



MELLING TO FAZAKERLEY WASTEWATER TRANSFER PIPELINE

Merseyside

Archaeological Evaluation



Oxford Archaeology North

February 2005

United Utilities plc

Issue No: 2004-05/320

OAN Job No: L9381

NGR: SJ 3895 9895

Document Title: MELLING TO FAZAKERLEY WASTEWATER TRANSFER PIPELINE

Document Type: Archaeological Evaluation

Client Name: United Utilities plc

Issue Number: 2004-05/320

OA Job Number: L9381

Site Code: MF04

National Grid Reference: SJ 3895 9895

Prepared by: Kathryn Blythe

Position: Supervisor

Date: February 2005

Checked by: Alison Plummer

Position: Senior Project Manager

Date: February 2005

Signed.....

Approved by:

Position: Operations Manager

Date: February 2005

Signed.....

Oxford Archaeology North

Storey Institute
Meeting House Lane
Lancaster
LA1 1TF
t: (0044) 01524 848666
f: (0044) 01524 848606

w: www.oxfordarch.co.uk
e: info@oxfordarch.co.uk

© Oxford Archaeological Unit Ltd (2005)

Janus House
Osney Mead
Oxford
OX2 0EA
t: (0044) 01865 263800
f: (0044) 01865 793496

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

CONTENTS

SUMMARY	2
ACKNOWLEDGEMENTS.....	3
1. INTRODUCTION	4
1.1 Circumstances of the Project	4
2. METHODOLOGY.....	5
2.1 Project Design.....	5
2.2 Field Work	5
2.3 Finds.....	5
2.4 Environmental Samples	5
2.5 Archive.....	6
3. BACKGROUND.....	7
3.1 Location, Topography and Geology	7
3.2 Historical Background	7
4. RESULTS.....	9
4.1 Evaluation	9
4.2 Finds.....	10
4.3 Environmental samples	11
5. DISCUSSION.....	12
6.BIBLIOGRAPHY	13
6.1 Cartographic Sources	13
6.2 Secondary Sources	13
ILLUSTRATIONS	14
Figures.....	14
Plates	14
APPENDIX 1: PROJECT DESIGN.....	15
APPENDIX 2: TRENCH DESCRIPTIONS AND CONTEXT LIST	20
APPENDIX 3: FINDS SUMMARY	25

SUMMARY

Oxford Archaeology North (OA North) were commissioned by United Utilities plc to undertake an archaeological evaluation prior to the construction of a new water transfer pipeline between Melling (SJ 3895 9895) and Fazakerley (SJ 3928 9743), to the north of the city of Liverpool, Merseyside (Fig 1). This followed an archaeological desk-based assessment of the proposed route, requested by the Merseyside Archaeological Service, which was carried out in May 2004.

The evaluation consisted of trial trenching across the Alt basin, which targeted the site of a prehistoric axe head findspot (Site **11**) and was also in the vicinity of a findspot of a flint core (Site **13**).

The evaluation was carried out between the 6th and 9th of December 2004, and comprised two 25m trenches in the vicinity of Site **11** and fifteen 5m trenches heading west from Site **11** towards Site **13** (Fig 2).

Three pits were discovered in the evaluation: Pit **30** in Trench 11 contained one sherd of post-medieval pottery; Pit **43** from Trench 16 was rich in charcoal; and pit **46**, also from Trench 16, contained no dating evidence. Sherds of post-medieval pottery and glass were also recovered from the topsoil in several of the trenches, and from a plough furrow in Trench 10. Evidence of modern farming was present in several of the trenches in the form of a modern water pipe, plough marks and field drains.

The sparse amount of information pertaining to any potential archaeological remains in this area suggests that the proposed pipeline will have a minimal impact on the archaeological resource.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to express its thanks to United Utilities plc for funding and supporting the project and, in particular, to Stephen Bennett, Barry Sherwood and Dave Studlock for their help during the evaluation. Thanks are also due to Yvette Alagul, Mark Hart and Sarah-Jane Farr of the Merseyside Archaeological Service for their assistance.

The evaluation was carried out by Martin Sowerby and Kathryn Blythe, who also wrote the report and produced the drawings. The project was managed by Alison Plummer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 United Utilities plc requested that Oxford Archaeology North (OA North) conduct an evaluation of land to the south of Melling Wastewater Treatment Works, Merseyside, in advance of the construction of a new water transfer pipeline between Melling (SJ 3895 9895) and Fazakerley (SJ 3928 9743).
- 1.1.2 A desk-based assessment carried out in May 2004 highlighted two findspots of a Neolithic axe head (Site **11**) and a Prehistoric flint core (Site **13**) in the vicinity of the northern end of the proposed pipeline. Due to the potential of this area OA North were commissioned to evaluate the site in order to provide information about the location, depth and importance of the archaeology in this area.
- 1.1.3 The evaluation was carried out in accordance with a verbal brief by the Merseyside Archaeological Officer (MAO), and the project design which had been agreed by the Merseyside Archaeological Service (*Appendix 1*).
- 1.1.4 This report sets out the results of the evaluation in the form of a short document. It outlines the findings, followed by a statement of the archaeological potential of the area, and an assessment of the impact of the proposed development.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 In response to a request from United Utilities plc, OA North submitted a Project Design (*Appendix 1*) for an evaluation prior to the construction of a Wastewater transfer pipeline between Melling and Fazakerley. The project design was prepared in accordance with a verbal brief from the Merseyside Archaeological Officer. The Project Design was adhered to in full and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practise.

2.2 FIELD WORK

2.2.1 In total, 17 north-east/south-west aligned trenches were excavated under the supervision of an archaeologist by a machine using a 2.1m wide toothless ditching bucket to the level of the natural subsoil or to the level of identified archaeological deposits. Where potential archaeological deposits were encountered, the trenches were hand cleaned and the deposits were manually excavated in order to test their date, character and extent. Two 25m x 2m trenches were excavated in the vicinity of Site **11**, and a further fifteen 5m x 2m trenches between Sites **11** and **13** in the Alt basin.

2.2.2 **Recording:** the trial trenching results were recorded using a system devised from that used by the English Heritage Centre for Archaeology. The archive includes both a photographic record and accurate large-scale plans and sections at an appropriate scale (1:10 and 1:20). Recording was principally in the form of a *pro-forma* Trench Record sheet for each trench, which notes the orientation, dimensions and description of the topsoil and subsoil present in the trench. Features thought to be of possible archaeological potential were recorded using *pro-forma* Context Record sheets.

2.3 FINDS

2.3.1 **Artefacts:** all finds recovered were bagged and recorded by context number, retained for assessment, processed and stored according to current standard practice based on guidelines set by the Institute of Field Archaeologists (IFA 1992). The finds have been analysed by the OA North in-house specialist (*Section 4.2*).

2.4 ENVIRONMENTAL SAMPLES

2.4.1 The sample was hand floated and the light fraction (flot) collected on 250µm mesh and air-dried. The flot was then scanned under a Leica stereo microscope for the presence of any charred plant remains. The presence of any other material, such as coal and modern seeds was also noted. The majority of the charcoal fragments did not float, therefore a number of fragments were hand-

picked from the residue in order to assess species type and the diversity of the assemblage.

2.5 ARCHIVE

- 2.5.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and with the current IFA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited in Liverpool Record Office within six months of the completion of the project. In addition, a copy of the report will be forwarded to the Merseyside Sites and Monuments Record (SMR) and a summary sent to the National Monuments Record (NMR).

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 **Location:** the evaluation site was located in a field to the south of the Melling Wastewater Treatment Works, to the north-east of the village of Aintree. This field was bounded by the Leeds and Liverpool Canal to the south-east and the River Alt to the south-west. To the north, behind the Treatment Works, was the M57, and to the north-east a B-road, Spencer's Lane, heading north out of Aintree.
- 3.1.2 **Geology:** the solid geology of the area consists of Keuper and Bunter sandstone and Keuper Marl Waterstones, although these rarely outcrop due to the low-lying landscape (Lewis and Cowell 2002). The drift geology of Merseyside generally comprises till and Shridley Hill sands, peat and alluviums in addition to silts of riverine and estuarine origin (*ibid*). However, the soils of the study area itself are classified as urban by the Soil Survey of England and Wales (1987).
- 3.1.3 **Topography:** the topography of the Merseyside area is directly influenced by the river Mersey and its estuary, and the resulting landscape is typically low-lying and gently rolling (Countryside Commission 1998, 138). The field in which the evaluation took place was fairly flat, sloping down slightly to the south to meet the river. It was being used as arable land, and there was short grass on it. The area investigated by the evaluation trenches was approximately 5-10m above sea level.

3.2 HISTORICAL BACKGROUND

- 3.2.1 The following historical background is taken from the desk-based assessment of the pipeline route issued in May 2004. The information presented here is intended to serve as a brief introduction to the area.
- 3.2.2 **Prehistoric:** there is evidence within Merseyside of activity representing all the major archaeological periods from prehistory through to the modern day. Evidence for immediate post-glacial settlement is relatively scarce (Cowell and Innes 1994, 34) but by the late Mesolithic activity around the Mersey estuary had become quite widespread (Cowell and Philpott 2000, 167). Within the Alt Valley itself, six sites have been located within mossland on sandy islands or ridges that are emerging as the peat shrinks (Cowell and Innes 1994, 112). The flints associated with these sites are largely of Mesolithic date, although one may be Neolithic (*ibid*). The archaeological material from the Neolithic is generally difficult to identify within the county (*op cit*, 89) and is mainly evidenced from flint scatters (*ibid*). However, although the Neolithic saw the introduction of cereal cultivation from the beginning of the fifth millennium BC, the pollen analysis suggests that there was little change in vegetation during the late fifth to early fourth millennium BC (*ibid*). The implication is, therefore, that hunting and gathering remained a more

significant part of the economic base, with only small-scale land clearance for cultivation. This period and later was represented within the desk-based assessment study area by finds of a ground sandstone axe head (Site 11) and a worked flint core (Site 13).

- 3.2.3 **Iron Age:** both finds and documentary evidence testify that the local population of the Mersey basin had sporadic contact with the Roman world even before the permanent Roman occupation of the area in the AD 70s (Cowell and Philpott 2000, 176). Unique in the region is the site at Meols in Wirral, which demonstrates contact with the Mediterranean world via Gaul during the late pre-Roman Iron Age and continuing into the Roman occupation period (*ibid*). Generally though, known Iron Age sites are few and widely spread and it is not possible to identify a substantial Iron Age population in the region at the time of the Roman conquest (*ibid*).
- 3.2.4 **Romano-British:** Meols is also the most important site that represents the Roman period in Merseyside (Philpott 1987) and there is a paucity of other known sites within the region (*ibid*). However, investigations along the A5300 road corridor have enhanced our understanding of the period and identified several further significant Roman sites at Brook House Farm, Halewood and Brunt Boggart and Ochre Brook in Tarbock (Cowell and Philpott 2000). Closer to the evaluation area, a very thin scatter of Roman potsherds and a coin of Diocletian have been recovered within the Melling district (Philpott 1987), possibly attesting to Roman activity in the vicinity.
- 3.2.5 **Medieval:** there is a general absence of archaeological and documentary evidence in the area for the period between the withdrawal of Roman administration in the fifth century AD and the Norman conquest in the eleventh (Lewis and Cowell 2002), with place-name evidence forming one of the core sources. The name Fazakerley derives from the Old English *-leah*, 'clearing in the woodland' and *-faes* and *-aecer* 'near a border strip' (Lewis and Cowell 2002, after Mills 1976). At Domesday, Fazakerley was part of Walton manor and attached to the royal demesne of West Derby Manor. It remained part of the medieval common arable fields of Walton until the thirteenth century (Lewis and Cowell 2002). Melling is also from Old English and probably means '(settlement of) the family or followers of a man called Mealla' or 'Mealla's place' (Mills 1991).
- 3.2.6 **Post-medieval:** the post-medieval era in the development area is largely dominated by the construction of the Leeds and Liverpool canal and the Liverpool, Bolton and Bury Line railway and further development as the result of the Industrial Revolution and expansion of trade, of which Liverpool was a major driving force.

4. RESULTS

4.1 EVALUATION

- 4.1.1 Trenches 1-15 were all 5m in length and were aligned north-east/south-west, parallel with, and just west of the canal (Fig 2). These were located in the vicinity of Site **13** identified in the desk-based assessment. Trenches 16 and 17 were both 25m in length and were located to the immediate north-east of Trench 15 and were on the same alignment as Trenches 1-15. These were situated in the vicinity of Site **11** identified in the desk-based assessment. Full trench summaries are presented in *Appendix 2*.
- 4.1.2 The topsoil in the trenches varied from 0.1m-0.4m in depth and changed from a silty-sand in the trenches nearest the river (Trenches 1-3), to a compacted clay further north of the river and up slope. Beneath the topsoil in the trenches closest to the river (Trenches 1-5) clean silty-sand deposits (0.3m-0.75m in depth) were recorded beneath the topsoil, and overlying the natural clay. The natural clay beneath these deposits was greyish-orange and quite sandy. In Trenches 6-17 the topsoil was found to directly overlie the natural clay, which was a bright pinkish-orange, very firm and with a much lower sand content.
- 4.1.3 The cut for a modern water pipe was seen in Trench 9. This was aligned west-north-west/east-south-east, and appeared to be associated with a water pipe aligned north-east/south-west, running approximately 2m east of, and parallel with, the trenches.
- 4.1.4 Several of the trenches on the top of the slope (Trenches 10 and 12-17, Plates 1 and 2) had plough marks aligned north-east/south-west cut through the natural clay. These appeared to be modern, as organic material could be seen in their fills. A large amount of white ceramic jam jar sherds were recovered from a plough cut at the north-east end of Trench 10. Many sherds of the same type could be seen scattered in the topsoil in this area between Trenches 10 and 11.
- 4.1.5 Two types of field drain were seen in the trenches. A red ceramic pipe in a narrow cut, 0.15m in width, was seen aligned north/south at the north-east end of Trench 11, and continuing through to Trench 12. This type of field drain was also seen in the south-west end of Trench 14, aligned north-north-east/south-south-west, at the north-east end of Trench 15, aligned north-east/south-west, and in Trench 16, aligned north-east/south-west and cutting through Pit **46**. A field drain with a sandstone slab-lined cut was identified in Trench 13, aligned north-north-east/south-south-west, running through the length of the trench. This type of field drain was also identified in Trench 16 (to the east of the ceramic field drain) and Trench 17, both aligned north-east/south-west.
- 4.1.6 A small pit, **30**, was excavated towards the south end of Trench 11 with the majority of the feature apparently extending beyond the east baulk of the trench. This appeared to be a small, roughly circular pit, 0.6m in diameter

where it met the trench edge. One sherd of white ceramic jam jar was recovered from its fill, **31**.

- 4.1.7 A small circular pit, **43**, 0.55m in diameter, but extending slightly beyond the west baulk of the trench, was excavated in Trench 16 (Plate 3 and Figs 3 and 4). The fill of this pit, **42**, was 0.19m in depth and comprised a mid-dark grey sandy-clay with frequent inclusions of small-medium sized fragments of charcoal. The pit was cut through natural grey sandy layer, **44**, patches of which could be seen throughout the trench.
- 4.1.8 A second pit, **46** (Plate 4 and Figs 3 and 4), was excavated 11.5m to the north of Pit **43**. This was roughly circular, 1.1m in diameter and 0.3m in depth. It was filled with a light grey silty-sandy-clay with rare inclusions of small stones. No archaeological finds were recovered from its fill, **45**. The pit was cut on its east side by a red ceramic field drain.

4.2 FINDS

- 4.2.1 **Introduction:** a total of 171 artefacts was recovered, the majority of which was pottery, with only two fragments of glass. The provenance of finds is summarised in Table 1, below. All the artefacts have been dated to the post-medieval period, and are listed in *Appendix 3*.

Material	1	8	12	26	28	30	40	Total
Glass			2					2
Pottery	2	3	2	151	2	6	3	169
Total	2	3	4	151	2	6	3	171

Table 1: Type of finds from different contexts

- 4.2.2 **Pottery:** the earliest coarseware vessel represented was part of a dish or bowl rim in a very coarse gritty fabric with orange core and dark grey, sooted surfaces from context **8**, the topsoil in Trench 3. The sherd retained no diagnostic features and cannot thus be dated more precisely than late medieval or early post-medieval. It was found with significantly later material, suggesting a disturbed context.
- 4.2.3 The bulk of the pottery (159 fragments) derived from grey stoneware 1lb jars, produced by WP Hartley and widely used in the late nineteenth and early twentieth centuries, most notably for the storage of marmalade and jams. The group represented parts of at least six vessels. Other fragments included white-glazed earthenware tablewares in small quantities, at least one with blue and white transfer printing and other decorative treatments such as rough-casting or polychrome glazing, again likely to be of late nineteenth and twentieth century date. The group also produced a small amount of garden wares.
- 4.2.4 Only the Trench 16 topsoil, context **40**, produced black- or brown-glazed domestic redwares, again likely to have been of late date, and probably broadly contemporary with the stoneware jars. Overall, the assemblage can be dated to the later nineteenth to earlier twentieth century.

- 4.2.5 **Glass:** only two fragments of glass were found, both from Trench 4 topsoil, context **12**. One is from the base of a dark olive green wine bottle, probably of late eighteenth century date. The other, in opaque white metal, cannot be identified with certainty, but is probably from a decorative lamp glass.
- 4.2.6 **Conclusions:** a small domestic assemblage was recovered during the project, comprising pottery and glass dated mainly to the late nineteenth to early twentieth century. Trench 16 topsoil, context **40**, produced a single sherd hinting at earlier activity, but in general the assemblage has little to contribute to the dating or characterisation of the sites represented.

4.3 ENVIRONMENTAL SAMPLES

- 4.3.1 **Introduction:** a bulk sample taken from Trench 16 context **42**, the fill of Pit **43**, was assessed for the presence of plant remains and the condition and nature of charcoal.
- 4.3.2 **Results:** the sample contained a couple of fragments of indeterminate cereal grains, a couple of coal fragments, and a number of modern weed seeds. The sample did, however, contain abundant charcoal fragments ranging in size from < 2mm to > 10mm. A number of fragments were assessed from several size fractions, the results of which are shown below.

Taxon	No. of fragments
<i>Quercus</i> sp. (oak)	10
<i>Prunus</i> sp./ Maloideae (blackthorn/cherry/hawthorn/apple/pear/whitebeam)	3
Betulaceae (birch/alder/hazel)	1
Indeterminate	16

Table 2: Assessment results of the charcoal from Trench 16 pit fill **42**

- 4.3.3 **Conclusion:** although the charred seed assemblage from pit fill **42** was very limited, the charcoal assessment showed that at least three species of wood were utilised, with oak predominant. Although the sample contained abundant fragments, it appears that the majority are too degraded or distorted to be identified with any degree of confidence.
- 4.3.4 **Potential:** the assessment has demonstrated that charred plant remains, although limited, are preserved, and that Pit 43 contained abundant charcoal fragments. Although a majority of the charcoal was poorly preserved, the size of the assemblage means that a representative amount could be analysed and provide information on the range of species utilised for fuel wood. However, this will only be warranted if the features can be directly associated with domestic and/or industrial activity.
- 4.3.5 **Recommendations:** should the site undergo further archaeological mitigation then it is recommended that a programme of environmental sampling should be carried out.

5. DISCUSSION

- 5.1.1 Seventeen trenches were excavated in order to investigate two potentially archaeologically sensitive areas identified in the desk-based assessment (Sites **11** and **13**).
- 5.1.2 Three small pits were observed in the evaluation. Pit **30** contained one sherd of post-medieval pottery. Pit **43** contained limited charred seeds but was very rich in charcoal. The charcoal consisted of a number of species including oak, blackthorn/hawthorn etc, and birch/alder/hazel, which demonstrates that numerous species were utilised for fuel wood. Pit **46** contained no archaeological dating evidence. Most of the recorded pottery was recovered from the topsoil and dated to the late nineteenth to early twentieth century, although a late medieval/post-medieval sherd from Trench 4 topsoil **12** is indicative of earlier activity in the area. Such material of medieval and later date is likely to derive from the practise of night-soiling: the use of domestic midden material for fertiliser and soil improvement. Evidence of modern farming activity was also present in the trenches in the form of land drains, and modern plough marks.
- 5.1.3 The sandstone axe head (Site **11**) and the flint core (Site **13**) identified in the desk-based assessment as from this area were both found in ploughed fields, suggesting that they had been disturbed from their primary contexts. The evaluation found no evidence of archaeological features or any other artefacts which could be associated with these find spots.
- 5.1.4 Given the nature of the archaeology observed during the evaluation, it is thought that the potential for further archaeological findings is low and, therefore, the impact of the pipeline will be minimal. However, considering the presence of the find spots, it is recommended that a watching brief is maintained during topsoil stripping activities in advance of any development.

6. BIBLIOGRAPHY

6.1 CARTOGRAPHIC SOURCES

Soil Survey of England and Wales 1987 *Soils of the Liverpool District*, Sheet **108**, 1: 50000

6.2 SECONDARY SOURCES

Countryside Commission, 1998 *Countryside Character Volume 2: North West*, Cheltenham

Cowell, RW, and Innes, JB, 1994 *The Wetlands of Merseyside, North West Wetlands Survey 1*, Lancaster Imprints **2**, Lancaster

Cowell, RW, and Philpott, RA, 2000 *Prehistoric, Roman-British and Medieval Settlement in Lowland North West England: Archaeological Excavations Along the A5300 Road Corridor in Merseyside*, Liverpool

English Heritage, 1991 *The Management of Archaeological Projects*, 2nd edn, London

Lees, P 1991 *A Guide to Merseyside's Industrial Past*, The North Western Society for Industrial Archaeology and History, Liverpool

Lewis, J, and Cowell, R, (eds) 2002 *The Archaeology of a Changing Landscape: The Last Thousand Years on Merseyside*, Journal of the Merseyside Archaeological Society **11**, Wallasey

Mills, AD 1998 *Dictionary of English Place Names*, Oxford

OA North 2004 *Melling to Fazakerley Wastewater Transfer Pipeline, Merseyside. Archaeological Desk-based Assessment*, Unpubl rep

Philpott, RA, 1987 *Merseyside in the Roman Period*, Journal of the Merseyside Archaeological Society **7**, Wallasey

ILLUSTRATIONS

FIGURES

Figure 1: Location Map

Figure 2: Trench Location Plan

Figure 3: Plan of Trench 16

Figure 4: North-east-facing section through Pit **43** and south-east-facing section through Pit **46**

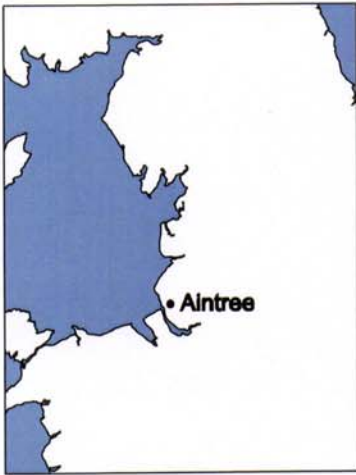
PLATES

Plate 1: Trench 13, looking north-east

Plate 2: Trench 14, looking north-east

Plate 3: Trench 16, looking north-east

Plate 4: Pit **46**, looking north-west



based upon the Ordnance Survey 1:100,000
with the permission of the controller of HMSO
© Crown Copyright



Figure 1: Location Map

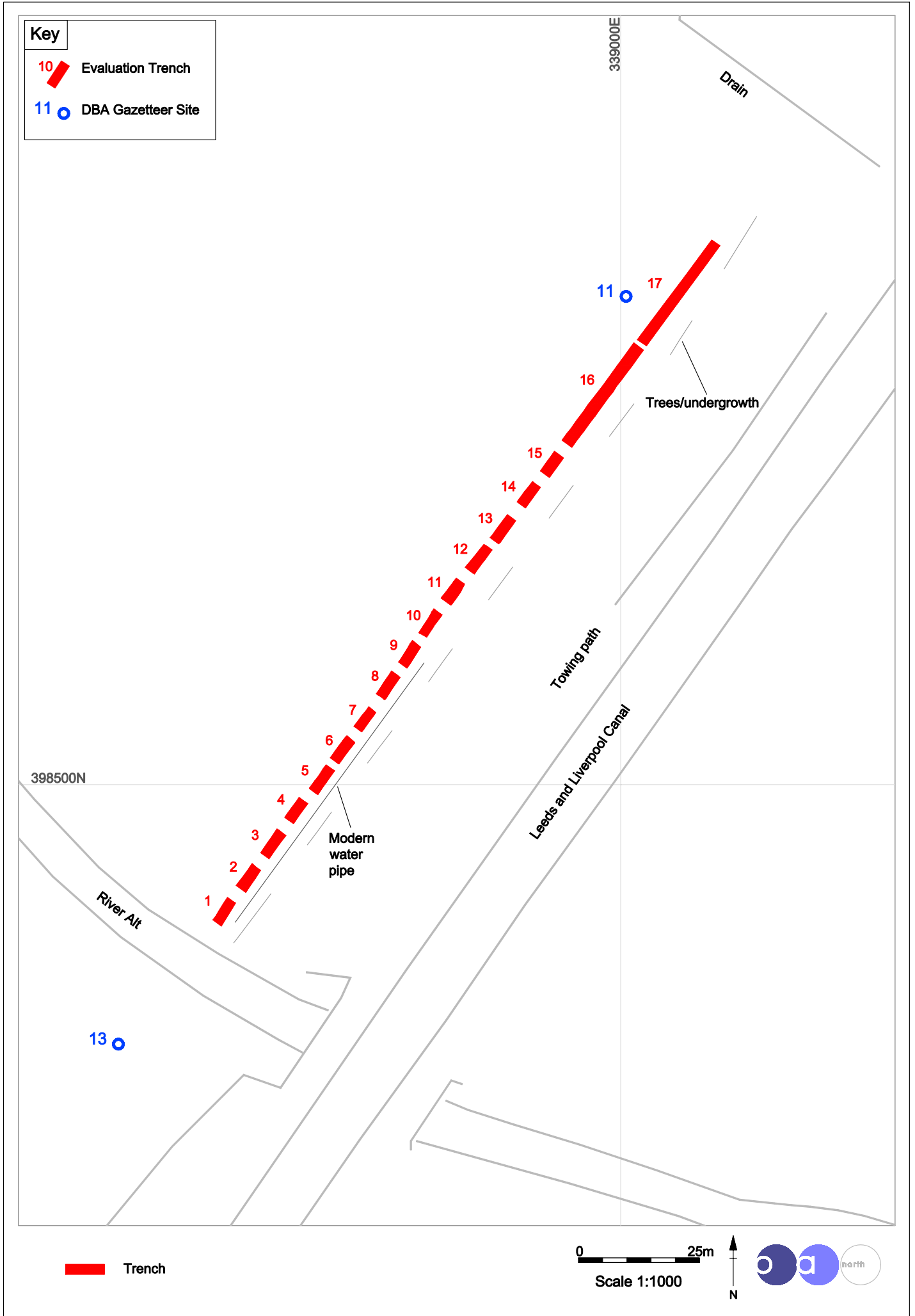


Figure 2: Trench Location Plan

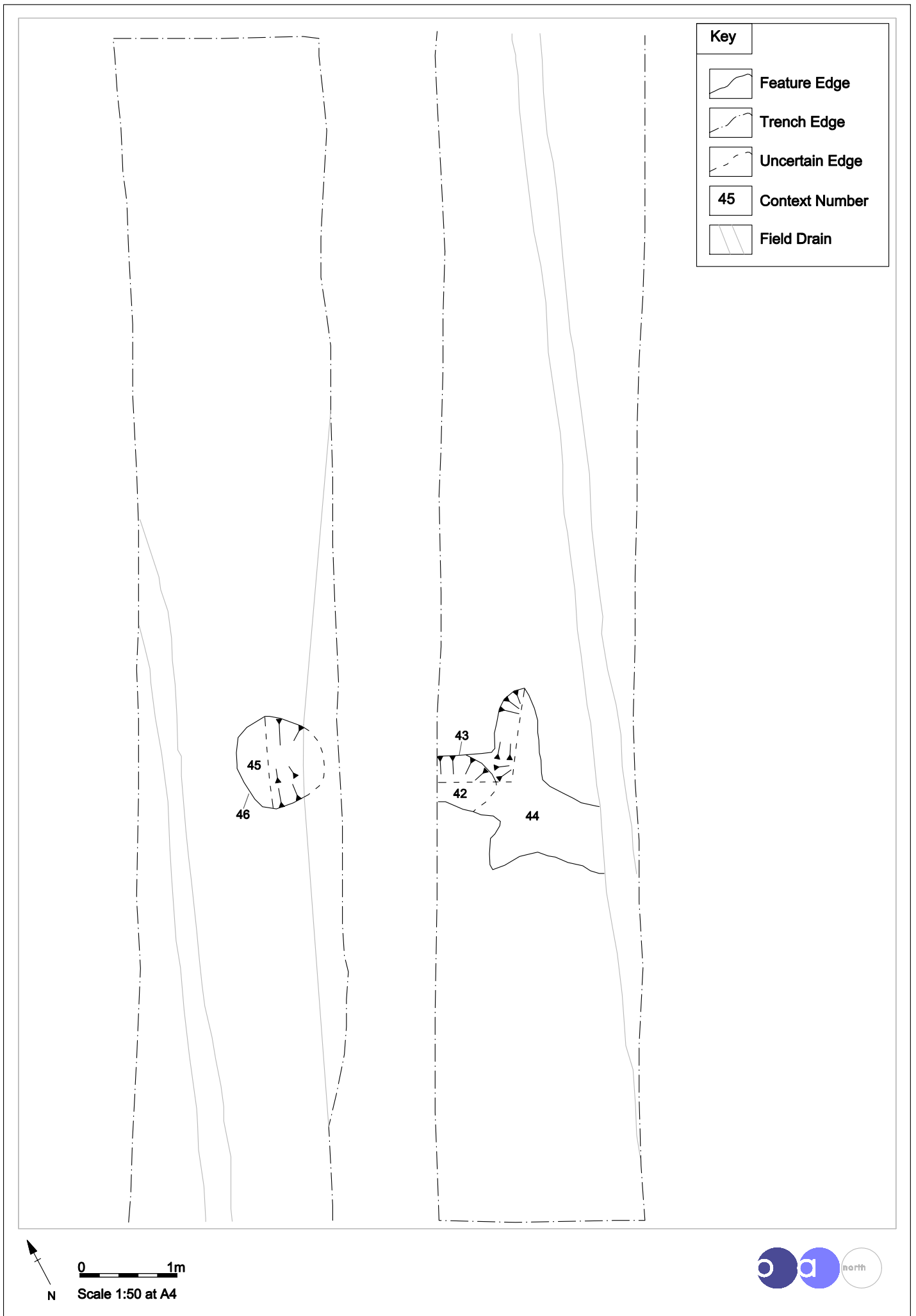
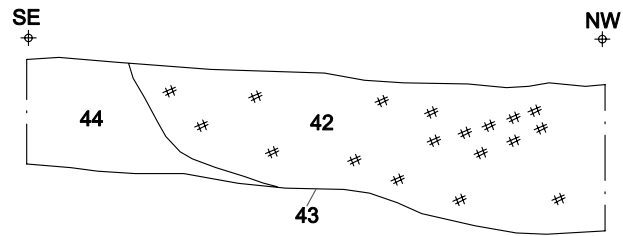
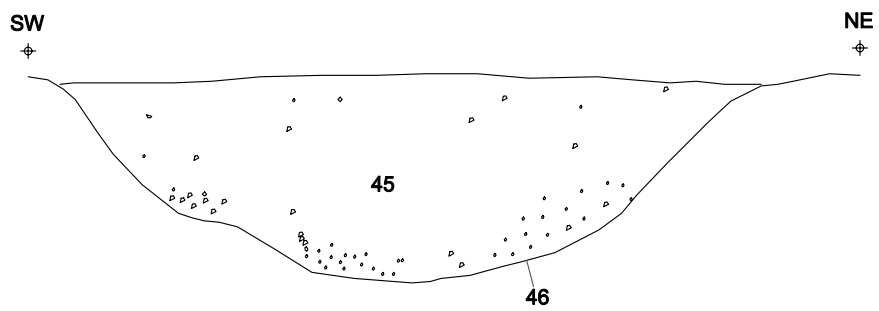


Figure 3 : Plan of Trench 16



North-east-facing section through Pit 43



South-east-facing section through Pit 46

- # charcoal
- stones

Scale 1:10 at A4



Figure 4: North-east-facing section through Pit 43 and south-east-facing section through Pit 46



Plate 1: Trench 13, looking north-east



Plate 2: Trench 14, looking north-east



Plate 3: Trench 16, looking north-east



Plate 4: Pit 46, looking north-west

APPENDIX 1: PROJECT DESIGN

**Oxford
Archaeology
North**

October 2004

**MELLING TO FAZAKERLEY PIPELINE, MERSEYSIDE
ARCHAEOLOGICAL EVALUATION
PROJECT DESIGN**

Proposals

The following project design is offered in response to a request by United Utilities for an archaeological evaluation to be undertaken in advance of a proposed pipeline running from Melling to Fazakerley, Merseyside.

1. INTRODUCTION

1.1 United Utilities (hereafter the client) have proposed the development of a new transfer pipeline running from Melling to Fazakerley Wastewater Treatment Works, Merseyside. Due to the known archaeological significance of the area, the Merseyside Archaeological Officer (MAO) recommended that an archaeological desk-based assessment was undertaken as an initial phase of investigation, prior to development works taking place (OA North 2004). Following the results of the desk-based assessment a second phase of work has been specified comprising a programme of trial trenching.

1.2 OXFORD ARCHAEOLOGY NORTH

1.2.1 OA North has extensive experience of evaluation and excavation of sites of all periods having undertaken a great number of small and large-scale projects during the past 23 years. These have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

1.2.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an **Institute of Field Archaeologists (IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

2.1 The following programme has been designed to provide an accurate archaeological assessment of the designated area within its broader context. The required stages to achieve these ends are as follows:

2.2 **Evaluation:** to implement a programme of trial trenching examining the area in the vicinity of the axe head find spot (Site 11), and a series of trenches across the Alt basin towards Site 13; this latter due to the known high density of lithic sites found in association with wetland deposits.

2.3 **Report and Archive:** an interim report may be issued should there be any further mitigation work necessary. The final report will be produced for the client within eight weeks of completion. A site archive will be produced to English Heritage guidelines (MAP 2) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. METHOD STATEMENT

3.1 EVALUATION

3.1.1 The programme of evaluation will require trenching to establish the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. In this way, it will adequately sample the threatened available area

3.1.2 The evaluation should take place prior to any topsoil stripping or associated ground works taking place within the pipeline easement. A 50m x 2m trench will be excavated in the general area of Site 11 and a series of 15 5m x 2m trenches across the Alt basin. The trenches will not be excavated deeper than 1.20m to accommodate health and safety constraints; any requirements to excavate below this depth will involve recosting.

- 3.1.3 The topsoil will be removed by machine (fitted with a toothless ditching bucket, approximately 1.6m in width) under archaeological supervision to the surface of the first significant archaeological deposit. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All features of archaeological interest must be investigated and recorded unless otherwise agreed by the County Archaeology Service.
- 3.1.4 All trenches will be excavated in a stratigraphical manner, whether by machine or by hand. Any investigation of intact archaeological deposits will be exclusively manual. A minimum sample of 50% of archaeological features must be examined by excavation. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no less than a 25% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 3.1.5 **Environmental Sampling:** environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). Subject to the results of the evaluation an assessment of any environmental samples will be undertaken by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would examine the potential for macrofossil, arthropod, palynological and general biological analysis. The costs for the palaeoecological assessment are defined as a contingency and will only be called into affect in agreement with the County Archaeologist of Merseyside, and the Client.
- 3.1.6 Samples will also be collected for technological, pedological and chronological analysis as appropriate. If necessary, access to conservation advice and facilities can be made available. OA North maintains close relationships with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs artefact and palaeozoological specialists with considerable expertise in the investigation, excavation and finds management of sites of all periods and types, who are readily available for consultation.
- 3.1.7 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. Merseyside Archaeological Service and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations, and if appropriate, in compliance with the 'Disused Burial Grounds (Amendment) Act, 1981.
- 3.1.8 **Recording:** all information identified in the course of the site works will be recorded stratigraphically, with sufficient pictorial record (individual trench plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.1.9 Results of the field investigation will be recorded using a paper system, adapted from that used by Centre for Archaeology of English Heritage. The archive will include both a photographic record and accurate large-scale location and trench plans and sections at an appropriate scale (1:50, 1:20, and 1:10). Levels will be tied into the Ordnance Datum. All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

- 3.1.10 **Treatment of finds:** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 3.1.11 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.1.12 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.1.13 **Contingency plan:** in the event of significant archaeological features being encountered during the evaluation, discussions will take place with the Archaeological Officer, as to the extent of further works to be carried out, and in agreement with the Client. All further works would be subject to a variation to this project design. In addition, a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the costing and would be in agreement with the client.

3.2 ARCHIVE/REPORT

- 3.2.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the SMR (the index to the archive and a copy of the report). Arrangements for deposition of the full site archive will be made with Liverpool Museum, National Museums & Galleries on Merseyside. The National Museums Liverpool (NML)'*Guidelines on the Deposition of Archaeological Archives*' will be consulted.
- 3.2.2 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further copy submitted to the Merseyside SMR within eight weeks of completion of the study. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above. The report will also include a complete bibliography of sources from which data has been derived.
- 3.2.3 This report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the identified archaeology within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, section drawings, and plans.
- 3.2.4 Provision will be made for a summary report to be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork, if relevant results are obtained.
- 3.2.5 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

4 OTHER MATTERS

- 4.1 **Project Monitoring:** whilst the work is undertaken for the client, the Archaeological Officer will be kept fully informed of the work. Any proposed changes to the project design will be agreed with the Archaeological Officer and the client.
- 4.2 **Access:** OA North will consult with the client regarding access to the site.
- 4.3 **Health and safety:** OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991). OA North will liaise with the Client to ensure all health and safety regulations are met. OA North site staff will receive a safety induction from the contractor. A risk assessment will be completed in advance of any on-site works.
- 4.4 **Reinstatement:** the topsoil removed will be stored alongside the evaluation trenches but not used as a backfill. The areas excavated will be backfilled with the spoil for practical and health and safety reasons but no reinstatement of the area will be undertaken. This will be carried out by the Client prior to/during development.
- 4.5 **Public Access:** the site will be protected from public access by fencing (erected by the Client).

5 WORK TIMETABLE

- 5.1 **Evaluation:** it is anticipated that the evaluation will take approximately five days to complete.
- 5.2 The client report will be completed within approximately eight weeks following completion of fieldwork. If further mitigation works prove necessary an interim statement will be produced.

6 STAFFING

- 6.1 The project will be under the direct management of **Alison Plummer BSc (Hons)** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 6.2 The excavation will be directed by an OA North supervisor. All OA North's project officers and supervisors are experienced field archaeologists who regularly undertaken supervision of numerous small- and large-scale evaluation and excavation projects.
- 6.3 The supervisor will be assisted by an archaeological assistant.
- 6.4 The processing and analysis of any palaeoenvironmental samples will be carried out under the auspices of **Elizabeth Huckerby BA, MSc** (OA North project officer), who has extensive experience of the palaeoecology of the North West, having been one of the principal palaeoenvironmentalists in the English Heritage-funded North West Wetlands Survey.
- 6.5 Assessment of any finds from the excavation will be undertaken by **Sean McPhillips BA**. Sean has worked as a finds supervisor for English Heritage and MOLAS on a number of occasions and has extensive knowledge concerning finds.

7 INSURANCE

- 7.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

APPENDIX 2: TRENCH DESCRIPTIONS AND CONTEXT LIST

Trench 1	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>1</i>	Topsoil. A dark brownish-grey silty-sand with rare small stone inclusions. Pottery was retrieved from this layer.	0.00m-0.26m
<i>2</i>	A light brown sandy-silt layer.	0.26m-0.66m
<i>3</i>	A mid-yellow-grey sandy-silt layer.	0.66m-1.01m

Trench 2	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>4</i>	Topsoil. A mid-dark blackish-brown slightly sandy silty-clay layer.	0.00m-0.4m
<i>5</i>	A light orange slightly silty-sand layer.	0.4m-0.73m
<i>6</i>	A pale grey clay layer, becoming slightly pinker towards its base.	0.73m-1.13m
<i>7</i>	An orange sandy-clay layer.	1.13m

Trench 3	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>8</i>	Topsoil. A mid-dark brown sandy-silt layer. Pot was retrieved from this layer.	0.00m-0.25m
<i>9</i>	A light orange-brown silty-sand layer with inclusions of charcoal flecks.	0.25m-0.55m
<i>10</i>	A pale grey silty-sand layer.	0.55m-0.90m
<i>11</i>	A mid-grey sandy-clay layer.	0.9m

Trench 4	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>12</i>	Topsoil. A mid-dark greyish-brown silty-clay with rare small stone inclusions. Pottery was retrieved from this layer.	0.00m-0.28m
<i>13</i>	A greyish-orange silty-clay layer with some inclusions of charcoal flecks noted towards the south-west end of the trench.	0.28m-0.58m
<i>14</i>	A mid-orange sandy-clay layer with rare stone inclusions.	0.58m

Trench 5	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>15</i>	Topsoil. A mid-dark brown sandy-clay.	0.00m-0.25m
<i>16</i>	A mid-orange slightly silty-sand layer.	0.25m-0.79m
<i>17</i>	A pink clay layer with occasional stone inclusions.	0.79m

Trench 6	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>18</i>	Topsoil. A mid-greyish-brown sandy-clay.	0.00m-0.27m
<i>19</i>	A pink clay layer with occasional stone inclusions.	0.27m

Trench 7	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>20</i>	Topsoil. A mid-greyish-brown sandy-clay.	0.00m-0.15m
<i>21</i>	A pink clay layer with occasional stone inclusions.	0.15m

Trench 8	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
22	Topsoil. A mid-greyish-brown sandy-clay with rare small stone inclusions.	0.00m-0.12m
23	A pink clay layer with occasional stone inclusions.	0.12m

Trench 9	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
24	Topsoil. A mid-greyish-brown sandy-clay with rare small stone inclusions.	0.00m-0.25m
25	A pink clay layer with occasional stone inclusions.	0.25m

Trench 10	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
26	Topsoil. A mid-grey clay with rare small stone inclusions. Pot was retrieved from this layer.	0.00m-0.3m
27	A pink clay layer with occasional stone inclusions.	0.3m

Trench 11	Dimensions 5m by 2.1m	Orientation north-east/south-west
A possible pit was identified in this trench		
Context	Description	Depth
28	Topsoil. A mid-grey clay with rare small stone inclusions. Pottery was retrieved from this layer.	0.00m-0.10m
29	A pink clay layer with occasional stone inclusions.	0.1m
30	Cut of possible pit.	0.1m-0.2m
31	Fill of 30. A deposit of mid-grey sandy-clay. Pottery was retrieved from this layer.	0.1m-0.2m

Trench 12	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
32	Topsoil. A mid-grey clay.	0.00m-0.2m
33	A pink clay layer with occasional stone inclusions.	0.2m

Trench 13	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
34	Topsoil. A mid-grey clay.	0.00m-0.3m
35	A pink clay layer with occasional stone inclusions.	0.3m

Trench 14	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
36	Topsoil. A mid-greyish-brown sandy-clay with rare small stone inclusions.	0.00m-0.3m
37	A pink clay layer with occasional stone inclusions.	0.3m

Trench 15	Dimensions 5m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
38	Topsoil. A mid-greyish-brown sandy-clay with rare small stone inclusions.	0.00m-0.25m
39	A pink clay layer with occasional stone inclusions.	0.25m

Trench 16	Dimensions 25m by 2.1m	Orientation north-east/south-west
Two pit features were identified in this trench		
Context	Description	Depth
<i>40</i>	Topsoil. A mid-greyish-brown sandy-clay with rare small stone inclusions. Pottery was retrieved from this layer.	0.00m-0.25m
<i>41</i>	A pink clay layer with occasional stone inclusions.	0.25m
<i>42</i>	Fill of <i>43</i> . A deposit of mid-dark grey sandy-clay with frequent inclusions of charcoal. An environmental sample was taken from this layer.	0.25m-0.45m
<i>43</i>	Cut of small, roughly circular pit.	0.25m-0.45m
<i>44</i>	An intermittent deposit of grey silty sand, overlying layer <i>41</i> .	0.25m-0.48m
<i>45</i>	Fill of <i>46</i> . A deposit of light grey slightly silty sandy-clay.	0.25m-0.55m
<i>46</i>	Cut of small roughly circular pit.	0.25m-0.55m

Trench 17	Dimensions 25m by 2.1m	Orientation north-east/south-west
No archaeological features were identified in this trench		
Context	Description	Depth
<i>47</i>	Topsoil. A mid-greyish-brown sandy-clay with rare small stone inclusions.	0.00m-0.28m
<i>48</i>	A pink clay layer with occasional stone inclusions.	0.28m

APPENDIX 3: FINDS SUMMARY

Context	Quantity	Material	Description	Date range
<i>1</i>	1	Pottery	Transfer-printed white earthenware	Late eighteenth century onwards
<i>1</i>	1	Pottery	Garden ware	Post-medieval/modern
<i>8</i>	1	Pottery	Coarseware bowl with black glaze and heavily laminated red fabric	Late nineteenth to early twentieth century
<i>8</i>	2	Pottery	Brown-glazed laminated red fabric	Late nineteenth to early twentieth century
<i>12</i>	1	Pottery	White earthenware with rough-cast outer surface and pink glaze on inner surface.	Late eighteenth - nineteenth century
<i>12</i>	1	Pottery	White earthenware	Late eighteenth century onwards
<i>12</i>	1	Glass	Dark olive green wine bottle, base.	Late eighteenth century?
<i>12</i>	1	Glass	Opaque white fragment – lamp glass	Late nineteenth – early twentieth century?
<i>26</i>	151	Pottery	Grey stoneware, straight-sided 1lb jars manufactured by WP Hartley	Late nineteenth- early twentieth century
<i>28</i>	2	Pottery	Grey stoneware, straight-sided 1lb jars manufactured by WP Hartley	Late nineteenth- early twentieth century
<i>30</i>	6	Pottery	Grey stoneware, straight-sided 1lb jars manufactured by WP Hartley	Late nineteenth- early twentieth century
<i>40</i>	1	Pottery	Partial rim of dish. Very gritty fabric with orange core and dark grey sooted surfaces	Sixteenth-seventeenth century?
<i>40</i>	1	Pottery	Garden ware	Post-medieval/modern
<i>40</i>	1	Pottery	Base; white earthenware with incised decoration and traces of polychrome glaze	Late seventeenth - early eighteenth century