthetic value, though these are limited. The position of the church as a spiritual and social hub of a community also means that the experiential setting and public appreciation of the monument contributes positively to its significance, though all these are tempered by the fact that the church appears to no longer be in use and parts of the building are in a poor condition.	No ground level views to and from the proposed development due to local topography and intervening obstacles (Fig. 8). Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the spatial association of the church with other buildings in Hesleden.



6. ASSESSMENT OF DIRECT EFFECTS

6.1 STATEMENT OF POTENTIAL

All data sources consulted (HER, Designated sites, cartography, aerial photography) have demonstrated there are no known heritage assets within the proposed turbine site. Within the surrounding area there are a number of archaeological features of minor interest, principally relating to medieval and post-medieval agriculture and settlement. It is considered likely that the extensive post-medieval agriculture extended across the proposed turbine site and, although there is some inherent low archaeological significance in remains of this type, the potential impact of deep agriculture on earlier remains is likely to be significantly detrimental.

The presence of significant prehistoric lithic scatters within the wider study area, and the local topography which is considered to be favourable for early prehistoric settlement or land exploitation, suggest a low-medium potential for Mesolithic activity, usually characterised by the presence of stone artefacts and, very rarely, by in-situ archaeological features.

6.2 STATEMENT OF POTENTIAL EFFECTS

Should the proposed development site host previously unknown heritage assets, then there will be an adverse effect on such assets in any areas where they are truncated by groundworks. Given the nature of the development, the footprint of groundworks will be minimal and, in accordance with the opinion of English Heritage, “flexibility in the siting...provides opportunities to avoid damage” (EH 2005, 7). Overall, it is considered that the potential direct effect of the proposed development is low.

7. ASSESSMENT OF INDIRECT EFFECTS

7.1 STATEMENT OF POTENTIAL EFFECTS

As is outlined above in the site-by-site assessment of potential change to setting and the contribution to significance, the constituent factors of setting can make both positive and negative contributions to the significance of a given heritage asset.

Of the sites assessed, there would be no effect on setting for the majority given the distance to the proposed turbine, the lack of any intervisibility due to intervening obstacles and screening, and the fact that the proposed turbine does not disrupt the coherence of any groups of heritage assets where such spatial relationships form a component of their setting.

Of those heritage assets which are closest to the proposed turbine site, Hardwicke Hall and the associated Grade II Listed walling which bounds the gardens will have limited views to the turbine, partially or totally screened by an existing mature tree belt for the majority of the hall and its grounds. The primary way in which the setting of Hardwicke Hall contributes to its significance is in the preservation and coherence of its immediate gardens and grounds, though there has been some disturbance to this through the modern developments associated with the adjacent farm. The proposed turbine will have no effect on this aspect of the hall's setting. The overall indirect effect of the proposed turbine on the setting of the Hardwicke Hall Listed structures is considered to be low to moderate, and to be low to negligible on the setting of the other designated heritage assets assessed.

7.2 CUMULATIVE EFFECTS

The cumulative effects of the proposed turbine have already been considered from a landscape visual point of view within the earlier Landscape Visual Appraisal (JBA Consultancy 2013), due to the presence of a number of wind renewables developments under application or previously approved within 25km of the proposed turbine site.

The closest potential development to the Dene Leazes site is the five turbine Sheraton Wind Farm c. 2.5km south of Dene Leazes, the application for which is currently being determined. As part of the assessment of cultural heritage effects within the Environmental Statement for the Sheraton Wind Farm, Hardwicke Hall was considered and the conclusions were:

“The hall is set on a south facing slope towards the development site, and is considered to have a medium sensitivity to change. The hedges surrounding the garden will shield a significant amount of the view and the wind farm may only be visible from the upper floors of the building. The immediate setting of the hall is well defined by a high wall with open agricultural landscape beyond. The addition of the turbines will not intrude into this immediate setting. The magnitude of impact is therefore considered to be negligible” (Stocking 2011, 266).

All other heritage assets assessed will not experience adverse setting effects from the proposed turbine at Dene Leazes, and so for those assets there will not be any cumulative effects. In regards to Hardwicke Hall, the cumulative effects are considered to be minimal and the overall indirect effect on its setting remains as low to medium.

8. RECOMMENDATIONS

8.1 POTENTIAL EVALUATION OR MITIGATION REQUIREMENTS

In terms of direct effect the potential identified relates to both a low potential for scattered Mesolithic artefacts and a high potential for post-medieval agriculture of low to negligible significance. Both of these potential effects can be mitigated through archaeological monitoring during groundworks in accordance with an agreed specification, which would be proportionate to the potential loss of significance and represent a “balanced judgement” as required by paragraph 135 of NPPF (CLG 2012, 31). The presence or absence of post-medieval ploughing remains does not affect the viability of conditioned monitoring as mitigation, particularly given the relatively small area of impact, and therefore it is considered that the information submitted as part of this assessment is sufficient and proportionate to satisfy the requirements of paragraph 128 of NPPF without the need for additional field evaluation prior to determination.

As potential indirect effects are considered to be low to negligible, and in the specific case of Hardwicke Hall low to medium, no additional mitigation in relation to the setting of heritage assets is recommended.



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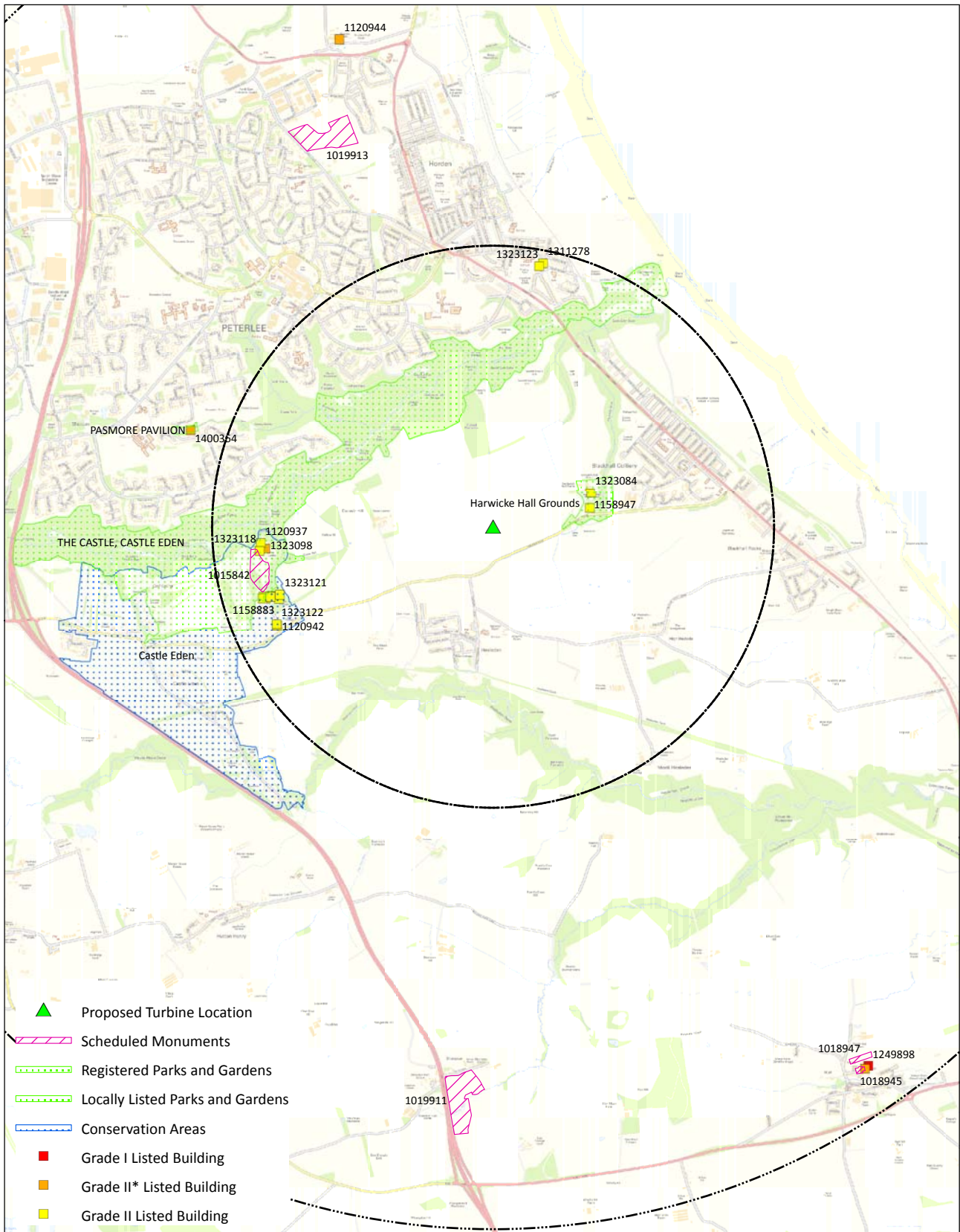


APPENDIX 1 – FIGURES





<p>Project</p> <p>Dene Leazes Farm Wind Turbine, County Durham</p> <p>Cultural Heritage Assessment</p>	<p>Legend</p> <p> Proposed Turbine Site</p>	<p>Solstice Heritage Crabtree Hall Business Centre Little Holby Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk</p> 
<p>Drawing</p> <p>Fig. 1 Site Location</p>		<p>Drawn by</p> <p>JB</p> <p>Date</p> <p>January 2014</p>



Project:
 Dene Leazes Farm Wind Turbine
 County Durham
 Cultural Heritage Assessment

Legend:

Solstice Heritage
 Crabtree Hall Business Centre
 Little Holtby
 Northallerton
 North Yorkshire
 DL7 9LN
 www.solsticeheritage.co.uk

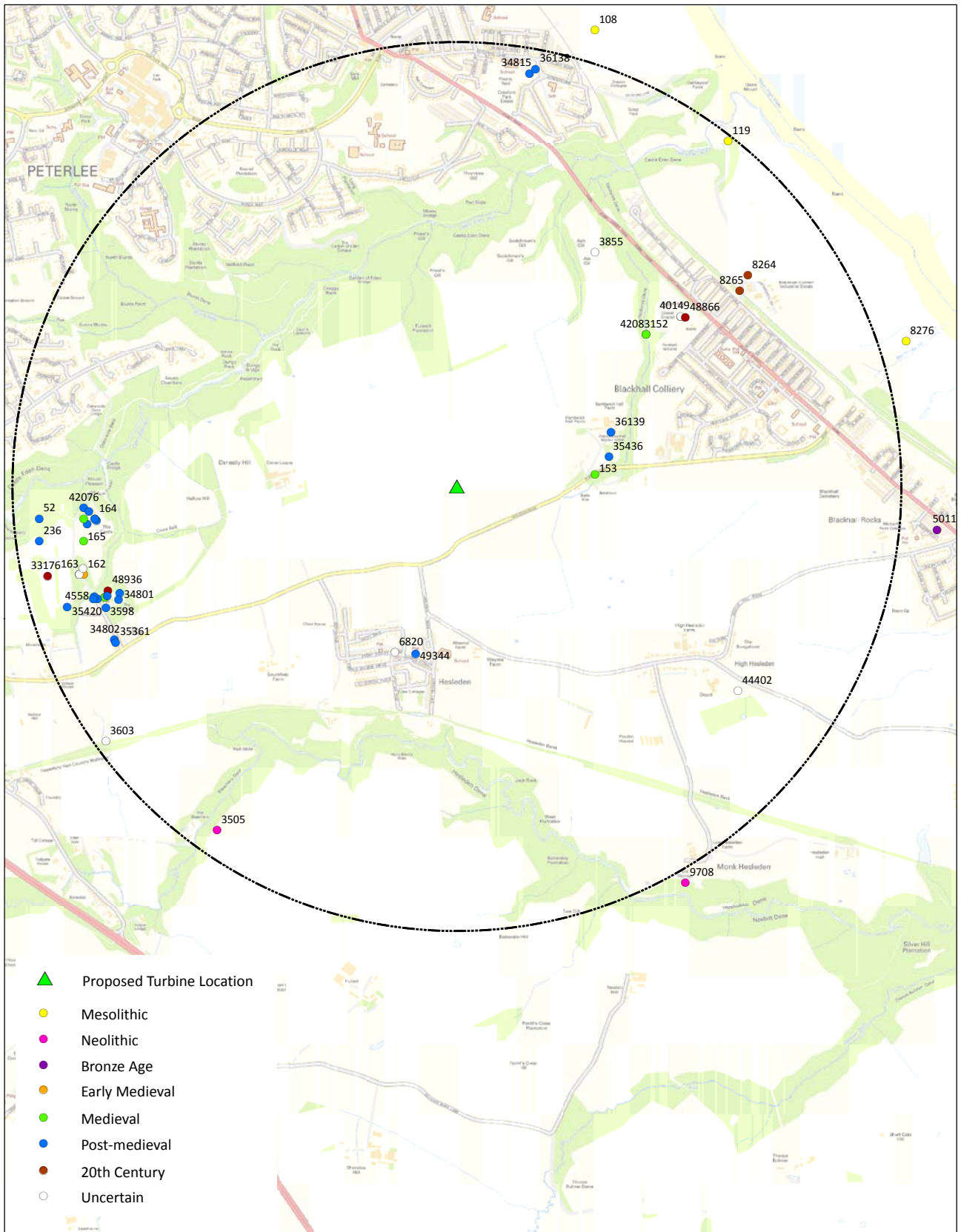


Drawing:
 Fig. 2 Location of Designated Heritage Assets



Drawn by:
 JB

Date:
 January 2014



Project:
 Dene Leazes Farm Wind Turbine
 County Durham
 Cultural Heritage Assessment

Legend:

0 0.25 0.5 1 km

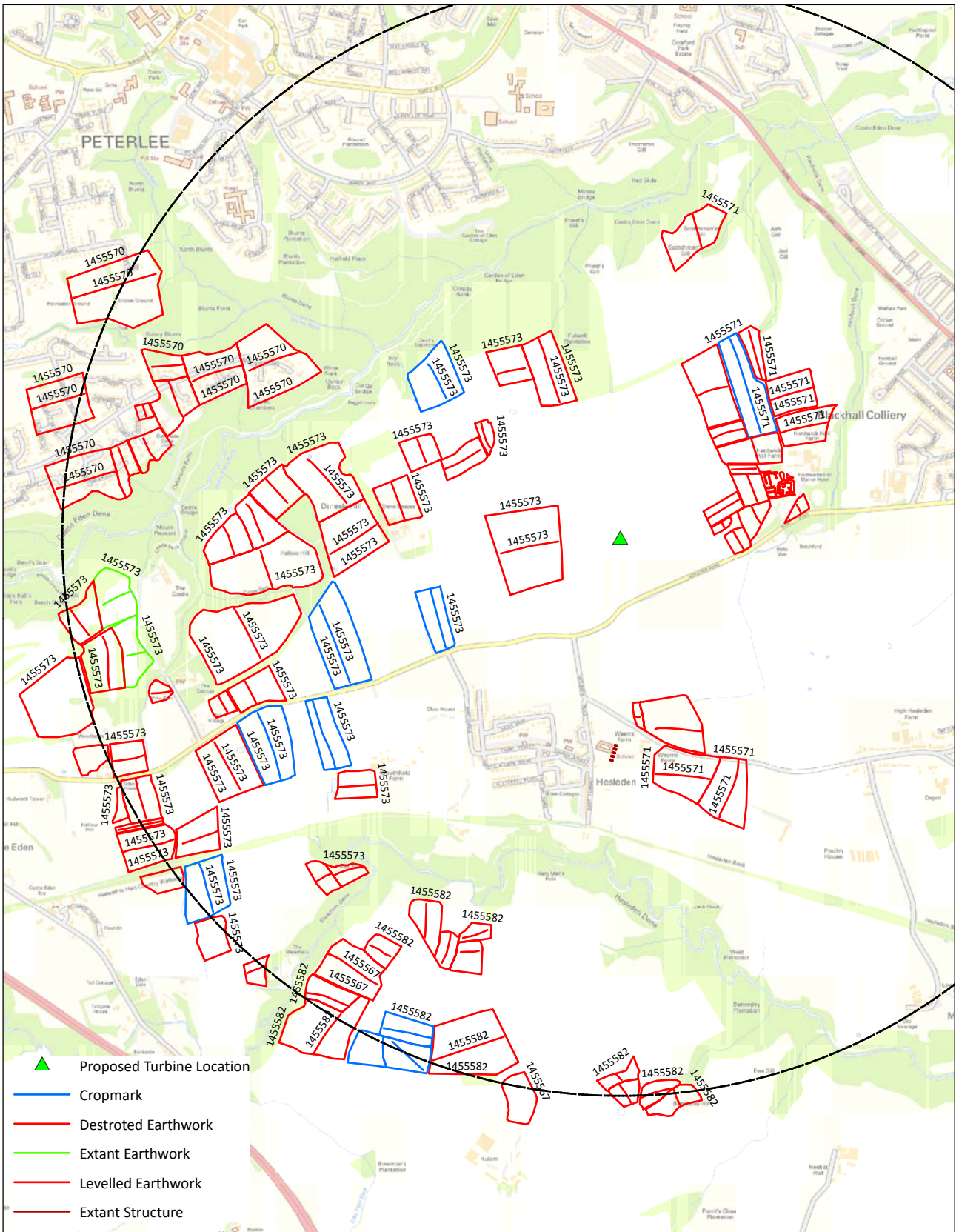
Solstice Heritage
 Crabtree Hall Business Centre
 Little Holtby
 Northallerton
 North Yorkshire
 DL7 9LN
 www.solsticeheritage.co.uk



Drawing:
 Fig. 3 Location of Non-Designated
 Heritage Assets

Drawn by:
 JB

Date:
 January 2014



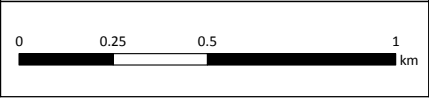
Project:
 Dene Leazes Farm Wind Turbine
 County Durham
 Cultural Heritage Assessment

Legend:

Solstice Heritage
 Crabtree Hall Business Centre
 Little Holtby
 Northallerton
 North Yorkshire
 DL7 9LN
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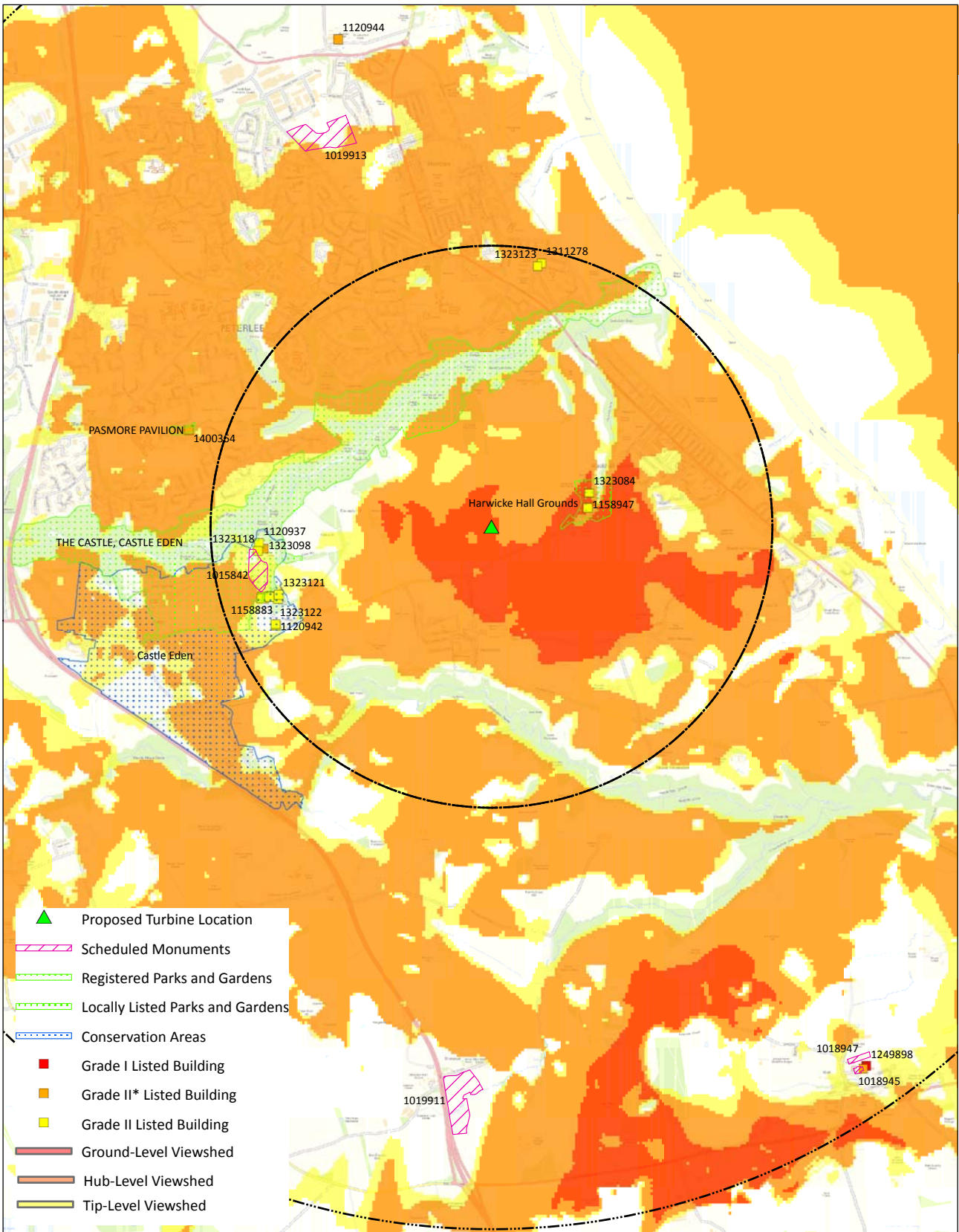













Drawing:
 Fig. 4 Features mapped from
 aerial photography



Drawn by:
 JB

Date:
 January 2014



-  Proposed Turbine Location
-  Scheduled Monuments
-  Registered Parks and Gardens
-  Locally Listed Parks and Gardens
-  Conservation Areas
-  Grade I Listed Building
-  Grade II* Listed Building
-  Grade II Listed Building
-  Ground-Level Viewshed
-  Hub-Level Viewshed
-  Tip-Level Viewshed

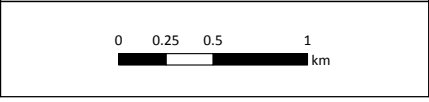
Project:
 Dene Leazes Farm Wind Turbine
 County Durham
 Cultural Heritage Assessment

Legend:

Solstice Heritage
 Crabtree Hall Business Centre
 Little Holtby
 Northallerton
 North Yorkshire
 DL7 9LN
 www.solsticeheritage.co.uk



Drawing:
 Fig. 5 ZTV in relation to
 Designated Heritage Assets



Drawn by:
 JB

Date:
 January 2014



Fig. 6 View south showing the easternmost Listed Building in the Castle Eden Conservation Area (closest to the proposed turbine site). The photograph illustrates the depth of mature tree screening east of the building which is typical of much of the Conservation Area.



Fig. 7 Ground level view south-west from the Cotsford Grange farm buildings in Horden. The proposed turbine is largely screened by intervening tree cover and will likely form a minor component of the view in this direction.



Fig. 8 View of the non-designated church of St James in Hesleden (now apparently disused). Ground level views north from the church are completely screened by the mature treeline centre-left of shot.

APPENDIX 2 – GAZETTEER

Table 10 Scheduled Monuments in the study area		
UID	Site	Period
1015842	Deserted medieval village, moated site, and early medieval timber building at Castle Eden, 200m south of The Castle	Medieval
1019911	Sheraton medieval settlement and open field system	Medieval
1018947	Fishponds 70m north of St Mary Magdalene's Church	Medieval
1019913	Yoden medieval settlement	Medieval
1018945	Great house 50m west of St Mary Magdalene's Church	Medieval to Post-medieval

Table 11 Registered Parks and Gardens in the study area		
UID	Site	Period
2366	THE CASTLE, CASTLE EDEN	Post-medieval
5085	PASMORE PAVILION	Modern

Table 12 Conservation Areas in the study area		
UID	Site	Period
34	Castle Eden	Post-medieval

Table 13 Grade I and II* Listed Buildings in the study area		
UID	Name	Grade
1249898	CHURCH OF ST MARY MAGDALENE	I
1120944	HORDEN HALL	II*
1249899	BOUNDARY WALL TO WEST OF CHURCH OF ST MARY MAGDALENE	II*
1323098	THE CASTLE	II*
1400364	APOLLO PAVILION	II*

Table 14 Grade II Listed Buildings in the core study area		
UID	Name	Grade
1120937	GATE TOWERS AND WALLS ON WEST SIDE OF STABLE YARD, 15M NORTH OF THE CASTLE	II
1120939	CHURCHYARD GATES, 35 METRES WEST OF CHURCH OF ST JAMES	II



1120940	CHURCH OF ST JAMES	II
1120941	THE COTTAGE	II
1120942	13, THE VILLAGE	II
1120943	GATES AND GATE PIERS, 5 METRES NORTH OF THE LODGE	II
1158883	THE LODGE	II
1158947	GARDEN WALL, 60 METRES SOUTH OF HARDWICK HALL HOTEL	II
1311278	FARMBUILDINGS, 15 METRES NORTH OF COTSFORD GRANGE FARMHOUSE	II
1323084	HARDWICK HALL HOTEL	II
1323118	LODGE, GLASSHOUSE AND WALL, 25 METRES WEST OF THE CASTLE	II
1323120	RECLINING EFFIGY AGAINST WEST TOWER OF CHURCH OF ST JAMES	II
1323121	COACH HOUSE AND LOOSE BOXES, 10 METRES NORTH OF THE COTTAGE	II
1323122	14, THE VILLAGE	II
1323123	COTSFORD GRANGE FARMHOUSE	II

Table 15 HER sites in the core study area

UID	Name	Period	Summary
52	Castle Eden, Dene	Hanoverian (1714 to 1837)	Hoard
108	Horden	Mesolithic (-10000 to -4000)	Flints
119	Blackhall Colliery, Dene Holme	Mesolithic (-10000 to -4000)	Findspot
152	Blackhall Colliery, Hardwick		Chapel
153	Blackhall Colliery, Hardwick	Medieval (1066 to 1540)	Chapel
162	Castle Eden	Early Medieval (410 to 1066)	Burial
163	Castle Eden, St. James		Chapel
164	Castle Eden	Post Medieval (1540 to 1901)	Castle, Country House
165	Castle Eden	Medieval (1066 to 1540)	Deserted Settlement, Village
236	Castle Eden	Stuart (1603 to 1714)	Artefact
3505	Castle Eden, The Bleachery	Neolithic (-4000 to -2200)	Axe, Findspot
3590	Castle Eden, St James Church		Sculpture
3598	Castle Eden, The Lodge (formerly Church Lodge)	Post Medieval (1540 to 1901)	Gatehouse
3603	Castle Eden		Railway
3855	Horden Lime Kiln Gill		Lime Kiln
4558	Castle Eden Historic Park and Garden	Post Medieval (1540 to 1901)	Landscape Park
5011	Blackhall Rocks	Bronze Age (-2600 to -700)	Arrowhead
6820	Hesleden		Local History
8264	Blackhall Colliery	20th Century (1901 to 2000)	Mine
8265	Blackhall Colliery	20th Century (1901 to 2000)	Railway Station
8276	Blue House Gill Mesolithic flints	Mesolithic (-10000 to -4000)	Flint Scatter



9708	Monk Hesledon, Flint Finds	Neolithic (-4000 to -2200)	Flint
33176	Aircraft Crash Site, Hurricane V7400, Castle Eden	Second World War (1939 to 1945)	Impact Crater, Aircraft Crash Site
34798	The Castle	Post Medieval (1540 to 1901)	Country House, Palm House
34799	Lodge, Glasshouse and Wall, 25m W of the Castle	Post Medieval (1540 to 1901)	Garden Wall, Lodge, Glasshouse
34800	Reclining Effigy against W tower of Church	Medieval (1066 to 1540)	Effigy, Statue
34801	Coach House and Loose Boxes, 10m N of The Cottage	Post Medieval (1540 to 1901)	Coach House, Stable, Garage
34802	Castle Eden, 14 The Village	Post Medieval (1540 to 1901)	House
34815	Cotsford Grange Farmhouse	Post Medieval (1540 to 1901)	Farmhouse
35336	Gate Towers & Walls north of Castle Eden Castle	Post Medieval (1540 to 1901)	Gate Tower, Wall
35338	Churchyard Gates, W of St James, Castle Eden	Post Medieval (1540 to 1901)	Gas Lamp, Gate, Lamp Bracket
35359	St James' Church, Castle Eden	Post Medieval (1540 to 1901)	Parish Church, Plaque, Bell Tower, Wall Monument
35360	The Cottage	Post Medieval (1540 to 1901)	House
35361	Castle Eden, 13 The Village	Post Medieval (1540 to 1901)	House
35362	Gates & Gate Piers, N of The Lodge, Castle Eden	Post Medieval (1540 to 1901)	Gate, Gate Pier
35420	The Lodge	Post Medieval (1540 to 1901)	Gate Lodge
35436	Garden Wall, 60 m S of Hardwick Hall Hotel	Post Medieval (1540 to 1901)	Garden Wall, Walled Garden, Gate
36138	Farmbuildings, 15m N of Cotsford Grange Farmhouse	Post Medieval (1540 to 1901)	Cart Shed, Farm Building, Granary, Hayloft, Stable
36139	Hardwick Hall Hotel, Monk Hesledon	Post Medieval (1540 to 1901)	Country House, Priest Hole, Hotel
40148	Blackhall Colliery		Colliery
40149	Blackhall Colliery		Colliery
42076	Cairn near The Castle	Stuart (1603 to 1714)	Cairn
42078	Church on The Castle site	Stuart (1603 to 1714)	Cemetery Chapel, Church
42080	The Castle	Medieval (1066 to 1540)	Castle
42082	West Lodge on The Castle site	Medieval (1066 to 1540)	Castle
42083	Chapel near Welfare Park	Medieval (1066 to 1540)	Chapel
44402	Monk Hesledon		Local History
44989	Multi-period features, The Castle, Castle Eden	Uncertain	Trackway, Ridge And Furrow, Ditch, Moat
48866	War Memorial Cross, Welfare Park, Blackhall Colliery	Mid-20th Century (1933 to 1966)	War Memorial



48936	St. James' Churchyard, Castle Eden	First World War (1914 to 1918)	Churchyard, Gravestone
49344	St. John's Church, Church Street, Hesleden	Victorian (1837 to 1901)	Church

