

ARCHAEOLOGICAL EVALUATION REPORT

LAND OFF MILLENNIUM WAY, LOWESTOFT LWT 163

A REPORT ON THE ARCHAEOLOGICAL EVALUATION, 2008
(Planning application no. DC/06/1328/FUL)
OASIS ID No:43252

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Field Team
Suffolk County Council Archaeological Service

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List of Contributors

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Summary

Evaluation on land off Millennium Way, Lowestoft was required to investigate the archaeological potential of the site. No archaeological activity was encountered either in the form of incised features or artefactual evidence. Two of the trenches had been subject to significant modern disturbance.

HER information

Planning application no. DC/06/1328/FUL
Date of fieldwork: 27th May 2008
Grid Reference: TM 5312 9497
Funding body: Paul Robinson Partnership
OASIS ID: 43252

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Introduction

Planning permission for development of land off Millennium Way, Lowestoft, required a programme of archaeological works as a condition of the consent. The site lies at TM 5312 9497 (Fig. 1), at a height of approximately 24m OD. Archaeological interest in this site is due to the presence of a surviving medieval boundary ditch and bank of the manor of Akethorpe to the west and north-east of the site (LWT 028). The remains of a ring ditch, indicative of a Bronze Age barrow, is recorded to the south (LWT 020).

Evaluation of the site was carried out by the Suffolk County Council Archaeological Service Field Team based on a 'Brief and Specification' by Jess Tipper (Appendix I). The fieldwork was carried on 27th March 2008 and was funded by the Paul Robinson Partnership.

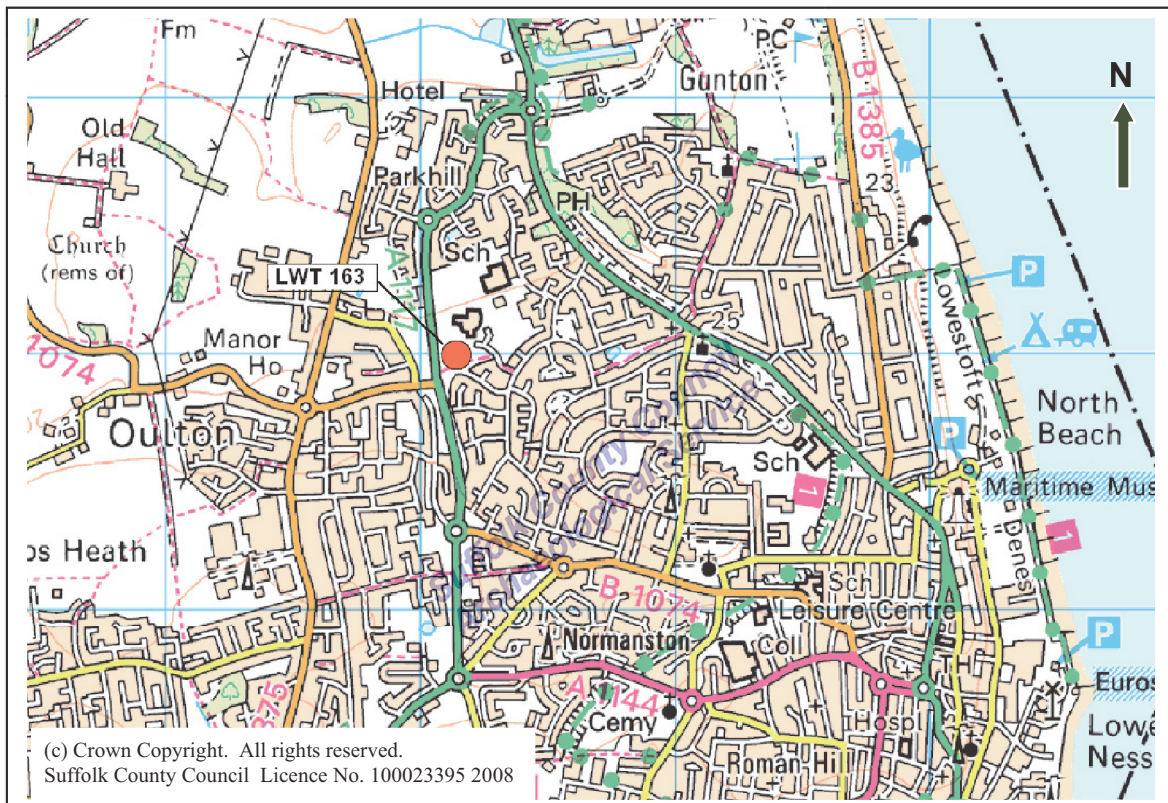


Figure 1. Site location

Methodology

The development area comprises approximately 7000 square metres within which 6 trial-trenches were opened in locations agreed by the Conservation Team at Suffolk County Council Archaeological Service (Fig. 2). This was carried out by a mechanical excavator equipped with a 1.8m wide toothless ditching bucket, under the supervision of an archaeologist. Overburden was removed from the trenches to the depth of the naturally occurring subsoil. In all, 415 square metres of trench were opened over the evaluation area, representing a sample of 5.9% of the total area. Both the excavated topsoil and the exposed surfaces of trenches were examined visually for artefactual evidence and subject to a metal detector search. The site was recorded under the HER (Historic Environment Record) code LWT 163. The evaluation archive will be deposited in the County HER at Shire Hall, Bury St Edmunds.

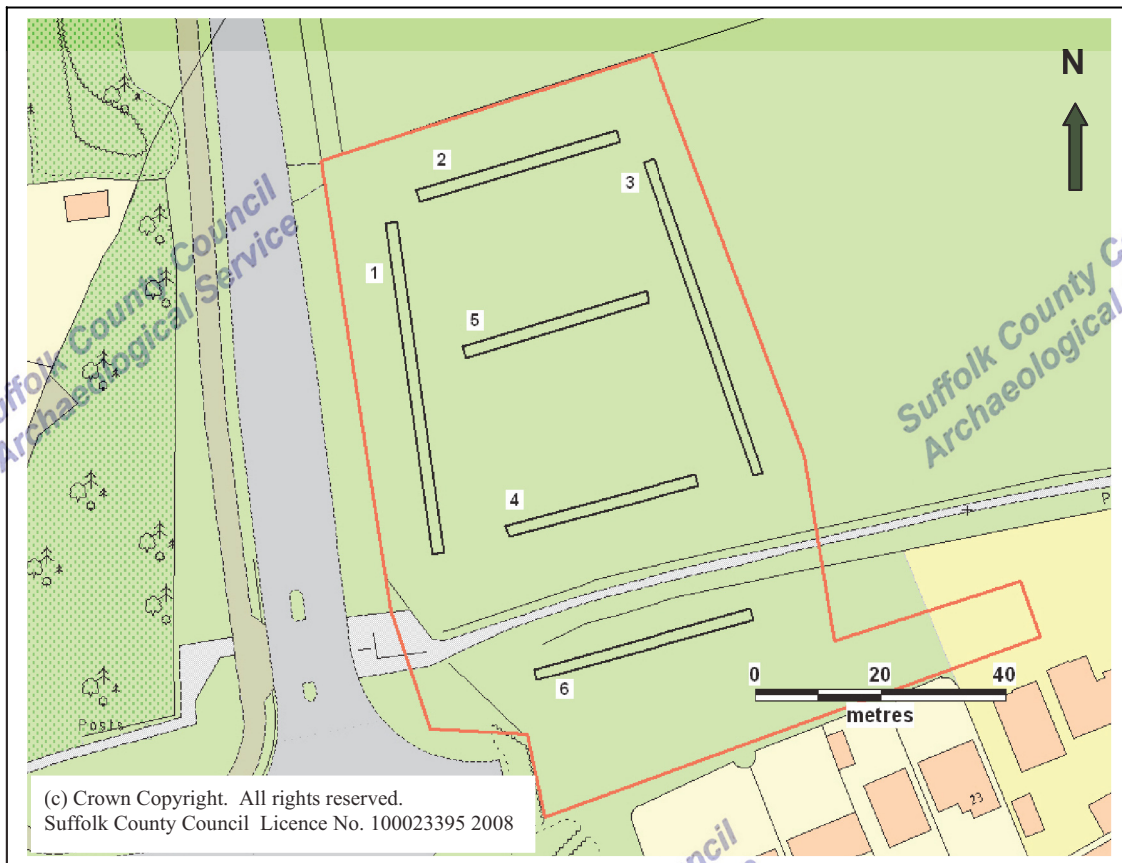


Figure 2. Trench locations

Results

The trench dimensions and average depths are recorded in the table below. As there was no bench mark nearby, levels were calculated using a known spot height on the footpath that bisects the site.

Trench	Description	Height at base of trench
1	50.5m NNW-SSE. 580mm sandy loam mixed with building rubble and orange gravelly sand layers. Natural subsoil comprises homogenous soft orangey yellow sand flecked with iron pan.	N end- 23.00m OD S end- 23.28m OD
2	33m SW-NE. 500mm dark brown sandy loam overburden. Natural subsoil comprises homogenous soft orangey yellow sand flecked with iron pan.	W end- 22.72m OD E end- 22.54m OD
3	52m NW-SE. 400mm dark brown sandy loam overburden. Natural subsoil comprises dark orange sand with iron pan staining.	N end- 22.80m OD S end- 23.45m OD
4	30m SW-NE. 300mm mid brown sandy loam topsoil; 250mm pale-mid brown sand subsoil. Natural subsoil comprises homogenous soft yellow sand flecked with iron pan.	W end- 23.61m OD E end- 23.61m OD
5	30m SW-NE. 400mm dark brown sandy loam overburden. Natural subsoil comprises soft orange sand with patches of iron pan.	W end- 23.58m OD E end- 23.36m OD
6	35m SW-NE. 1.05m sandy loam mixed with building rubble and orange gravelly sand layers. Natural subsoil comprises homogenous soft orangey yellow sand flecked with iron pan.	W end- 22.84m OD E end- 22.92m OD

Trenches 1 and 6 had been subject to modern disturbance, with very recent building rubble and plastics present throughout the overburden. This is likely to be associated with the construction of the houses to the south of the site and Millennium Way to the west.

No pre-modern artefacts were recovered from the topsoil or upcast spoil.

Discussion

Despite the sites potential for evidence of early activity, no archaeological deposits were encountered. It is possible that isolated features exist within the development area but outside of the trenches. The dearth of artefactual evidence in the upcast spoil suggests the site has never been subject to any significant activity.

Recommendations for further work

As no archaeological deposits were revealed in the trenches, no further work is recommended.

Linzi Everett
Field Team
Suffolk County Council Archaeological Service
May 2008

Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Division alone. The need for further work will be determined by the Local Planning Authority and its archaeological advisors when a planning application is registered. Suffolk County Council's archaeological contracting service cannot accept responsibility for inconvenience caused to clients should the Planning Authority take a different view to that expressed in the report.

**SUFFOLK COUNTY COUNCIL
ARCHAEOLOGICAL SERVICE - CONSERVATION TEAM**

Brief and Specification for a Archaeological Trenched Evaluation

LAND OFF MILLENNIUM WAY, LOWESTOFT, SUFFOLK

The commissioning body should be aware that it may have Health & Safety responsibilities.

1. The nature of the development and archaeological requirements

- 1.1 Planning permission for the construction of an A1 retail store with car parking, access and associated works on Land on the east side of Millennium Way, Lowestoft, Suffolk (TM 5312 9497), has been granted by Waveney District Council conditional upon an acceptable programme of archaeological work being carried out (application DC/06/1328/FUL).
- 1.2 The proposed development has a total area of 0.63ha and located at c. 20.00m AOD. The underlying glaciofluvial and aeolian drift geology of the site comprises principally deep loam.
- 1.3 This application lies in an area of archaeological importance recorded in the County Historic Environment Record. There is a surviving medieval boundary ditch and bank of the manor of Akethorpe to the west and north-east (LWT 028). In addition, the remains of a ring ditch, indicative of a Bronze Age barrow, is recorded to the south (LWT 020). There is high potential for occupation deposits to be disturbed by this development. The proposed works would cause significant ground disturbance that has potential to damage any archaeological deposit that exists.
- 1.4 A linear trenched evaluation is required of the development area, before any groundworks take place. The results of this evaluation will enable the archaeological resource, both in quality and extent, to be accurately quantified, informing both development methodologies and mitigation measures. Decisions on the need for, and scope of, any further work should there be any archaeological finds of significance will be based upon the results of the evaluation and will be the subject of an additional brief.
- 1.5 All arrangements for the field evaluation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated with the commissioning body.
- 1.6 Detailed standards, information and advice to supplement this brief are to be found in Standards for Field Archaeology in the East of England, East Anglian Archaeology Occasional Papers 14, 2003.
- 1.7 In accordance with the standards and guidance produced by the Institute of Field Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Written Scheme of Investigation (WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval. The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the WSI as satisfactory. The WSI will provide the basis for measurable standards and will be used to satisfy the requirements of the planning condition.
- 1.8 Before any archaeological site work can commence it is the responsibility of the developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological deposit which exists; proposals for sampling should be discussed with the Conservation Team of the Archaeological Service of SCC (SCCAS/CT) before execution.
- 1.9 The responsibility for identifying any constraints on field-work, e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c., ecological considerations rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such constraints or imply that the target area is freely available.

- 1.10 Any changes to the specifications that the project archaeologist may wish to make after approval by this office should be communicated directly to SCCAS/CT and the client for approval.

2. Brief for the Archaeological Evaluation

- 2.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ* [at the discretion of the developer].
- 2.2 Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- 2.3 Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- 2.4 Establish the potential for the survival of environmental evidence.
- 2.5 Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.
- 2.6 This project will be carried through in a manner broadly consistent with English Heritage's Management of Archaeological Projects, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and an assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design; this document covers only the evaluation stage.
- 2.7 The developer or his archaeologist will give SCCAS/CT (address as above) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored.
- 2.8 If the approved evaluation design is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected. Alternatively the presence of an archaeological deposit may be presumed, and untested areas included on this basis when defining the final mitigation strategy.
- 2.9 An outline specification, which defines certain minimum criteria, is set out below.

3. Specification: Field Evaluation

- 3.1 Trial trenches are to be excavated to cover a 5% by area, which is 315m² of the development plot. These shall be positioned to sample all parts of the site. Linear trenches are thought to be the most appropriate sampling method. Trenches are to be a minimum of 1.8m wide unless special circumstances can be demonstrated; this will result in a minimum of 175m of trenching at 1.8m in width.
- 3.2 The existing buildings may be mechanically removed to ground level, and any concrete slabs broken up by the building contractor, prior to archaeological evaluation, using an appropriate machine. However, no ground disturbance should be caused by this work and no foundations should be removed until the evaluation has taken place. Where necessary, this work may be monitored by an archaeologist to ensure that no potential archaeological deposits are disturbed.
- 3.3 Material sealed below the slab should be removed by machine with a back-acting arm and fitted with a toothless bucket. All machine excavation is to be under the direct control and supervision of an archaeologist. All material below the modern disturbance should be examined for archaeological material.

- 3.4 If excavation is mechanised a toothless 'ditching bucket' at least 1.2m wide must be used. A scale plan showing the proposed locations of the trial trenches should be included in the Written Scheme of Investigation and the detailed trench design must be approved by SCCAS/CT before field work begins.
- 3.5 The topsoil may be mechanically removed using an appropriate machine with a back-acting arm and fitted with a toothless bucket, down to the interface layer between topsoil and subsoil or other visible archaeological surface. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.
- 3.6 The top of the first archaeological deposit may be cleared by machine, but must then be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 3.7 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or post-holes, should be preserved intact even if fills are sampled. For guidance:
- For linear features, 1.00m wide slots (min.) should be excavated across their width;
- For discrete features, such as pits, 50% of their fills should be sampled (in some instances 100% may be requested).
- 3.8 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.
- 3.9 Archaeological contexts should, where possible, be sampled for palaeoenvironmental remains. Best practice should allow for sampling of interpretable and datable archaeological deposits and provision should be made for this. The contractor shall show what provision has been made for environmental assessment of the site and must provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from J. Heathcote, English Heritage Regional Adviser for Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy, P.L. and Wiltshire, P.E.J., 1994, *A guide to sampling archaeological deposits for environmental analysis*) is available for viewing from SCCAS.
- 3.10 Any natural subsoil surface revealed should be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character.
- 3.11 Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
- 3.12 All finds will be collected and processed (unless variations in this principle are agreed SCCAS/CT during the course of the evaluation).
- 3.13 Human remains must be left *in situ* except in those cases where damage or desecration are to be expected, or in the event that analysis of the remains is shown to be a requirement of satisfactory evaluation of the site. However, the excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857.
- 3.14 Plans of any archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. All levels should relate to Ordnance Datum. Any variations from this must be agreed with SCCAS/CT.

- 3.15 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies and/or high resolution digital images.
- 3.16 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.
- 3.17 Trenches should not be backfilled without the approval of SCCAS/CT.

4. General Management

- 4.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by SCCAS/CT. The archaeological contractor will give not less than five days written notice of the commencement of the work so that arrangements for monitoring the project can be made.
- 4.2 The composition of the archaeology contractor staff must be detailed and agreed by this office, including any subcontractors/specialists. For the site director and other staff likely to have a major responsibility for the post-excavation processing of this evaluation there must also be a statement of their responsibilities or a CV for post-excavation work on other archaeological sites and publication record.
- 4.3 It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfil the Brief.
- 4.4 A detailed risk assessment must be provided for this particular site.
- 4.5 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 4.6 The Institute of Field Archaeologists' *Standard and Guidance for archaeological field evaluation* (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

5. Report Requirements

- 5.1 An archive of all records and finds must be prepared consistent with the principles of English Heritage's *Management of Archaeological Projects*, 1991 (particularly Appendix 3.1 and Appendix 4.1).
- 5.2 The report should reflect the aims of the WSI.
- 5.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 5.4 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established.
- 5.5 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries.
- 5.6 The Report must include a discussion and an assessment of the archaeological evidence, including an assessment of palaeoenvironmental remains recovered from palaeosols and cut features. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).
- 5.7 The results of the surveys should be related to the relevant known archaeological information held in the County HER.
- 5.8 A copy of the Specification should be included as an appendix to the report.

- 5.9 The project manager must consult the County HER Officer (Dr Colin Pendleton) to obtain an HER number for the work. This number will be unique for each project or site and must be clearly marked on any documentation relating to the work.
- 5.10 Finds must be appropriately conserved and stored in accordance with *UK Institute of Conservators Guidelines*.
- 5.11 The project manager should consult the SCC Archive Guidelines 2008 and also the County HER Officer regarding the requirements for the deposition of the archive (conservation, ordering, organisation, labelling, marking and storage) of excavated material and the archive.
- 5.12 Every effort must be made to get the agreement of the landowner/developer to the deposition of the finds with the County HER or a museum in Suffolk which satisfies Museum and Galleries Commission requirements, as an indissoluble part of the full site archive. If this is not achievable for all or parts of the finds archive then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate. If the County HER is the repository for finds there will be a charge made for storage, and it is presumed that this will also be true for storage of the archive in a museum.
- 5.13 The site archive is to be deposited with the County HER within three months of the completion of fieldwork. It will then become publicly accessible.
- 5.14 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute for Archaeology*, must be prepared. It should be included in the project report, or submitted to SCCAS/CT, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.
- 5.15 County HER sheets must be completed, as per the County HER manual, for all sites where archaeological finds and/or features are located.
- 5.16 Where appropriate, a digital vector trench plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the County HER. AutoCAD files should be also exported and saved into a format that can be imported into MapInfo (for example, as a Drawing Interchange File or .dxf) or already transferred to .TAB files.
- 5.17 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms.
- 5.18 All parts of the OASIS online form must be completed for submission to the County HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

Specification by: Dr Jess Tipper
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Shire Hall
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Date: 2 May 2008

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Reference: / MillenniumWay-Lowestoft2008

This brief and specification remains valid for six months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.

If the work defined by this brief forms a part of a programme of archaeological work required by a Planning Condition, the results must be considered by the Conservation Team of the Archaeological Service of Suffolk County Council, who have the responsibility for advising the appropriate Planning Authority.

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