Duggleby Wold Wind Turbine
Sherburn, North Yorkshire

Report on an Archaeological Watching Brief

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Report on an Archaeological Watching Brief

Planning Ref: 10/01311/FUL

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EXECUTIVE SUMMARY

An archaeological watching brief was undertaken in December 2013 and January 2014 in advance of the erection of a single wind turbine and the creation of its associated infrastructure. The site is located on arable land to the west of Duggleby Wold Farm in the parish of Sherburn, North Yorkshire. Previous geophysical survey across the site had identified uncertain anomalies which had the potential to be archaeological features, and a watching brief was secured as a condition of planning permission (10/01311/FUL).

No archaeological or palaeoenvironmental remains were observed, and no artefacts or ecofacts were recovered during monitoring of groundworks.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

This report has been prepared by Solstice Heritage on behalf of ICE Renewables Limited to outline the results of archaeological monitoring (watching brief) on groundworks in advance of the construction of a free-standing monopole wind turbine and associated infrastructure at Duggleby Wold Farm, Sherburn, North Yorkshire. The monitoring was undertaken to fulfil a condition of planning permission (10/01311/FUL) originally obtained for two turbines, but since the preparation of the WSI a decision was made to initially proceed with a single turbine. Should the second turbine be erected in the future under the same planning permission, then monitoring of groundworks will be undertaken and an addendum to this report will be prepared.

A programme of geophysical survey was undertaken to inform the planning application (YAT 2010). The results of the survey were summarised as follows:

"The data are dominated by linear trends which reflect the current ploughing alignment. A handful of pit type anomalies have the potential of being archaeological in nature but due to the lack of further responses these have been given an *uncertain* category. Trends, other than current agricultural responses, again may be of an archaeological origin but previous ploughing alignments are an equally valid interpretation" (YAT 2010, 1).

1.2 SITE LOCATION

The development is situated south of Duggleby Wold Farm *c.*2km north of the village of Weaverthorpe, Sherburn, North Yorkshire, centred at grid reference SE 96080 73340 (Fig. 1 Appendix 1). The groundworks comprised the turbine base itself and the associated access and infrastructure (Fig. 2 Appendix 1).

1.3 POTENTIAL SIGNIFICANCE

Consultation with the Development Management Archaeologist at NYCC resulted in confirmation that the geophysical survey showed a low potential archaeological significance for the site. However, given the presence of the anomalies stated above, it was considered proportionate that a watching brief be carried out on groundworks as a condition of permission.

1.4 AIMS OF THE PROJECT

An archaeological watching brief is defined as:

> "A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, intertidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive" (IfA 2008a, 2).

The overarching aim of the watching brief was:

- To ensure that important archaeological remains were not destroyed without first being adequately recorded.

The objectives of the watching brief were:

- To record, excavate and environmentally sample any archaeological deposits of significance observed during the groundworks
- To establish the date, character and significance of any archaeological and palaeoenvironmental deposits, including in relation to other similar features within the area
- To ensure there is a permanent record of the work undertaken deposited with the local Historic Environment Record (HER) and made available online
- To ensure all work is undertaken in compliance with the Code of Conduct of the Institute for Archaeologists (IfA) (2000), the IfA Standard and Guidance for Watching Briefs (revised 2001), and the Regional Statement of Good Practice.

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".
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.
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

Ryedale Council have recently implemented the new Ryedale Plan, of which the main document of local planning policy is the Local Plan Strategy (ref). The key policy in relation to heritage is SP12 and the pertinent sections in relation to this project are summarised in Table 3 below.

Table 3 Key points within the Ryedale Local Plan Strategy in relation to the project

Paragraph	Summary
7.7	Where it can, the Council will look to protect wider features of local historic value which are not afforded statutory protection.
SP12 Para. 4	In considering and negotiating development proposals, the Council will seek to protect other [non-designated] features of local historic value and interest throughout Ryedale having regard to the scale of any harm or loss and the significance of the heritage asset.

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.
Standard and Guidance for Archaeological Watching Briefs (IfA revised 2008)	This document represents non-statutory industry best practice as set out by the Institute for Archaeologists. This work has been undertaken to these standards, as subscribed to by Solstice Heritage.

2.3.2 REGIONAL

Archaeological work within North Yorkshire is often required to comply with *Yorkshire, The Humber and The North East: A Regional Statement of Good Practice for Archaeology in the Development Process* (SYAS 2011). The key principles in relation to the proposed monitoring works are summarised in the table below:

Table 5 Key principles of the Regional Statement of Good Practice	
Principle	**Key Points**
2	Archaeological work should be undertaken by professionally qualified and appropriately experienced archaeologists and organisations.
3	All archaeological work will have a scope agreed in advance with the archaeological curator (this document), and any changes to the scope or methodology will be agreed in writing with the archaeological curator.
4	Monitoring of archaeological work by the local archaeological curator will be the norm, and reasonable notice of commencement of fieldwork will be given by the archaeologist.
5	Archaeological work will be undertaken in accordance with the best practice guidance of English Heritage and the IfA.
6	The local Historic Environment Record should be consulted prior to the commencement of fieldwork.
7	Archaeological work in the planning process should have regard to national and local published research agenda (see section 4.2 below)
9	Reports and required data will be submitted to the archaeological curator and local HER in a timely fashion and in accordance with the agreed WSI.
10	Any comments made by the archaeological curator on reports and outputs will be made within a reasonable timetable of receipt.
11	Where appropriate significant archaeological findings will be submitted for publication in a suitable journal or journals.
12	Any archive produced will be deposited in an ordered and acceptable fashion within a reasonable timetable, the details of which will be given in the project report.
13	During the course of archaeological work arrangements will be made, where possible, for disseminating information about the site to the general public.

3. METHODOLOGY

3.1 FIELDWORK

The footprint of the mast base and associated trackway infrastructure, illustrated on Fig. 2 below, were excavated on Thursday 5th December 2013, with works completed on Wednesday 8th January 2014. All groundworks were monitored by a suitably qualified archaeologist, and a toothless ditching bucket was used for removal of all overburden.

Where archaeological features and deposits were encountered, these were to be recorded to the standards outlined in the relevant IfA Standard and Guidance. All features and deposits were to be recorded on *pro-forma* record sheets, drawn in plan and section at a suitable scale, and photographed. In addition to any specific features or deposits, a general record of the trench stratigraphy was made on a *pro-forma* record sheet.

Prior to fieldwork a full Written Scheme of Investigation (WSI) (Brightman 2013) was prepared and submitted to the local authority archaeologist. The methodological sections of this document have been included as Appendix 2 below.

3.2 POST-FIELDWORK

The primary site archive comprises site records and digital photography on cd. This has been used to compile this report, which will be deposited with the local HER in digital format as the principal record of the monitoring work undertaken. Given the lack of archaeological features, deposition and preservation of the limited paper archive with a suitable local repository museum is not considered suitable. An OASIS record has been completed for this work, including a digital version of this report, the reference for which is **solstice1-168423**.

In the absence of any material culture, faunal or human remains, or deposits of palaeoenvironmental significance no further work was required to catalogue, process or assess such remains for integration within the report and archive. The procedures and strategy that would have been followed had such remains been encountered is set out within the earlier WSI and included in Appendix 2 below.

3.3 HEALTH AND SAFETY

All archaeological work was undertaken in a safe manner in compliance with the *Health and Safety at Work Act 1974*. A full risk assessment was undertaken in advance of the commencement of work, a copy of which was available on site for the duration of the fieldwork. Solstice Heritage has a full Safety, Health and Environment Policy which can be supplied upon request.

3.4 QUALITY ASSURANCE

Solstice Heritage commits all fieldwork and post-fieldwork assessment, analysis, reporting and dissemination to be undertaken to the standards stipulated by the Institute for Archaeologists (IfA). All roles within the project were undertaken by Jim Brightman who is a fully accredited member of the IfA (MIfA level).

3.5 CHRONOLOGY

Where chronological and archaeological periods are referred to in the report, 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

3.6 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. 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.

3.7 COPYRIGHT

4. RESULTS

4.1 GENERAL STRATIGRAPHY

The area of groundworks comprised a long track adjacent to the north-west to south-east field boundary, and a spur access track which ran into the field at right angles to the turbine location. All areas of stripping were *c.*6m in width with the exception of the point at which the two trackways joined, where the intersection was widened to allow access for the large vehicles which would deliver the mast prior to erection (all shown on Fig. 2 below). The access track parallel to the field boundary included an existing trackway for much of its length, and had therefore been previously disturbed and truncated. The stripped area measured a total of *c.*0.5ha in plan, and was reduced to a relatively uniform depth of *c.*0.3m, the thickness of the topsoil.

The topsoil (001) was a good quality loam, though with significant stone inclusions of naturally fractured chalk and flint. As noted above the topsoil layer had an average thickness of *c.*0.3m and was relatively uniform. The field has a long history of arable use and is currently under wheat crop.

Beneath the topsoil there was a 'B Horizon' subsoil (002) comprising an orange clayey sand with significant quantities of fractured chalk brash (Fig. 3 below). The subsoil matrix was intermittent and filled natural pockets and depressions within the more-solid strata beneath. Given the nature of the sequence of deposits, it is at this level that cut features would have been most visible.

The interface between the subsoil with brash inclusions (002) and the fractured chalk deposit (003) beneath was graded and indistinct. Within the pit excavated to house the turbine mast the solid chalk bedrock (004) was exposed at *c.*1.3m below modern ground level. This sequence can be seen in Fig. 4 below.

4.2 ARCHAEOLOGICAL AND PALAEOENVIRONMENTAL FEATURES

No archaeological or palaeoenvironmental features were observed, and no artefacts or ecofacts were recovered during monitoring of the groundworks.

5. SOURCES

5.1 BIBLIOGRAPHY

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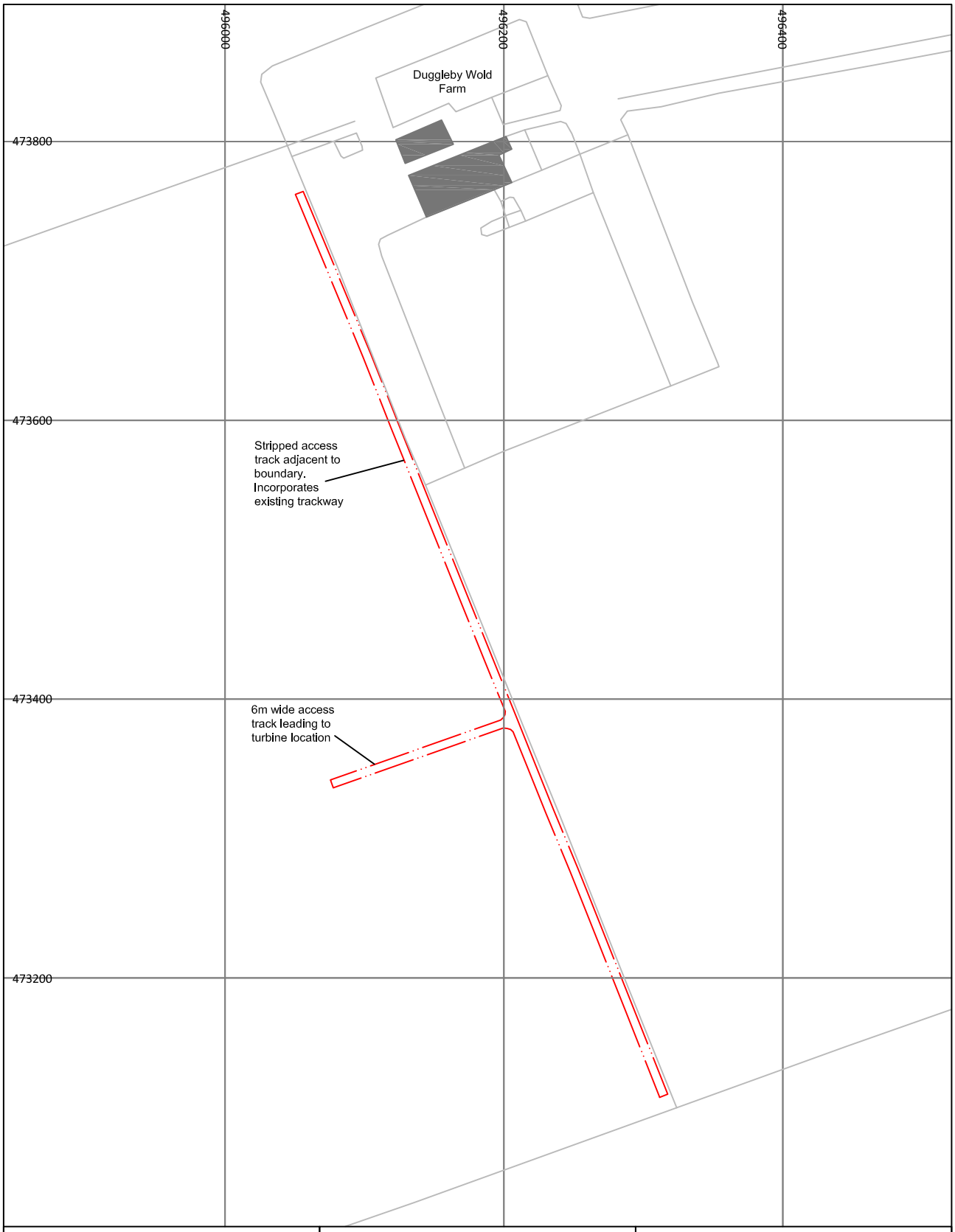
APPENDIX 1 – FIGURES

Project Duggleby Wold Wind Turbine, Sherburn, North Yorkshire Report on an Archaeological Watching Brief	Legend Turbine Location	Solstice Heritage Crabtree Hall Business Centre Little Holtby Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk	
Drawing Fig. 1 Site Location	0 — 2 km	Drawn by JB	Date January 2014



Project Duggleby Wold Wind Turbine, Sherburn, North Yorkshire Report on an Archaeological Watching Brief	Legend	Solstice Heritage Crabtree Hall Business Centre Little Holtby Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk	
Drawing Fig. 2 Site Plan	0 200m 1:4000@A4	Drawn by JB	Date January 2014

Fig. 3 Stripped access track looking north-east from the turbine location back towards the field boundary.

Fig. 4 Fully excavated pit for turbine base showing the thin overburden overlying chalk brash and bedrock.

APPENDIX 2 – WRITTEN SCHEME OF INVESTIGATION

Only the methodology, resources and programming section of the WSI are included within this appendix in order to prevent unnecessary repetition.

FIELDWORK METHODOLOGY

ARCHAEOLOGICAL MONITORING

All groundworks will be monitored by a suitably qualified archaeologist and all mechanical excavation will be undertaken with a toothless bucket. Where archaeological or palaeoenvironmental features or deposits are encountered, groundworks will halt and suitable time will be afforded to the archaeologist to investigate, sample and record such remains. Equally the archaeologist will aim to minimise disruption to the programme of groundworks through good working practice.

Where standing structures are encountered, their full extent within the area of monitoring will be exposed and recorded. Where cut features are exposed, they will be cleaned and delimited as much as is practicable within the area of monitoring and investigated using the sampling strategy outlined in Table 6 below. Where cut features contain material culture or palaeoenvironmental remains of significance then they will be subject to a more rigorous sampling strategy, usually included 100% excavation of fill material and palaeoenvironmental sampling as detailed in section 5.5 below.

Table 6 Sampling strategy for investigation of cut features

Size/Nature of Feature	Minimum percentage of fill excavated and sampled
Cut feature less than *c.*1m in diameter or equivalent area	50%
Cut feature greater than *c.*1m in diameter or equivalent area	25% or until form, function and date can be adequately characterised
Linear features	10% in 1m slots evenly spaced along the length of the features though focussing on junctions and relationships with other features where present. Minimum sample of 1m length where the linear feature is less than 10m in total length.

RECORDING METHODOLOGY

All archaeological features will be recorded on *pro-forma* sheets creating a primary written record that will be accompanied by drawn and photographic records. A site diary giving a summary of each day's monitoring will also be maintained including overall interpretive observations.

A drawn record will be compiled of all features, including plan and section/profile illustrations, at a suitable scale (usually 1:10, 1:20 or 1:50) depending on the complexity and significance of the remains.

The photographic record of the monitoring will be undertaken in 35mm black and white print and high-resolution digital formats. Photographs will be taken of all archaeological and palaeoenvironmental features in addition to general site photography locating the individual features in their wider context.

The total area of groundworks will be located and tied to the National Grid at a scale of 1:2500 or 1:1250 as practical. All features will be located accurately within this area and their height also accurately recorded above Ordnance Datum. The same level of accuracy will be applied to measuring the respective heights of the top and base of excavations.

Small Finds

Given the relatively small size of the area to be monitored, all small finds will be initially retained and bagged by context for assessment at the post-fieldwork stage. Should an unexpected quantity of material be uncovered that is deemed to be of little significance then this will be noted but not retained, subject to the agreement of the Development Management Archaeologist.

Small finds will be handled, packed and stored in accordance with the guidelines in *First Aid for Finds* (Watkinson and Neal 1998).

In the event that finds of 'treasure' are uncovered then the local Coroner will be informed and the correct procedures will be followed as outlined under the *Treasure Act 1996*.

The contact details for the coroner local to this work are:

Mr M.D. Oakley
HM Coroner for North Yorkshire
3 Market Place
Malton
North Yorkshire
YO17 7LP
101(2) – Coroner's office

Human Remains

In the event of human remains being uncovered, including evidence of cremations, these will be initially left in situ, protected and covered from view. Should removal of the remains be deemed necessary then a licence will be obtained from the Ministry of Justice (MoJ) prior to excavation proceeding. Exhumation of human remains will proceed in accordance with the MoJ licence and all health and safety regulations and guidance.

Scientific and Palaeoenvironmental Sampling Strategy

Aim of the Sampling Strategy

Given the uncertainty of the presence or level of archaeological remains likely to be encountered as part of this monitoring, the general aim of the scientific and palaeoenvironmental sampling strategy is:

- To provide information on the nature of human activity and the past environment in the immediate area, in relation to the archaeological deposits uncovered during the project.

Overview

Table 7 below provides an overview of the basic sampling strategy. Sampling levels and feature-specific approaches may vary from this broad outline in accordance with the characteristics and potential of individual features to address the aims and objectives outlined above. Should the nature of archaeological remains observed during the course of fieldwork be markedly different to that

anticipated, then modifications to this sampling strategy will be agreed with the Development Management Archaeologist. Sampling and assessment methodologies will follow best practice as set out in relevant guidance documents, including *Environmental Archaeology* (English Heritage 2011).

Table 7 Outline of scientific and palaeoenvironmental sampling strategy					
Potential Data	**Botanical Macrofossils**		**Pollen, Foraminifera**	**Radiocarbon Dating**	**Archaeometallurgy/Industrial Residue**
Sample Type	**Bulk (flotation)**		**Monolith/ Subsample**	**Individual**	**Bulk (residue)**
	Min. Sample Size	**Min. Excavated Sample**			
Feature or Context Type					
Structural or occupational features (isolated or with little observed palaeoenvironmental potential)	-	50%	-	Individual samples where observed during excavation and suitable sample recovered from bulk flotation	-
Structural or occupational features (concentrated, containing material culture, or with demonstrable palaeoenvironmental potential)	40 litre or 100% of excavated fill	100%	Subsample of single fill or monolith sample of stratigraphy where suitable		40 litre or 100% of excavated fill
Isolated pit features(Prehistoric to Early Medieval containing material culture)		100%			
Isolated pit features (medieval containing material culture)		100%			
Isolated pit features (Post-medieval containing material culture)		50%		-	
Isolated pit features < *c.*1m in diameter or equivalent area (undated or with little observed palaeoenvironmental potential)	-	50%		-	-
Isolated pit features > *c.*1m in diameter or equivalent area (undated or with little observed palaeoenvironmental potential)	-	25%		-	-
Linear features (associated with structural or occupational features)	40 litre or 100% of excavated fill	10% or 2m if less than 20m in total length	Monolith sample of preserved stratigraphy where suitable (e.g. laminated	Individual samples where observed during excavation and suitable sample	40 litre or 100% of excavated fill

			ditch deposits)	recovered from bulk flotation	
Linear features (isolated)	-			-	-
On-site processing methods	On-site flotation using graduated sieves with a minimum of 500 micron mesh		None beyond approved storage and packaging methods	None beyond approved storage and packaging methods	Residue from on-site flotation

Health and Safety

All archaeological work will be undertaken in a safe manner in compliance with the *Health and Safety at Work Act 1974*. A full risk assessment will be undertaken in advance of the commencement of work, a copy of which will be available on site for the duration of the fieldwork. Solstice Heritage has a full Safety, Health and Environment Policy which can be supplied upon request.

Extensive Remains and/or Significant Finds

In the event of discovery of archaeological remains which are more extensive and/or significant than could reasonably have been anticipated then the following procedure will be followed:

- The archaeological remains will be fenced off and no machinery or contractors other than project archaeologists will operate in the area.
- The client, Development Management Archaeologist and any other key stakeholders will be informed and an agreement will be reached on any amendments to the methodology and project scope.
- Where required, a modified WSI, or addendum to this document, will be prepared and agreed with all stakeholders.

Post-Fieldwork Methodology

Small Finds Processing

All finds will be processed and catalogued in line with standard guidance documents including *First Aid for Finds* (Watkinson and Neal 1998) and the *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (IfA 2008b).

Specialist Assessment and Analysis

After processing artefacts and ecofacts will be quantified and assessed to provide an overview of their potential to meet the aims and objectives of the project. This will be undertaken, where necessary, by a relevant specialist, as set out below, and will include a statement on the potential and requirement for further analysis. Where extensive analysis is recommended and justified by the potential of the assemblage or sample then this will be undertaken after agreement with the client and Development Management Archaeologist.

Reporting

Following completion of any specialist assessment and analysis, all information will be synthesised in a project report, which will include as a minimum:

- Planning application number, OASIS reference number and site grid reference
- A non-technical summary of results
- Introduction
- Aims and method statement
- Legislative, policy and guidance framework
- Tabular summary of data outlining all archaeological deposits, features, classes and numbers of artefacts and spot dating of significant finds
- Specialist reports (where necessary)

- Discussion of results
- Illustrative digital photography
- Location plan of the site of at least 1:10000 scale
- Extent plan of the area of monitoring at a suitable and recognised scale positioning all archaeological and palaeoenvironmental features and deposits in relation to the national grid
- Plans and section of all archaeological features at a suitable scale (see section 5.2 above)
- Above Ordnance Datum (aOD) levels on plans and incorporated into the text
- A copy of this WSI as an appendix

Any variation to the minimum requirements above will be approved in advance in writing by the Development Management Archaeologist.

One bound paper copy and one digital copy will be supplied to the client and to the local authority archaeologist upon completion.

ARCHIVING

Within 6 months of the completion of all post-fieldwork stages of the project, a full archive will be compiled and deposited with a local recipient museum. The archive will be compiled in accordance with the *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (IfA 2009). The archive and all material contained in it will be compiled according to the guidelines of the recipient museum, and will include as a minimum:

- A list of archive contents, by box if required
- Hard copies of all relevant project documentation
- Digital material created for the project
- Artefacts and ecofacts for which there is a reason for retention (e.g. inherent significance, potential for future analysis).

Deposition of any material culture will be agreed prior to commencement of work with the legal owner and the recipient museum. This will be confirmed in writing to the local authority archaeologist, and is not included in this document as the proposed development site is currently undergoing a change of ownership. Final deposition will be confirmed to the client and Development Management Archaeologist in writing.

Should there be no material archive arising from the project then, as a minimum, the project report will be submitted to the North Yorkshire HER in hard copy and digital format, and project details and a copy of the report will be made available through OASIS (see below).

OASIS

Solstice Heritage is registered with the Online Access to Index of Archaeological Investigations (OASIS) Project and fully supports all project documentation and records being made available through the OASIS website. Upon completion of the post-fieldwork reporting and archiving, an OASIS record will be completed, and a copy of the project report will be uploaded.

PUBLICATION AND DISSEMINATION

In the event that formal publication and/or wider dissemination is deemed necessary, then a suitable format will be agreed with the client and the Development Management Archaeologist. This may

include a digital download document made freely available or publication in a local, regional or national journal.

Extensive Remains and/or Significant Finds

In the event of discovery of archaeological remains which are more extensive and/or significant than could reasonably have been anticipated then this will require a more detailed post-fieldwork approach. Should this be required, a suitable and proportionate post-fieldwork methodology will be agreed with the client and the Development Management Archaeologist upon completion of fieldwork, including a suitable level of publication and/or dissemination as noted above.

Resources and Programming

Fieldwork Staff

It is anticipated that the project will be managed by Jim Brightman of Solstice Heritage. Jim holds full accredited professional membership of the Institute for Archaeologists (IfA) at MIfA level. Jim is also experienced in undertaking and managing archaeological projects in North Yorkshire. Details of fieldwork staff will be confirmed in writing to the Development Management Archaeologist prior to commencement.

Post-Fieldwork Staff

The post-fieldwork reporting and archiving will also be managed by Jim Brightman. Details of other post-fieldwork or reporting staff will be confirmed in writing to the Development Management Archaeologist prior to commencement.

Specialist Input

Should specialist input be required for assessment and analysis at post-fieldwork stage, then it is intended that the following specialists be used:

Table 8 Proposed specialist input to post-fieldwork stages

Specialism	Specialist	Company/Institution
Lithics	Spencer Carter	Independent specialist
Prehistoric pottery	Dr Clive Waddington	ARS Ltd
Romano-British Pottery	Dr Gerry Evans	Barbican Research Associates
Roman brick/tile	Alex Croom	Tyne and Wear Archives & Museums
Early glasswork	Dr Hilary Cool	Barbican Research Associates
Medieval/Post-medieval pottery	Dr Chris Cumberpatch	Independent specialist
Archaeometallurgy	Dr Gerry McDonnell	Independent specialist
Clay pipe	Dr Susie White	University of Liverpool
Industrial/later glasswork	Chris Howard-Davies	Oxford Archaeology North (OAN)
Industrial/later brickwork	Ian Miller	OAN
Industrial/later metalwork	Chris Scott	ARS Ltd
Conservation of artefacts	Jennifer Jones	Archaeological Services Durham University (ASDU)
Botanical macrofossils	Dr Charlotte O'Brien	ASDU
Pollen	Dr Charlotte O'Brien	ASDU
Human remains	Kate Mapplethorpe	ARS Ltd

Faunal remains	Kate Mapplethorpe	ARS Ltd
All dating techniques	Dr Gordon Cook	Scottish Universities Environmental Research Centre (SUERC)

This list is subject to change depending on individual availability of specialists and the specific requirements of the archaeological and palaeoenvironmental remains uncovered during the course of fieldwork.

Fieldwork Programme

The dates have not yet been set for the commencement of fieldwork, though it is intended to be completed by the end of 2013. A minimum of two weeks' notice of commencement of groundworks will be given to the Development Management Archaeologist.

Post-Fieldwork Programme

The post-fieldwork process will commence immediately upon completion of the fieldwork. Unless a more in-depth post-fieldwork process has been agreed as an addendum to this document, then a report will be compiled within two months, subject to any required specialist input. An OASIS record will be completed and any archive will be deposited within six months of the completion of the post-fieldwork phase.

Monitoring

The NYCC contact for monitoring of the project will be:

Lucie Hawkins (or cover for her position should the work be undertaken in her absence)
Development Management Archaeologist
Waste & Countryside Services
Business and Environmental Services
North Yorkshire County Council
County Hall
Northallerton
DL7 8AH

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