

ARCHAEOLOGICAL EVALUATION ON LAND BY QUEEN ELIZABETH WAY, KING'S LYNN, NORFOLK (KLQE14)

Work Undertaken For King's Lynn Internal Drainage Board

April 2014

Report Compiled by Neil Parker M.A.

National Grid Reference: TF 6427 1857 Planning Application No: 13/00360/FM OASIS Record No: archaeol1-177115

APS Report No.37/14

ARCHAEOLOGICAL PROJECT SERVICES





Quality Control Queen Elizabeth Way, King's Lynn, Norfolk (KLQE14)

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1. SUMMARY

A programme of archaeological works required in advance of construction of a flood attenuation reservoir at Middleton Stop, Kings Lynn, Norfolk. This comprised evaluation works to address the archaeological potential of site. followed bvappropriate which mitigation measures will be dependent on the results of the evaluation phase.

This phase of evaluation of the site comprised the excavation of two forty metre long trenches on an area of site considered to have high potential for the survival of archaeological deposits, based on the results of a auger survey and subsurfacing modelling undertaken previously.

The site lies in an archaeologically sensitive area, close to the fen-edge and the site of a deserted medieval settlement, known prehistoric remains and also surface finds of Roman date.

The upper soil deposit was solid clay, probably redeposited as part of a marling process, which covered layers of oxidised and unoxidised peat over natural sandy substrate. No deposits of an archaeological nature were encountered and no artefacts were recovered from the evaluation.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it

enables an assessment of their worth in a local, regional, national or international context as appropriate (IfA 2008).

2.2 Planning Background

Planning permission for a flood storage area has been granted by King's Lynn and West Norfolk Borough Council (application number 13/00360/FM) subject to an archaeological condition requiring a programme of archaeological evaluation at the site.

2.3 Topography and Geology

The proposed development is located on southwest outskirts of Kings Lynn, Norfolk in the Civil Parish of North Runcton and in the administrative district of Kings Lynn and West Norfolk, centred on National Grid Reference TF 6427 1857. To the northeast the approximately 8 hectare area of development is bounded by the A149 Queen Elizabeth Way and to the northeast by the Middleton Stop drain.

The site lies close to the boundary of soils of the Wallasea 2 and Adventurers 2 Associations as mapped by the Soils Survey of England and Wales. (Hodge *et al.* 1984).

2.4 Archaeological Setting

The site lies within an area of fen deposits but close to the fen edge which follows an irregular but generally north south alignment from Kings Lynn northwards.

A number of archaeological investigations of a site approximately 250m to the northeast have identified archaeological remains of Mesolithic, Neolithic, Early Bronze Age and medieval date (NHER 36320). Excavations undertaken at this site in 2004 recovered Mesolithic and Neolithic worked worked flint from buried soils and tree throw holes. Evidence for Late Neolithic\Early Bronze Age activity alongside a palaeochannel was identified

and excavation of a burnt flint mound revealed an underlying trough. Medieval remains recorded at the site comprised a series of intercutting ditches surrounding a sandy knoll (Norfolk Heritage Explorer).

A number of records of nearby medieval, post medieval or undated linear banks and earthworks which probably relate to drainage or flood defence activities are also contained within the NHER (38307, 38312, 38306). Record 383312 relates to an intermittent earthwork bank associated with the Middleton Stop Drain which bounds the northeast side of the proposed area of development

To the west of the site, evidence of medieval agriculture in the form of ridge and furrow earthworks and circular stack stands have been recorded (38235). Within five hundred metres to the west of the site the remains of a medieval moated site and the remains of the deserted medieval settlement of Hardwick have been identified through the work of the National Mapping Programme and are recorded under NHER reference (38259).

Sub-surface modelling of auger data recovered in November 2012 revealed a peat-filled stream along the western and lowest part of the site. The base of this peat was carbon dated to the middle Neolithic period (c 3200BC) (Rackham, 2013). A Roman period (c. 100AD) carbon date from the top of the peat on the highest part of the site demonstrates the survival of a 3000 year long sequence of organic deposits. Overlying these deposits were sediments associated with a marine inundation, probably during the late or post Roman period.

3. AIMS AND OBJECTIVES

The aim of the work was to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the

site.

The objectives of the work were to establish the type of archaeological activity that may have been present within the site and its likely extent; to determine the date and function of the archaeological features present on the site, their state of preservation and spatial arrangement; to determine the extent to which the surrounding archaeological extended into the application area and to establish the wav in which archaeological features identified fitted into the pattern of occupation and land-use in the surrounding landscape.

4. METHODS

The evaluation consisted of two 40m x 1.6m trenches arranged in an L shape and converging at what had been identified as a subsurface high spot by the augur survey (Figure 4). The trenches were excavated under archaeological supervision using a JCB 3CX fitted with a 1.6m toothless ditching bucket. The exposed surfaces of the trenches were then cleaned by hand and inspected for archaeological remains.

deposit exposed Each during the evaluation was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their interpretations appears as Appendix 2. A photographic record was also compiled and sections and plans were drawn at a scale of 1:20. Recording of deposits encountered was according undertaken to standard Archaeological Project Services practice.

The location of the excavated trenches was surveyed using a survey grade GPS logger. The fieldwork was undertaken on the 31st March and 1st April 2014.

5. RESULTS (Figure 5, Plates 1-7)

Encountered at approximately 1.15m below the ground surface across the entire excavation was a mixed deposit of mid grey sand and blue clay containing frequent angular and sub angular stones (004). This deposit formed the natural substrate of the site.

Directly overlying the natural substrate was a deposit of mid brown, un-oxidised peat (003). This moderately plastic deposit contained many branches and thick trunks of "bog oak" and had an average thickness of 0.5m.

An oxidised and fibrous layer of friable, dark brown, oxidised peat (002) that had an average thickness ranging between 0.3m and 0.4m lay directly below the upper soil deposit.

The upper soil (001) was a 0.5m thick layer of stiff, plastic blue grey and yellow clay that appeared to have been imported.

6. DISCUSSION

The two 40m long trenches, which converged at the northwest, showed consistent deposits throughout. Groundwater began to encroach on the evaluation at a depth of approximately 0.9m below the ground surface.

Deposits encountered during evaluation of the site did not differ greatly from those encountered during previous investigations (Rackham 2013).

Part of the purpose of the evaluation was to ascertain whether a potential buried soil might have been preserved between the peat and the natural sandy substrate. Over the entire evaluation area this was proven not to be the case. The peat directly overlay the sand and clay throughout the trenches. Buried soils may have been present and subsequently eroded or

washed away or may never have formed in the first place. The borehole survey indicated that a thin palaeosol survived in places on the site and it is possible that this was not recognised in the excavated trenches due to the extremely poor ground conditions. However, the sand underyling the recorded peat deposits was thoroughly inspected during machining for evidence of archaeological deposits and artefacts.

The frequency of the trunks of "bog oak" within the lower peat deposit (003) suggest that the area was at one time heavily wooded and eventually succumbed to rising flood waters.

Worthy of note is the upper soil deposit (001) of stiff clay. This was unlike the topsoil to the immediate south of the investigation area and it appeared to have been excavated from elsewhere and imported. The most likely explanation for this is the process known as marling, where thicker clay deposits are introduced to the topsoil to stop the erosion of the surface. This is supported by the very fine nature of the upper, friable, oxidised peat layer (002) and wind erosion may well have been a problem. During the marling process the clay deposits are usually ploughed into the soil so it is possible that this is where the material may have been stockpiled and ploughed from.

No deposits of an archaeological nature were uncovered by the evaluation.

7. CONCLUSION

Two archaeological trial trenches were excavated on land by Queen Elizabeth way, King's Lynn, Norfolk prior to the excavation of a flood storage area. The purpose of the evaluation was to ascertain whether a buried soil deposit with archaeological potential was present between the layers of peat and the natural substrate. No deposits of this type were encountered during this phase of

evaluation of the site. Two differing layers of peat overlay the natural substrate and imported clay formed the upper soil layer sealing the other deposits.

No layers or features of an archaeological nature were present within the area evaluated.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to thank the King's Lynn Internal Drainage Board for commissioning the fieldwork and post-excavation analysis. The work was coordinated by Dale Trimble who edited this report along with Tom Lane.

9. PERSONNEL

Project Coordinator: Dale Trimble Site Supervisor: Neil Parker

Photographic reproduction: Neil Parker

CAD Illustration: Neil Parker

Post-excavation analysis: Neil Parker

10. BIBLIOGRAPHY

Hodge, C.A.H., Burton, R.G.O., Corbett, W.M., Evans, R. and Seale, R.S., 1984 Soils and their use in Eastern England. Soil Survey of England and Wales 13

If A, 2008, Standard and Guidance for Archaeological Field Evaluations.

Rackham, J., 2013. Archaeological Evaluation on site of proposed Attenuation Reservoir, Middleton Stop, King's Lynn, Norfolk. Unpublished Archaeological Project Services Report. 22/13

11. ABBREVIATIONS

APS Archaeological Project Services

If A Institute for Archaeologists

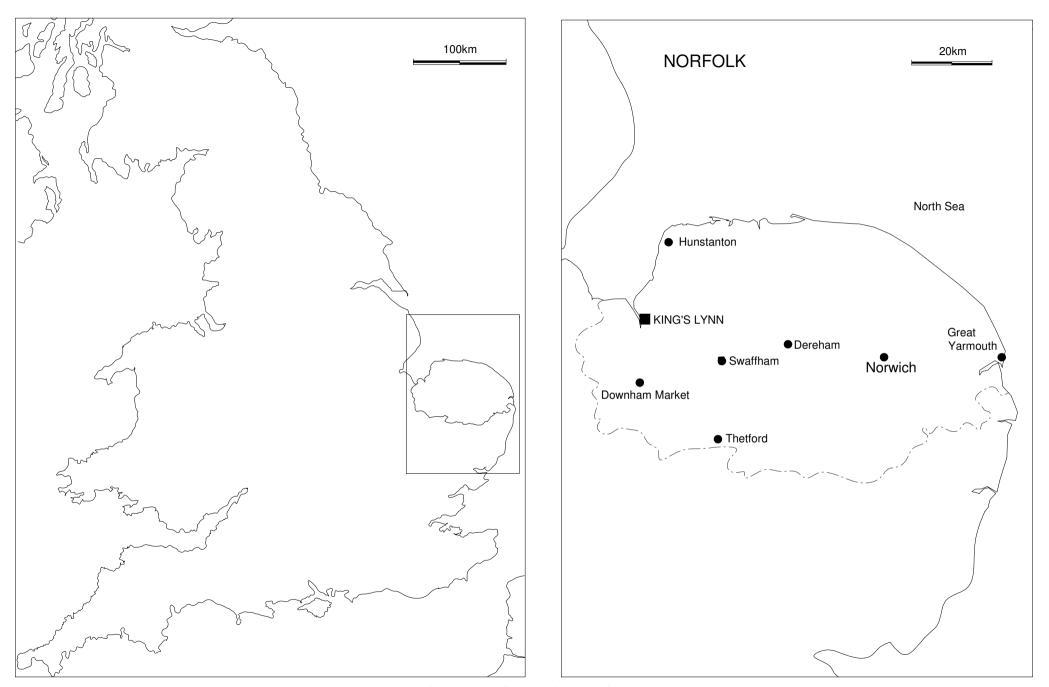
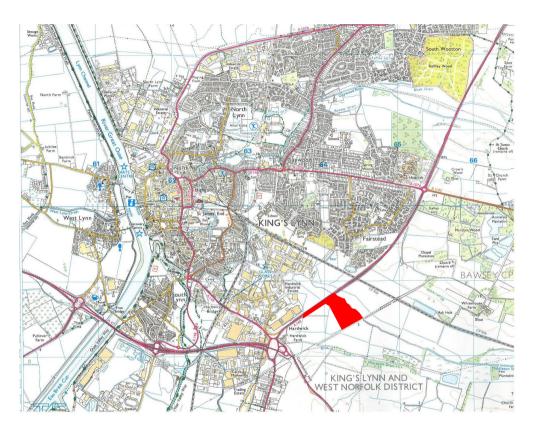


Figure 1 - General Location Plan





Ordnance Survey © 1999. All rights reserved. License number AL5041A0001

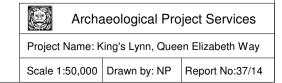
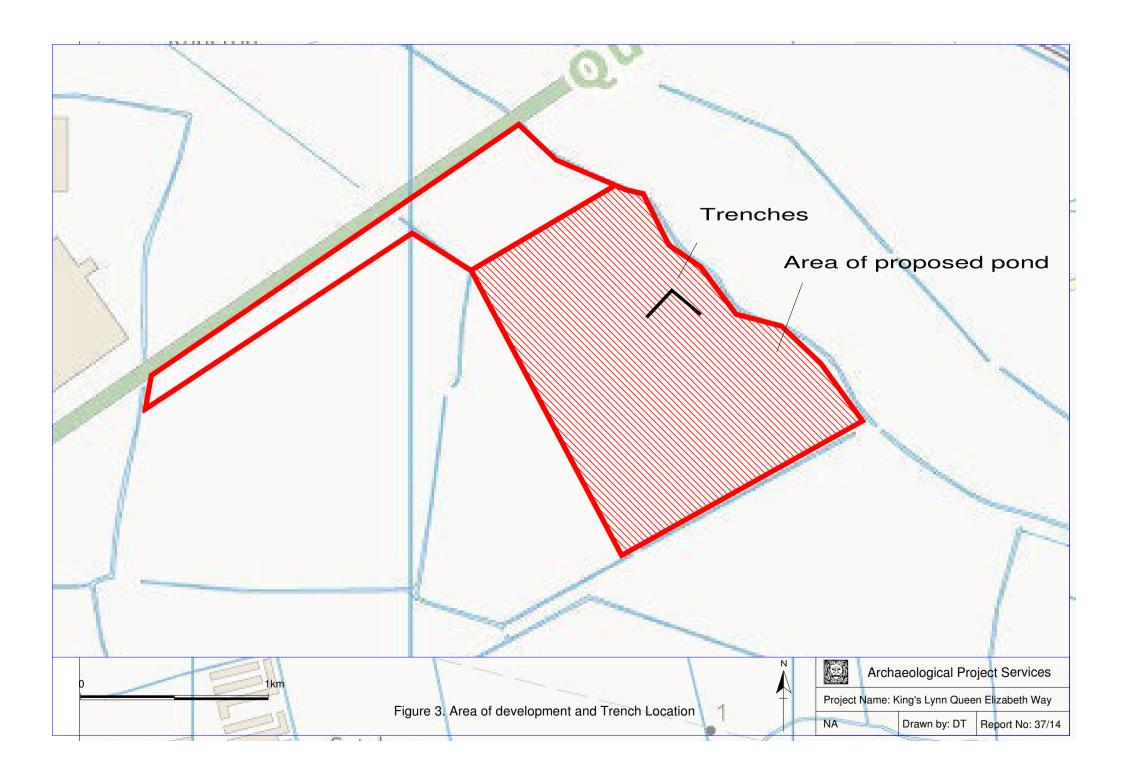


Figure 2 Site Location



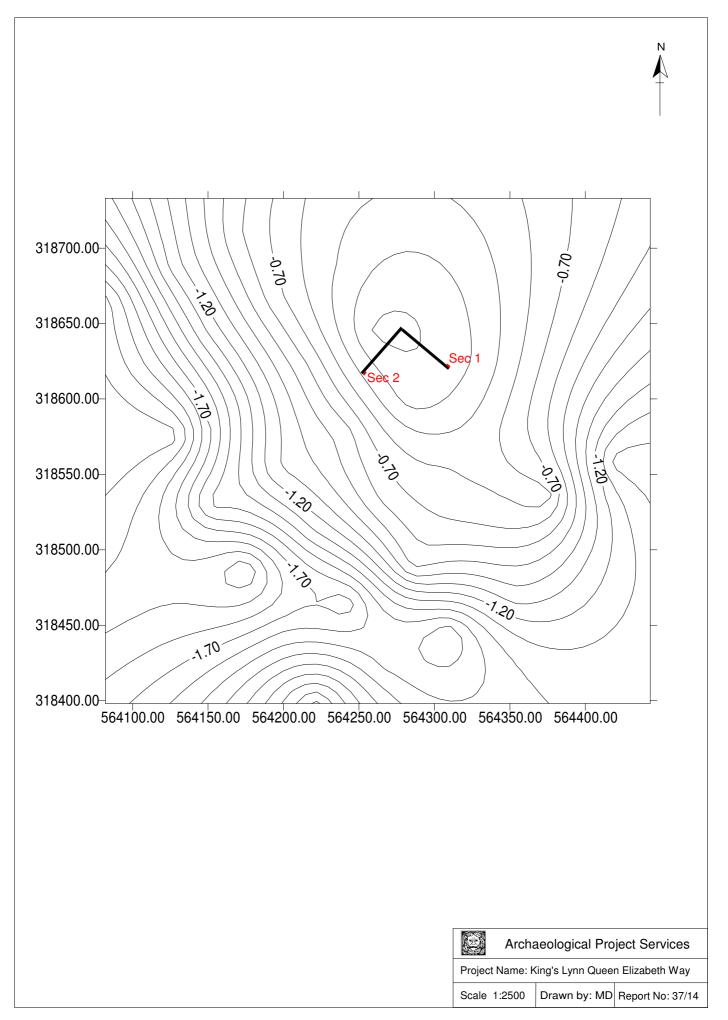


Figure 4 Trenches shown against sub-surface topography

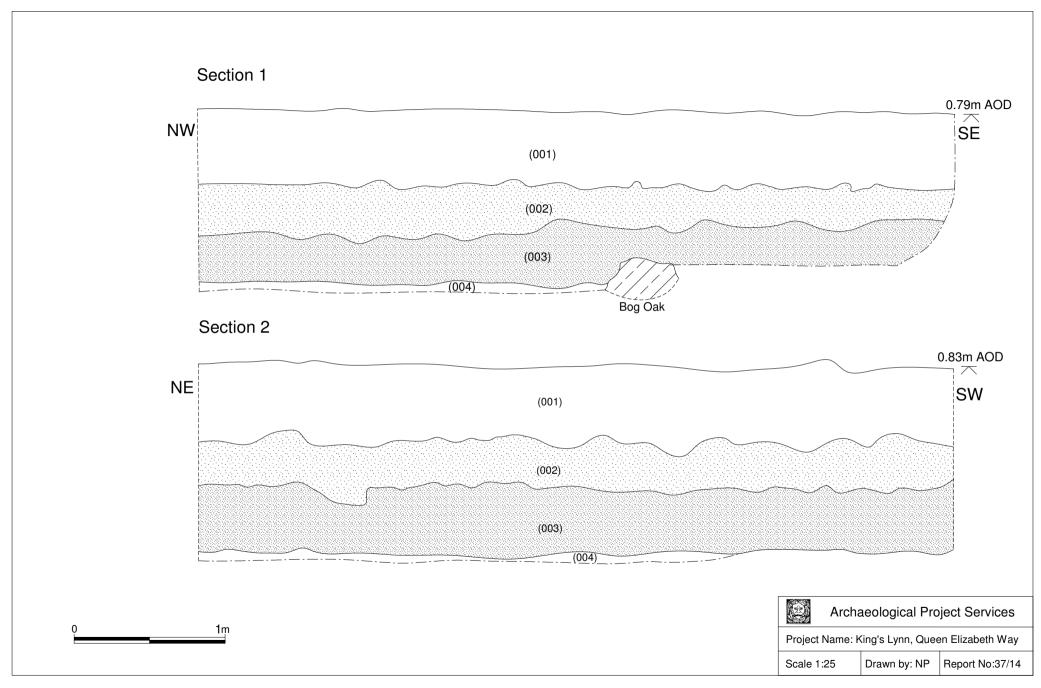


Figure 5. Sections 1 & 2

The Plates



Plate 1.
Commencement of excavation showing
Queen Elizabeth Way in the distance and the rapid encroachment of groundwater in the trench.
Looking approximately northwest



Plate 2 Removal of the heavy clay upper soil (001) directly overlying the upper oxidised peat layer (002). Looking north



Plate 3
Layers of roots and branches of "bog oak" within the lower unoxidised peat layer (003) directly overlying natural sand and clay substrate (004).
Looking north



Plate 4 (left) Northwest-southeast arm of the excavation showing peat deposits and complete groundwater encroachment, looking northwest Plate 5 (below). Section 1 with large trunk of "bog oak" at the base. Looking northeast





Plate 6 (left) Northeast-southwest arm of the excavation. The high points at the trench base are "bog oak" trunks. Looking northeast.

Plate 7 (below). Section 2. The natural grey sand is visible below the groundwater. Looking northeast.



Appendix 1 Specification

- 1.1 A programme of archaeological works is required in advance of the construction of a flood attenuation reservoir at Middleton Stop, Kings Lynn, Norfolk. This will comprise evaluation works to address the archaeological potential of the site, followed by appropriate mitigation measures which will be dependent on the results of the evaluation phase.
- 1.2 This phase of evaluation of the site will comprise the excavation of two forty metre long trenches on an area of site considered to have high potential for the survival of archaeological deposits, based on the results of a auger survey and sub-surfacing modelling undertaken previously.
- 1.3 The site lies in an archaeologically sensitive area, close to the fen-edge and the site of a deserted medieval settlement, known prehistoric remains and also surface finds of Roman date.
- 1.4 The results of the fieldwork and subsurface topographic model will be incorporated into a final report describing the results of the investigations.

2 INTRODUCTION

- 2.1 This document comprises a Written Scheme of Investigation for a programme of archaeological works to be undertaken in advance of construction of a flood attenuation reservoir at Middleton Stop, Kings Lynn, Norfolk.
- 2.2 This document contains the following parts:
 - 2.2.1 Overview.
 - 2.2.2 Stages of work and methodologies.
 - 2.2.3 List of specialists.
 - 2.2.4 Programme of works and staffing structure of the project

3 SITE LOCATION

3.1 The proposed development is located on southwest outskirts of Kings Lynn, Norfolk in the Civil Parish of North Runcton and in the administrative district of Kings Lynn and West Norfolk, centred on National Grid Reference TF 6427 1857. To the northeast the approximately 8 hectare area of development is bounded by the A149 Queen Elizabeth Way and to the northeast by the Middleton Stop drain.

4 PLANNING BACKGROUND

4.1 Planning permission for a flood storage area as been granted by King's Lynn and West Norfolk Borough Council (application number 13/00360/FM) subject to an archaeological condition requiring a programme of archaeological evaluation at the site.

5 SOILS AND TOPOGRAPHY

5.1 The site lies close to the boundary of soils of the Wallasea 2 and Adventurers 2 Associations as mapped by the Soils Survey of England and Wales. (Hodge et al. 1984). The former comprise deep stoneless calcareous clayey soils developed from marine alluvium and the latter largely fen peats. Local topography is slightly undulating and lies at elevations of between 0.5 and 1.5m OD. .

6 ARCHAEOLOGICAL OVERVIEW

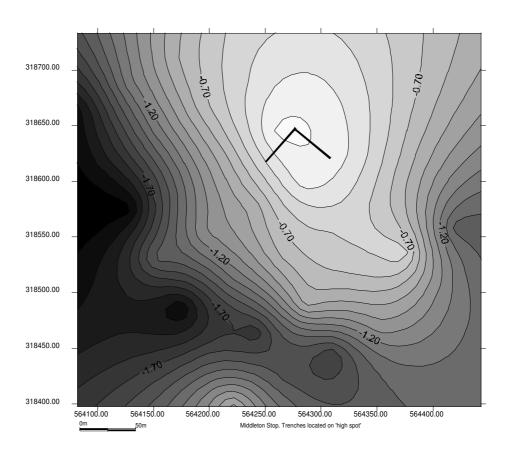
- 6.1 The site lies within an area of fen deposits but close to the fen edge which follows an irregular but generally north south alignment from Kings Lynn northwards.
- A number of archaeological investigations of a site approximately 250m to the northeast have identified archaeological remains of Mesolithic, Neolithic, Early Bronze Age and medieval date (NHER 36320). Excavations undertaken at this site in 2004 recovered Mesolithic and Neolithic worked worked flint from buried soils and tree throw holes. Evidence for Late Neolithic\Early Bronze Age activity alongside a palaeochannel was identified and excavation of a burnt flint mound revealed an underlying trough. Medieval remains recorded at the site comprised a series of intercutting ditches surrounding a sandy knoll (Norfolk Heritage Explorer).
- A number of records of nearby medieval, post medieval or undated linear banks and earthworks which probably relate to drainage or flood defence activities are also contained within the NHER (38307, 38312, 38306). Record 383312 relates to an intermittent earthwork bank associated with the Middleton Stop Drain which bounds the northeast side of the proposed area of development

- To the west of the site, evidence of medieval agriculture in the form of ridge and furrow earthworks and circular stack stands have been recorded (38235). Within five hundred metres to the west of the site the remains of a medieval moated site and the remains of the deserted medieval settlement of Hardwick have been identified through the work of the National Mapping Programme and are recorded under NHER reference (38259).
- Sub surface modelling of auger data recovered in November 2012 revealed a peat filled stream along the western and lowest part of the site. The base of this peat was carbon dated to the middle Neolithic period (c 3200BC) (Rackham, 2013). A Roman period (c. 100AD) carbon date from the top of the peat on the highest part of the site demonstrates the survival of a 3000 year long sequence of organic deposits. Overlying these deposits were sediments associated with a marine inundation, probably during the late or post Roman period.

7 TRIAL TRENCHING

7.1 Reasoning for this technique

- 7.1.1 Trial trenching enables the in situ determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site. In this instance the trenching will target an area of higher ground sealed by later deposits located adjacent to a possible prehistoric stream channel.
- 7.1.2 The trial trenching will consist of the excavation of two trenches measuring 40m x 1.6m located on the sub-surface 'high spot' identified by the sub-surface topographic, as shown on Figure 1.



7.1.3 Should archaeological deposits extend below 1.2m depth then the trench widths may be extended and the sides stepped in, or shored, as appropriate. In some instances where hand excavation is impractical, augering may be used to determine the depth of deposits.

7.2 <u>General Considerations</u>

- 7.3 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the evaluation.
- 7.4 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). Archaeological Project Services is an IFA registered archaeological organisation (no. 21)

- managed by a Member of the Institute.
- 7.5 All work will be carried out in accordance with accordance with Standards for Field Archaeology in the East of England (Gurney 2003) and any revisions of such received up to the acceptance of this specification.
- 7.6 Any artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and the discovery promptly reported to the appropriate coroner's office.
- 7.7 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will necessarily be excavated. However, the evaluation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 7.8 Open trenches will be marked by hazard tape attached to road irons or similar poles. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.
- 7.9 The trenches, all exposed surfaces, excavation horizons, and spoil, will be regularly and repeatedly metaldetected to ensure optimum recovery of artefacts. Any identified artefacts will be excavated from its parent context in normal stratigraphic sequence.
- 7.10 Accession number ENF133648 has been obtained from the Norfolk HER for allocation to the site archive.

7.11 Methodology

- 7.12 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services.
- 7.13 If a buried soil horizon is present within the trenches, machine excavation should stop at this horizon. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.
- 7.14 A 1m square sample of any buried soil horizon will then be excavated and sieved through a 5mm mesh for retrieval of artefacts.
- 7.15 A metal detector will be used during normal hand excavation in order to maximise artefact retrieval. The spoil heap will also be scanned with a metal detector.
- 7.16 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation in situ, excavation will be limited to the absolute minimum, (i.e. the minimum disturbance) necessary to interpret the form, function and date of the features.
- 7.17 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn. All context and site numbering used will be compatible with the Norfolk Sites and Monuments Record.
- 7.18 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.
- 7.19 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and digital colour images will be compiled. The photographic record will consist of:
- 7.20 the site before the commencement of field operations.
- 7.21 the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
- 7.22 individual features and, where appropriate, their sections.
- 7.23 groups of features where their relationship is important.
- 7.24 the site on completion of fieldwork

- 7.25 Should human remains be encountered, they will be left in situ with excavation being limited to the identification and recording of such remains. The archaeological curator, local environmental health department and, if appropriate, the coroner and the police will be informed. If removal proves necessary, appropriate Home Office licences will be obtained before excavation of human remains commences.
- 7.26 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered, ready for later washing and analysis. All finds work will be carried out to accepted professional standards and the Institute of Field Archaeologists Guidelines for Finds Work (1992).
- 7.27 Conservation of artefacts will be carried out by Lincoln City and County Museum. The resources available for conservation is dependent on the quantity and type of artefacts recovered from the site.
- 7.28 The spoil generated during the evaluation will be mounded along the edges of the trial trenches with the topsoil being kept separate from the other material excavated for subsequent backfilling.
- 7.29 The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey or tape survey to established features recorded on Ordnance Survey maps, as appropriate.
- 7.30 Samples will be taken from all waterlogged feature fills. Otherwise, samples will be taken from primary and secondary fills of ditches and pits, the level of sampling being appropriate to the content of the individual feature. Samples will be retained from approximately 50% of half-sectioned postholes where they form parts of recognizable structures. All sampling will follow the procedures in Centre for Archaeology Guidelines Environmental Archaeology (English Heritage 2002).
- 7.31 Representative samples of structural masonry will be retained. The retention of unworked structural stone and plain ashlar will be determined by the number of geological types present. All dressed, inscribed or moulded stone masonry will be retained except where there are logistical, or archaeological considerations, not to do so.

8 ENVIRONMENTAL ASSESSMENT

- 8.1 Environmental sampling will aim to establish:
 - the state of preservation of any environmental remains which may be contained within archaeological deposits on the
 - the broad character of these deposits e.g. the presence of material indicating domestic occupation, non settlement related deposits which might indicate broad environmental changes such as mollusc communities within field ditches. To this end a variety of feature types should be samples as appropriate.
 - the distribution of environmental remains across the site through sampling features from distributed within different trenches from across the site.
 - the presence of archaeological remains within features of separate periods through sampling features separated stratigraphically or by datable artefactual material.
- 8.2 All environmental sampling will be undertaken in accordance with English Heritage guidance on environmental sampling (Campbell, 2011).
- 8.3 If appropriate, during the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

9. POST-EXCAVATION AND REPORT

9.1. Stage 1

- 9.1.1. On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.
- 9.1.2. All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

9.2. Stage 2

- 9.2.1. Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 9.2.2. Finds will be sent to specialists for identification and dating.

9.3. Stage 3

- 9.3.1. On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:
 - A non-technical summary of the results of the investigation.
 - A description of the archaeological setting of the site.
 - Description of the topography and geology of the investigation area.
 - Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results
 - A text describing the findings of the investigation.
 - Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
 - Sections of the trenches and archaeological features.
 - Interpretation of the archaeological features exposed and their context within the surrounding landscape.
 - an assessment of potential of the finds recovered from the site within specialist reports.
 - Appropriate photographs of the site and specific archaeological features or groups of features.
 - A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.
 - Assessment of the potential impact of the development on any archaeological remains at the site in light of the results of the evaluation.
- The results of the subsurface topographic model will be integrated into a single report with the C14 dating from peat deposits within the test pits.

9 REPORT DEPOSITION

9.1 Copies of the report will be provided to the client, the Norfolk Historic Environment Record, the English Heritage Regional Science Advisor within 1 month of the completion of the relevant phase of on-site works.

10 ARCHIVE

- 10.1 The documentation, finds, photographs and other records and materials generated during the investigation will be sorted and ordered in accordance with the procedures in the Society of Museum Archaeologists' document *Transfer of Archaeological Archives to Museums* (1994), and any additional local requirements, for long term storage and curation. This work will be undertaken by the Finds Supervisor, an Archaeological Assistant and the Conservator (if relevant). The archive will be deposited with the receiving museum as soon as possible after completion of the project, and within 12 months of that completion date.
- 10.2 Prior to the project commencing, Norfolk Museums Service will be contacted to obtain their agreement to receipt of the project archive and to establish their requirements with regards to labelling, ordering, storage, conservation and organisation of the archive. Event number ENF 133683 has been obtained from the Norfolk Historic Environment Service.
- 10.3 Upon completion and submission of the evaluation report, the landowner will be contacted to arrange legal transfer of title to the archaeological objects retained during the investigation from themselves to the receiving museum. The transfer of title will be effected by a standard letter supplied to the landowner for signature.

11 PUBLICATION

- 11.1 Details of the investigation will be input to the Online Access to the Index of Archaeological Investigations (OASIS).
- 11.2 If appropriate, notes on the findings will be submitted to the appropriate national journals: *Britannia* for discoveries of Roman date, and *Medieval Archaeology* and the *Journal of the Medieval Settlement Research Group* for findings of medieval or later date.

12 CURATORIAL RESPONSIBILITY

12.1 Curatorial responsibility for the project lies with the Norfolk County Council Historic Environment Officer. As much notice as possible will be given in writing to the curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

13 VARIATIONS AND CONTINGENCIES

- 13.1 Variations to the scheme of works will only be made following written confirmation of acceptability from the archaeological curator.
- 13.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

14 PROGRAMME OF WORKS AND STAFFING LEVELS

14.1 The trial trenching will be undertaken by Archaeological Project Services staff comprising 1 Project Officer and 1 Assistant and take up to 3 days.

15 SPECIALISTS TO BE USED DURING THE PROJECT

15.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

Conservation Laboratory, City and County Museum,

Lincoln.

Pottery Analysis

Prehistoric: Dr D Knight, Trent and Peak Archaeological Trust or Dale

Trimble mentored by Dr Knight.

Roman: Alex Beeby, APS Roman pottery specialist mentored by or

B Precious, independent specialists

Anglo-Saxon: Dr A. Irving (formerly Boyle) APS independent pottery specialist

Medieval and later: Alex Beeby mentored by Dr. A. Irving APS Independent

pottery specialists

Other Artefacts J Cowgill, independent specialist; or G Taylor, APS

Human Remains Analysis R Gowland, independent specialist

Animal Remains Analysis Matilda Holmes, Independent specialists

Environmental Analysis & Geoarchaeology James RackhamEnvironmental Archaeology Consultancy

Radiocarbon dating Beta Analytic Inc., Florida, USA

Dendrochronology dating University of Sheffield Dendrochronology Laboratory

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Specification: Version 1, March 2013

Appendix 2 Context Descriptions

Context	Description	Interpretation
001	Stiff, plastic blue grey and yellow clay, up to 0.5m	Upper soil
	thick	deposit/re-
		deposited
		marling layer
002	Friable, dark brown fibrous oxidised peat, average	Upper peat layer
	thickness 0.3 to 0.4m trenchwide	
003	Variously firm, friable and plastic mid brown	Lower peat layer
	unoxidised peat with frequent roots, branches and	
	trunks of "bog oak". Up to 0.5m thick trenchwide	
004	Soft and variously plastic mid grey and mid blue sand	Natural substrate
	and clay with frequent small angular and rounded	
	stones.	

Appendix 3

GLOSSARY

Bronze Age

A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.

Context

An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, *e.g.* [004].

Cut

A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, *etc*. Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.

Intrusive

Artefacts of later date found in deposits that must pre-date them are said to be intrusive. Such intrusive artefacts will usually be small and have worked down in the soil through cracks, or by root, worm or rodent action. Intrusive artefacts will generally be isolated and be distinctively later than a larger assemblage of earlier artefacts, for example, a single 19th century pottery fragment found in a large collection of medieval ceramics in a refuse pit.

Layer

A layer is an accumulation of soil or other material that is not contained within a cut

Medieval

The Middle Ages, dating from approximately AD 1066-1500.

Natural

Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity

Prehistoric

The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.

Romano-British

Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

Till

A deposit formed after the retreat of a glacier. Also known as boulder clay, this material is generally unsorted and can comprise of rock flour to boulders to rocks of quite substantial size.

Appendix 4

THE ARCHIVE

The archive consists of:

- 4 Context recording sheets
- 1 Section record sheet
- 1 Plan record sheet
- 1 Photographic record sheet
- 2 Daily record sheets
- 2 sheets of drawing film

All primary records are currently kept at:

Archaeological Project Services The Old School Cameron Street Heckington Sleaford Lincolnshire NG34 9RW

The ultimate destination of the project archive is:

Norwich Castle Museum Castle Meadow Norwich Norfolk NR1 3JU

Norfolk Historic Environment Service Site Code: ENF 133683

Archaeological Project Services Site Code: KLQE14

OASIS Record No: archaeol1-177115

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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