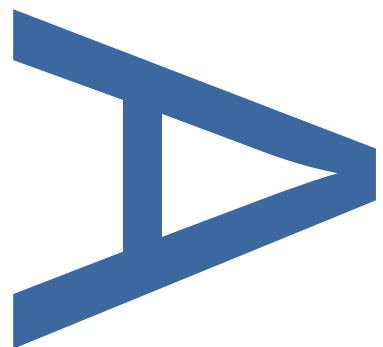


**IVE FARM, IVE FARM LANE,
LEYTON,
LONDON BOROUGH OF WALTHAM
FOREST, E10 5HL:
AN ARCHAEOLOGICAL
EVALUATION**



**LOCAL PLANNING AUTHORITY:
LONDON BOROUGH OF WALTHAM
FOREST**



SITE CODE: IVE17

MARCH 2017

PRE-CONSTRUCT ARCHAEOLOGY

**IVE FARM, IVE FARM LANE, LEYTON,
LONDON BOROUGH OF WALTHAM FOREST, E10 5HL:
AN ARCHAEOLOGICAL EVALUATION**

SITE CODE: IVE17

LOCAL PLANNING AUTHORITY: LONDON BOROUGH OF WALTHAM FOREST

PLANNING APPLICATION NUMBER:

CENTRAL NGR: TQ 37270 86690

WRITTEN BY: CHRISTINA READE (ACIfA)
PRE-CONSTRUCT ARCHAEOLOGY LIMITED
MARCH 2017

PROJECT MANAGER: HELEN HAWKINS (MCIfA)

COMMISSIONING CLIENT: NPS LONDON

CONTRACTOR: Pre-Construct Archaeology Limited
Unit 54, Brockley Cross Business Centre
96 Endwell Road
Brockley
London, SE4 2PD

Tel: 020 7732 3925

Fax: 020 7732 7896

E-mail: hhawkins@pre-construct.com

Website: www.pre-construct.com

© Pre-Construct Archaeology Ltd
March 2017

© The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Ltd cannot be held responsible for errors or inaccuracies herein contained.

CONTENTS

1	ABSTRACT	3
2	INTRODUCTION.....	4
3	PLANNING BACKGROUND AND EVALUATION OBJECTIVES	5
4	GEOLOGY AND TOPOGRAPHY	7
5	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	8
6	METHODOLOGY	11
7	ARCHAEOLOGICAL PHASE DISCUSSION.....	13
8	RESEARCH OBJECTIVES.....	16
9	BIBLIOGRAPHY.....	18
10	ACKNOWLEDGEMENTS.....	19

APPENDICES

APPENDIX 1: CONTEXT INDEX.....	20
APPENDIX 2: SITE MATRIX	24
APPENDIX 3: LITHIC ASSESSMENT	25
APPENDIX 4: POTTERY ASESMENT	27
APPENDIX 5: GLASS ASSESSMENT	29
APPENDIX 6: PLATES.....	31
APPENDIX 7: OASIS FORM	39

FIGURES

FIGURE 1: SITE LOCATION	42
FIGURE 2: TRENCH LOCATION PLANS.....	43
FIGURE 3: PLAN OF TRENCHES.....	44
FIGURE 4: PLAN OF TRENCHES.....	45
FIGURE 5: PLAN OF TRENCHES.....	46
FIGURE 6: SECTIONS.....	47


DOCUMENT VERIFICATION

IVE FARM, IVE FARM LANE, LEYTON, LONDON BOROUGH OF WALTHAM FOREST, E10

5HL

Type of project

AN ARCHAEOLOGICAL EVALUATION Quality Control

Pre-Construct Archaeology Limited Project Code		K4876	
	Name	Signature	Date
Text Prepared by:	C Reade		3.3.2017
Graphics Prepared by:	H Baxter		3.3.2017
Graphics Checked by:	J Brown	<i>Josephine Brown</i>	6.3.2017
Project Manager Sign-off:	H Hawkins		6.3.2017

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Ltd
Unit 54
Brockley Cross Business Centre
96 Endwell Road
London
SE4 2PD

1 ABSTRACT

- 1.1 This report details the results of an archaeological evaluation conducted between 20th and 24th February 2017 on land at Ive Farm, Ive Farm Lane, Leyton, London Borough of Waltham Forest. The evaluation was undertaken by Pre-Construct Archaeology Limited, and was commissioned by NPS London.
- 1.2 Nine trenches were excavated across the site, which comprised a disused sports ground. The dimensions of all trenches were set out at 10m x 1.8m, but in practice numerous modifications had to be made to the course or extent of the trenches in order to evade field drains.
- 1.3 Trenches 1–6 were to be excavated to a depth of 1.2m below ground level (BGL) or to the top of the natural alluvial deposit, whichever was reached first. Trenches 7–9 were excavated to the top of the alluvium then sondaged to a depth of 2m in order to reveal the level and nature of the underlying gravel formation. The alluvial deposit that signalled the archaeological horizon was noted in all trenches between 5.14 m OD and 5.84 m OD. The sondages in Trenches 7, 8 and 9 recorded the underlying gravel formation at 3.98–4.18m OD.
- 1.4 All trenches revealed a similar sequence of layers comprising a topsoil made ground overlying a slightly mixed layer characterised by a homogenous sandy clay with occasional charcoal flecking. This mixed deposit was similar in character to the underlying more clearly natural alluvium and is taken to represent the uppermost natural alluvial deposition. Variations in the made ground were recorded in Trench 1 in which the mixed alluvial deposit was covered by a series of sloping layers which were suggestive of industrial waste dumping to a depth of 1.30m BGL; these deposits included burnt debris, a layer of fly ash, and frequent metal, slag, pottery, and glass artefactual finds. Trench 2 was the only other intervention that recorded a similar burnt layer, though with a significantly reduced thickness of approximately 100mm.
- 1.5 A small number of features were recorded which cut into the mixed alluvial deposit, with a small number of worked flints recovered from within two of the features and one from within the mixed deposit itself suggesting a Mesolithic to Neolithic date for the features. One feature was recorded that contained a clay pipe stem fragment suggesting a post-medieval date, while the made-ground layers in Trench 1 are potentially of early–mid 20th century date based on the artefactual assemblage recovered.
- 1.6 The small amount of evidence for prehistoric and post-medieval activity suggest only light use of the area during these periods.
- 1.7 Modern activity does not appear to have truncated the underlying archaeological resource, though the lack of evidence for post-medieval usage of the site means that modern impacts at this level may in fact have been widespread.

2 INTRODUCTION

- 2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited at Ive Farm, Ive Farm Lane, Leyton, London Borough of Waltham Forest, E10 5HL. The site consisted of a roughly 'L' shaped plot of land which lay to the east of Jubilee Park and the Dagenham Brook, and south of an industrial estate containing several firms including a large joinery (Howdens Joinery). The site is further bounded to the east by residential housing at Villiar's Close and Walnut Road, part of an area known as the Oliver Close Estate, with Oliver Road Allotments located to the south. The site covered c. 8,250m² and was centred at NGR TQ 37270 86690 (see Figures 1 and 2). The site comprised a disused sports ground.
- 2.2 The site was located within an Archaeological Priority Area centred on the historic core of Leyton (DLO35947) and the River Lea and its environs (DLO35927)
- 2.3 A desk-based assessment carried out by NPS Archaeology concluded that there was a high potential for later prehistoric archaeology and a moderate probability for archaeological remains dating to the Roman, Saxon, medieval, and post-medieval periods (NPS 2016).
- 2.4 The site was located in an area with known archaeological potential and therefore the Archaeology Advisor to the London Borough of Waltham Forest recommended that the site should be subject to an archaeological trial trench evaluation in the first instance, in order to inform the application decision.
- 2.5 The archaeological evaluation works were carried out between 20th and 24th February 2017 and were commissioned by NPS London. The work was undertaken in accordance with an approved Written Scheme of Investigation (Hawkins 2017) and following Historic England guidelines (GLAAS 2015).
- 2.6 The archaeological evaluation was supervised by Christina Reade and was project managed by Helen Hawkins, both of Pre-Construct Archaeology Limited. The work was monitored by Adam Single, Historic England, Archaeology Advisor to the London Borough of Waltham Forest.
- 2.7 The completed archive comprising written, drawn, and photographic records and artefacts will be deposited with the London Archaeological Archive and Research Centre (LAARC).
- 2.8 The site was allocated the unique site code IVE17.

3 PLANNING BACKGROUND AND EVALUATION OBJECTIVES

3.1 National Guidance: National Planning Policy Framework

3.1.1 The National Planning Policy Framework (NPPF) was adopted on March 27th 2012, and now supersedes the Planning Policy Statements (PPSs). The NPPF constitutes guidance for local planning authorities and decision-takers both in drawing up plans and as a material consideration in determining applications.

3.1.2 In considering any planning application for development the local planning authority will be guided by the policy framework set by the NPPF, by current Local Plan policy and by other material considerations.

3.2 Regional Policy: The London Plan

3.2.1 The relevant Strategic Development Plan framework is provided by “The London Plan, Spatial Development Strategy for Greater London Consolidated with Alterations since 2011” (March 2016). It includes the following policy relating to archaeology within central London:

Policy 7.8 Heritage Assets and Archaeology

3.3 POLICY 7.8 HERITAGE ASSETS AND ARCHAEOLOGY

Strategic

A London’s heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.

B Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site’s archaeology.

Planning decisions

C Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.

D Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.

E New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.

LDF preparation

F Boroughs should, in LDF policies, seek to maintain and enhance the contribution of built, landscaped and buried heritage to London’s environmental quality, cultural identity and economy as part of managing London’s ability to accommodate change and regeneration.

G Boroughs, in consultation with English Heritage, Natural England and other relevant statutory organisations, should include appropriate policies in their LDFs for identifying, protecting, enhancing and improving access to the historic environment and heritage assets and their settings where appropriate, and to archaeological assets, memorials and historic and natural landscape character within their area.

3.4 Local Policy: Archaeology in the London Borough of Waltham Forest

3.4.1 The relevant local policy is provided by the London Borough of Waltham Forest Core Strategy, which was adopted in 2012. It contains the following policy statement with regards to the Historic Environment:

POLICY CS12: PROTECTING AND ENHANCING HERITAGE ASSETS

In managing growth and change, the Council will promote the conservation, enhancement and enjoyment of the Borough's heritage assets and their settings such as conservation areas, listed buildings, parks and gardens of local historic interest, Archaeological Priority Areas and other buildings and spaces of local historic value by:

A) keeping under review heritage designations and designating additional areas, buildings and spaces for protection where justified by evidence;

B) carrying out, reviewing and implementing Conservation Area Appraisals and management plans;

C) promoting heritage-led regeneration and seeking appropriate beneficial uses and improvements to historic buildings, spaces and areas;

D) ensuring improved access to historic assets and improved understanding of the Borough's history.

3.5 Planning Permission

3.6 An application will be made for the redevelopment of the site to provide a new sporting facility including two full-size 3G/4G outdoor sport pitches, a 60m sprint track and four court beach volleyball arena, informal seating, a new pavilion (including changing rooms, multi-purpose room, reception, office and café), flood lighting facilities car parking off Orient Way along with associated public realm improvements.

3.6.1 A Written Scheme of Investigation was prepared by Helen Hawkins of Pre-Construct Archaeology (Hawkins 2017) and implemented in accordance with Historic England Greater London Archaeology guidelines. The WSI was approved by Adam Single, the Archaeology Advisor to the London Borough of Waltham Forest so that the evaluation work could be carried out pre-determination of the planning application.

3.6.2 This document forms the post investigation assessment of archaeological work, as defined above.

3.7 Evaluation Objectives

3.7.1 The Written Scheme of Investigation (Hawkins 2017) highlighted the following research objectives:

- To determine the natural topography of the site, and the height at which it survives.
- To establish the presence or absence of prehistoric activity, its nature and (if possible) date. Does the material found at Oliver Close continue on the site, or is the site in marginal marshland/foreshore?
- To establish the presence or absence of medieval activity.
- To establish the presence or absence of post-medieval activity at the site.
- To establish the nature, date and survival of activity relating to any archaeological periods at the site.
- To establish the extent of all past post-depositional impacts on the archaeological resource.

4 GEOLOGY AND TOPOGRAPHY

- 4.1 The site covered an area of c. 8,250m² located on the lower ground on the edge of a gravel terrace. It was located immediately east of an area of flat floodplain located around the River Lea, which lies at the centre of an area of marshland (the Hackney and Leyton marshes).
- 4.2 The site overlay Lambeth Group - clay, silt and sand. A sedimentary bedrock which formed approximately 56 to 66 million years ago in the Palaeogene Period, the local environment at that time was one of swamps, estuaries and deltas.
- 4.3 The superficial deposits consisted of Taplow Gravel Formation- Sand and Gravel, deposits which formed up to 2 million years ago in the Quaternary Period in a local environment previously dominated by rivers.
- 4.4 The south-west boundary of the site ran parallel to the Dagenham Brook, a small water course that continues broadly north-west to join the River Lee. Aligned along the interface of the Taplow terrace and the alluvial floodplain, the brook has been artificially straightened along most of its course.
- 4.5 A geotechnical site investigation was carried out for the site in September 2016 (Ground Engineering Limited 2016). The investigation found that generally, the made ground was between 0.40m and 1.8m thick. It was underlain by a brown/orange mottled sandy clay which the engineers described as Alluvium, presumably associated with the Dagenham brook. The alluvium was between 0.70m and 1.20m thick and overlay Taplow Gravel.
- 4.6 The evaluation revealed mid-brown sandy gravel deposits in Trenches 7–9 at 3.98m OD, 4.18m OD, and 4.09m OD respectively. This was overlain by a series of orange sandy clay alluvial layers totalling between 1.10m–1.30m in thickness and capped by a topsoil of between 200mm–550mm thick. The specifics of each layer are discussed in its relevant section below and outlined in the context index (Appendix 1).
- 4.7 The site at Ive Farm lies to the east of Leyton Park and the Dagenham Brook, and south of an industrial estate containing several firms including a large joinery (Howdens Joinery). The site is bounded to the east by residential housing at Villiar's Close and Walnut Road, part of an area known as the Oliver Close Estate. Oliver Road Allotments are to the south. The west boundary of the site is overgrown with trees and bushes and the site itself is covered in long grass (Plates 15 & 16).
- 4.8 The site was generally flat, other than a mound built up on the western boundary. The site was located at c.7m OD in the north and 5.5m OD in the south. Excavations at Oliver Close, directly to the east of the site (PCA 2001), found that the top of the Taplow Gravel was at c. 12m OD, indicating a slope down from the higher gravel terrace in the east to the Dagenham Brook and River Lea. The site was therefore located on the floodplain of the two rivers.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1 The full archaeological and historical background is given in the Desk Based Assessment (NPS 2016) and the most pertinent points to the evaluation summarised below (taken from the Written Scheme of Investigation (Hawkins 2017)).
- 5.2 Prehistoric and Roman
- 5.2.1 Radiocarbon dating of deposits from a possible palaeochannel recorded during geotechnical monitoring in 2006 provided a Neolithic date. This possible palaeochannel may have been an earlier tributary of the River Lea, possibly a former course of the Dagenham brook.
- 5.2.2 Close to the south-east corner of the site, archaeological evaluation and excavation has been carried out at the Oliver Close Estate (PCA 2001). Remains of Bronze Age date here included a ring ditch and post-holes. Later remains found by the same works included a Roman findspot of an unclassified date, while a pit of post-medieval date was found during an archaeological watching brief at the same site. However, as discussed above, the archaeology was located on the higher ground, c. 4-5 m above the current site on a gravel terrace promontory.
- 5.2.3 A watching brief during the excavation of engineering test pits at the Cathall Road, Oliver Close and Chingford Hall estates to the south-east of the site recovered further Bronze Age and Iron Age remains. Here, again on the higher ground, there were Bronze Age and Iron Age pits and post-holes. Finds of later date included a Roman pit and a medieval cultivation soil.
- 5.2.4 An archaeological excavation covering 14,430m² in an area bounded by Oliver Road, Osier Way, Tupelo Road and Walnut Road to the south-east of the site, recovered worked flints of Early Mesolithic to Late Bronze Age date along with some fragments of possibly Neolithic pottery. A large ditched enclosure with associated pottery and possible structures represented by pits, post-holes and other cut features at the site appears to represent an enclosed Late Bronze Age settlement.
- 5.2.5 Within the 500m search area Roman activity is located around Church Road. Gravel extraction at High Farm gravel pit near Church Road in the 1920s recovered a Buff coarse-ware pottery flask of Roman date and grave digging in the churchyard of St Mary the Virgin in 1932 revealed two coins of Vespasian [69-79 AD]. What was thought to be a Roman urn found in the 19th-century by an antiquarian was later found to be a fragment of post-medieval drain.
- 5.2.6 A ditch system and enclosure of Roman date have been recorded at 57-59 Church Road with a medieval cultivation soil found during the same works.
- 5.3 Saxon and Medieval
- 5.3.1 The place-name Leyton is first recorded as Lugetune before 1066. This has been interpreted as 'The Tun on the River Lea', with 'Tun' being a settlement. Hackney, which gives its name to the marshes west of the River Lea, actually means 'well-watered meadows' in Anglo-Saxon. The name is recorded as Lei(n) Tuna in Domesday.
- 5.3.2 There is little physical evidence to support the documentary evidence recorded on the GLHER. Centres of Saxon activity appear to lie outside the 500m search area, further south at the Old Ford, which may have been established as a Roman crossing of the River Lea, and at Stratford where pottery of this date is present. It is possible that the earlier form of the River Lea was altered by Alfred in 895 to strand an invading Danish fleet, though this is unsubstantiated. There may also have been Saxon settlement centred on St Mary's church to the east, but as yet there is no supporting evidence.
- 5.3.3 The site is situated in the medieval parish of Low Leyton (Layton) in the manor of Robert son of Corbution.
- 5.3.4 In the medieval period, the Dagenham Brook at the edge of the alluvial floodplain probably defined the limits of fields surrounding the centre of Low Leyton, focused around St Mary's church to the east of the site.

-
- 5.3.5 Leyton Grange, owned by Corbution, the lord of the manor, was probably located east of the church. Recorded by 1470, the grange was rented out in 1535 as the manor house of Leyton, along with various outbuildings including a hayhouse, parlours, stable and buttery. These probably went in 1640 when a new grange was constructed. A new brick and stone house finished in 1720 had a front elevation of two storeys and five bays, with ornate pilasters and statues to decorate the buildings front. It was sold in 1860 and the building demolished. An estate was developed following the demolition
- 5.4 Post-Medieval
- 5.4.1 It is noted in the *History of the County of Essex* that Walthamstow's roads evolved on a gridiron plan, and this is probably also true of the smaller settlement of Leyton. It is due in part to these good communication routes that the town of Leyton continued to grow during the medieval period, so that by 1523–4, 49 persons were assessed for subsidy, and by 1670 there were 83 dwellings in the parish. The settlement would still have had a rural feel at this time, though it quickly started to become a suburb of the city of London.
- 5.4.2 Maps (not reproduced) indicate there were filtering beds just to the north-west of the site, adjacent to the Dagenham Brook. These are similar to filter beds located at Lea Bridge to the west of the site.
- 5.4.3 Following the arrival of the railway at Layton in 1840, Leyton became a dormitory town in which industry played an increasing part. The population had increased from 3,006 in 1801 to 95,131 by 1901.
- 5.4.4 During the First World War about 1,300 houses were damaged by bombing during airship raids in 1915–16.
- 5.4.5 The Bomb Map of London <http://bombsight.org/explore/greater-london/waltham-forest/Leyton> details bombs dropped on London during the Blitz between 7th October 1940 and 6th June 1941. Three high-explosive bombs were dropped at the western boundary of the site, and also just beyond, in the vicinity of Dagenham Brook. Further bombs lay in the vicinity of the railway to the south-west, which was likely to have been the target. There are known to have been 24nos. V1 strikes and 12nos. V2 strikes within the borough of Leyton.
- 5.4.6 The most relevant entry on the GLHER is that of the Ive Farm itself. Documentary sources indicate that the house, two storeyed with attics and built of brick with a slate roof, was probably constructed in the late 17th-century. It survived into the 1940s, before making way for new housing.
- 5.4.7 Part of Hackney Marshes at Daubeney Road to the south-west of the site is thought to have been part of a post-medieval park. The park today covers 140 hectares making it Hackney's largest open space and public park. Hackney Marsh was acquired under the Open Spaces Act 1893 and formally dedicated as public open space in 1894.
- 5.5 Modern
- 5.5.1 Modern maps indicate the sports ground was created sometime between 1916 and 1938.
- 5.5.2 The Victoria County History indicates the popularity of sport locally, although it is not recorded who was responsible for building the sports ground. In 1906–7 there were 20 cricket and football clubs in Leyton and in 1931, 15 cricket clubs, over 20 football clubs and a number of tennis, netball, swimming, athletics, cycling, motoring and gymnastics clubs.
- 5.5.3 The Eton Manor Boys' Club was responsible for the creation of a large sports ground to the south of the site at Eton Manor, and it is perhaps possible they had some involvement with the example at Ive Farm.
- 5.5.4 The 1938 OS map shows it as the Education Committee's Sports ground. This is presumably Leyton Education Committee and suggests use of the sports ground was linked to the education of children and youths from disadvantaged backgrounds, in a similar way to the Eton Manor Boys' Club.
- 5.5.5 An athletics website (Running Track Directory 2016) provides some recent history of the site. Here the running track is described as originally 440y but apparently one of the bends

was subsequently reshaped, leading to a slightly different length than the original. The track itself is in fair condition and made of cinder.

- 5.5.6 The sports ground was used for school sports and also the town's annual inter- school sports competitions. This continued through to the 1980s, when it went out of use.
- 5.5.7 At this time the sports ground was used by Eton Manor Athletics Club in the summer with a clubhouse 380m from the track at Marsh Lane. By this period it seems that the main pavilion and outbuildings had been demolished.
- 5.5.8 The small pavilion at the track (possibly re-built at this time) was used and managed by the Waltham Forest African Caribbean Centre from the 1990s until 1999. Following bankruptcy, the sports ground became derelict and vandalised.
- 5.5.9 In 1999 the Score Project operated by Leyton Orient football club rebuilt the pavilion, providing changing rooms for those using the football ground within Ive Farm and also training at the site, whilst Eton Manor Athletics Club had continued access to the track. After a few years, problems of finance prevented the Score Project and Leyton Orient continuing its investment.
- 5.5.10 Following bankruptcy, the site has been held by the local authority awaiting redevelopment. Ahead of a possible use during the 2012 Olympics, footpaths were improved and a new bridge over Dagenham Brook built.

6 METHODOLOGY

- 6.1 The evaluation was undertaken according to a Written Scheme of Investigation (Hawkins 2017) which was approved in advance by Adam Single, Historic England, Archaeological Adviser to the London Borough of Walthamstow. The aim of the work was to define and characterise any archaeological deposits and features, in order to allow an assessment to be made of the heritage potential of the site, and the impact upon it from the proposed development.
- 6.2 The evaluation followed ClfA guidelines and the methodologies set out in Historic England (GLAAS) Guidance Papers for standards and practices in archaeological fieldwork, assessments and evaluation.
- 6.3 All excavations were supervised by the author and proceeded in 100mm spits using a 360 degree tracked excavator with a toothless bucket. The trenches were backfilled with the upcast material and compressed by the machine until the surfaces were level.
- 6.4 The evaluation saw the excavation of nine trenches (Figure 2). The trenches were laid out with GPS survey equipment and checked with a CAT scanner prior to and during excavation. All trenches were designed to be 10m long x 1.8m wide, however the final extent and/or angle of the trenches was constrained by field drains which ran throughout the site.
- 6.5 Trenches 1–6 were excavated where possible to a depth of 1.2m or the top of the alluvium or gravel, whichever came first. If no natural alluvium was encountered at 1.2m below ground level, a sondage was excavated in order to allow for some reconstruction of the natural topography of the site. Trenches 7–9 had sondages excavated into the gravel to a depth of c. 2.00 m BGL to assess the gravel for the potential for Palaeolithic material to survive.
- 6.6 The final trench dimensions and highest and lowest levels are tabulated below:

Trench Number	Length	Width	Highest level	Lowest level
1	10m	1.8m	6.97m OD	5.39m OD
2	10m	1.8m	6.61m OD	5.02m OD
3	11.5m	1.8m	6.21m OD	4.82m OD
4	11.5m	1.8m-2m	5.70m OD	5.05m OD
5	11.5m	1.8m	5.76m OD	5.19m OD
6	10.5m	1.8m	5.69m OD	5.01m OD
7	9m	1.8m	5.73m OD	3.68m OD
8	10m	1.8m	6.00m OD	3.90m OD
9	10m	1.8m	5.87m OD	3.82m OD

- 6.7 Trenches were CAT scanned prior to and during excavation in order to check for buried services which were not marked on the service plan.
- 6.8 Trenches were scanned for UXO prior to excavation by a trained and certified engineer. The UXO engineer was in attendance during the machining of all trenches.
- 6.9 All open trenches were secured with heras fencing to prevent unauthorised access.
- 6.10 The trenches were cleaned by hand, recorded and photographed. Recording of the deposits was accomplished using the Single Context Recording Method on pro-forma context and planning sheets. Contexts were numbered and are shown in this report within squared brackets. Plans were drawn at a scale of 1:50 and section drawings at a scale of 1:10.

- 6.11 Digital photographs were taken of all trenches and features, a selection of which are presented in Appendix 7.
- 6.12 A Temporary Bench Mark (TBM) was established on the site using GPS survey equipment. The TBM was established on a manhole cover in the southern area of the site and had a value of 5.41m OD. The height of all principal strata and features were calculated relative to Ordnance Datum and indicated on the appropriate plans and sections.
- 6.13 The complete Site Archive, including all material generated electronically during post excavation, and the artefactual material will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the *Standards in the Museum Care of Archaeological Collections* (1992) and *Towards an Accessible Archaeological Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland Scotland and Wales* (SMA 1995) will be adhered to. The depositional requirements of the body to which the Site Archive will be ultimately transferred will be met in full; for this project, the repository which is expected to take custody of the archive is the London Archaeological Archive and Research Centre (LAARC).

7 ARCHAEOLOGICAL PHASE DISCUSSION

- 7.1 The trenches are shown in plan on Figures 3, 4 and 5 and sections are shown in Figure 6.
- 7.2 Four Phases of activity were noted during investigations:
- Phase 1 represents the natural geology encountered during investigations.
- Phase 2 represents the prehistoric use of the site.
- Phase 3 represents the post-medieval use of the site.
- Phase 4 represents the modern made ground layers.
- 7.3 Phase 1
- 7.3.1 The underlying sandy gravel of the Taplow Gravel formation was uncovered in the deeper sondages conducted in Trenches 7–9 (Plates 12–14). In Trench 7 it was recorded as context [41] at 3.98m OD, in Trench 8 as context [46] at 4.18m OD, and in Trench 9 as context [50] at 4.09m OD.
- 7.3.2 In Trench 7, the gravel was overlain by a band of mid-brown sand approximately 250mm thick recorded as context [41]. This sandy layer in Trench 7 and the sandy gravel layer in all other trenches was overlain by a deposit of alluvial layers, all comprised of predominantly sandy clay, but ranging in colouration from a light yellowish-orange near the base through to a mixed and mottled mid brownish-orange nearer to the surface. The light yellowish-orange alluvium was only visible in the deep sondages and recorded as contexts [39] and [45] in Trench 7 and Trench 8 respectively. This layer had a maximum height of 4.63m OD–4.82m OD and was between 400mm–600mm thick.
- 7.3.3 Overlying the lighter alluvial layer, and encountered in all evaluation trenches, was a mid orange sandy clay alluvium. This was recorded as contexts [8], [13], [18], [25], [32], [35], [38], [44], and [49] in Trenches 1 through 9 respectively. This alluvial layer was recorded at heights ranging from a minimum of 4.99m OD to a maximum of 5.65 m OD. The thickness of this alluvial layer was not ascertained in most instances as this natural deposit represented the typical extent of excavation; however, in the Trenches 7–9 sondages it was recorded as ranging between 400mm–900mm thick.
- 7.3.4 Above this mid-orange alluvial layer a darker more mottled brownish-orange sandy clay alluvial layer was also recorded across the entirety of the site. In Trench 1 this upper, more mixed layer was conflated with context [8] in the recording, but in Trenches 2–9 it was recorded as [12], [17], [24], [31], [34], [37], [43], and [48]. This mixed alluvium was typically between 100mm–400mm thick and underlay the made-ground or topsoil deposits at depths of between 5.14m OD–5.84m OD. The ‘natural’ character of this sandy clay layer was queried at first due to the slightly mottled look, the inclusion of occasional charcoal flecking throughout, and the singular find of a worked flint blade (SF1) during the cleaning of this layer in Trench 3. However, in consideration of the fact that the features found were cut into this layer, and because the composition of it was both a) homogenous across the extent of the site and b) very similar to the lower, cleaner, alluvial layer, this is not believed to be a made-ground layer. It is instead believed to be the uppermost ‘natural’ layer and comprises the archaeological horizon at the site.
- 7.4 Phase 2
- 7.4.1 Three small pits or potentially shallow postholes were recorded in Trenches 3 and 4 which may represent the prehistoric activity of the site.
- 7.4.2 Pit [20] was located in the eastern end of Trench 3 (Plate 5). Although it ran into the northern baulk of the evaluation trench, the feature appeared roughly circular in shape and measured 400mm x 500mm. The excavated feature was 130mm in depth (5.65–5.52m OD), though it appeared in section that this feature was truncated by the mechanical excavation and was actually cut from the surface of the mottled alluvial layer [17], allowing for a total depth of approximately 320mm. Pit [20] was filled by [19], which is recorded as a soft, mid-grey sandy silty clay. A probable worked flint was found here which was suggestive of a prehistoric date.
- 7.4.3 Pit [22] was also located in the eastern end of Trench 3, just south-west of pit [20] (Plate 5). It was also roughly circular with a 500mm diameter. Although the machine excavation was

raised to a higher level in this location, it is possible that, like the previous feature, this may have been truncated resulting in a shallow depth of just 100mm (5.78–5.68m OD). However, even accounting for the overcut, this feature was likely not to have been more than 160mm in depth if cut from the surface of layer [17]. Feature [22] was filled by [21], which comprised a mid-light grey sandy silty clay with moderate charcoal flecking. There was no direct dating evidence for this feature, and its prehistoric phasing was based predominantly on its potential relationship with feature [20].

7.4.4 A similarly sized (550mm x 550mm) sub-rounded feature [29] was also recorded in the eastern end of Trench 4 (Plate 8 & 9). This was originally thought to be a small circular pit or post hole, but excavation determined a slightly more irregular shape that extended into the baulk; meaning that the potential for [29] to represent the terminus of a linear feature cannot therefore be ruled out. The excavation of this feature recorded a depth of 180mm (5.31–5.13m OD), though once again examination of the baulk suggested that this was overcut initially, and that the full depth would be approximately 280mm from the top of layer [24] (5.41m OD). This feature was filled by [28] which comprised a light brownish-grey silty, sandy clay with very occasional struck or worked flint. The flint assessment suggested a Mesolithic or Early Neolithic date for this feature (Appendix 3).

7.4.5 Apart from the struck and worked flint finds recovered within the features, a single flint blade of prehistoric date was found in the cleaning of the mottled alluvial layer [17] in Trench 3. This was also assigned to the Mesolithic or Early Neolithic period (see Appendix 3).

7.5 Phase 3

7.5.1 Very little evidence for post-medieval activity was found during excavation of the evaluation trenches. The only feature that potentially dates to within this period is the small pit [15] located in Trench 2 (Plate 3). Pit [15] measured 350mm x 350mm and was 70mm in depth (5.60–5.53m OD). This feature was filled by [14], which comprised a dark grey-black sandy silt with occasional charcoal flecking and a single pot sherd and clay pipe stem fragment.

7.5.2 Occasional displaced ceramics that were late post-medieval in date were also noted amongst the modern made-ground dump layers in Trench 1.

7.6 Phase 4

7.6.1 A probably modern, though potentially earlier, linear feature was recorded in Trench 4 as context [27] (Plate 7). This linear feature followed the course of the modern field drain system and was located adjacent to a visible gravel filled drainage cut. Many similar linear features were identified in the context of the modern drainage system, but this was unique in regards to its total depth. Excavation and recording was conducted as there was a chance that this linear feature could represent an earlier drainage system. This feature was oriented north-south and extended across the whole of the evaluation trench to a length of 2.52m x 0.20m with an excavated depth of 110mm (5.16–5.05m OD; though this was visible from higher up and does not represent the whole depth of the trench). The linear feature was filled by [26], which comprised a dark greyish-black clayey silt with no artefacts recovered.

7.6.2 Trenches 1 and 2 were the only evaluation trenches that recorded modern dump layers overlying the mixed alluvial deposit. In Trench 2 this comprised layers [10] and [11]. Layer [10] consisted of a dark greyish brown silt mixed with a light yellowish brown clay with inclusions of lime, scrap metal, and slag. Layer [10] was recorded at 6.18m OD across the whole of the trench and was 440mm thick, overlying Layer [11]. Layer [11] comprised a very dark brown silty sand with very frequent clinker and charcoal. This was recorded across the whole trench as being 100mm thick at approximately 5.74m OD.

7.6.3 Trench 1 recorded over 1.00m of modern dump layers varying in thickness from 20mm to 200mm. Each of these layers appeared to slope downwards from west to east. The finds from this deposit as a whole included modern debris such as a plastic comb and complete screw-top glass bottles. A selection of potentially early 20th century 'Bovril' bottles were also found; a selection of the more diagnostic finds were collected. This made ground comprised:

- [2], a mid yellowish brown silty clay with coal and slag inclusions
- [3], a friable dark reddish brown silty clay with charcoal flecking
- [4], a fine grained light yellowish-brown clay with no visible inclusions
- [5], a dark reddish brown silt with inclusions of pottery, slag, metal, and glass
- [6], a mid brown clay silt with no visible inclusions
- [7], a fine grained light grey fly ash deposit that peels off directly onto the surface of the underlying alluvial layer

7.6.4 The nature of the debris and the presence of significant amounts of slag and burnt materials, including fly ash, suggests a purposeful dumping episode, primarily in the area of Trench 1, but extending to the area of Trench 2. Trenches 1 and 2 were located on a slope going up towards the raised running track and therefore the material had probably been dumped to enable the construction of the running track.

7.6.5 A dark greyish-brown sandy, clayey silt topsoil with grass surface was recorded as the uppermost layer across the entirety of the site. This was recorded as layers [1], [9], [16], [23], [30], [33], [36], [42], and [47] in Trenches 1 to 9 respectively. The surface of the topsoil was recorded at heights between 5.69m OD and 6.97m OD and ranged from 250mm–550mm in thickness.

8 RESEARCH OBJECTIVES

- 8.1 To determine the natural topography and the height to which it survives.
 - 8.1.1 The deep sondages revealed the natural Taplow Gravels to be present at 3.98m OD, 4.18m OD, and 4.09m OD in Trenches 7–9 respectively. There was no evidence for any Palaeolithic material within the Taplow Gravel upcast.
 - 8.1.2 Alluvial deposits overlay the natural Taplow Gravels across the site, with a combined thickness of between 1.10m–1.30m where the full extent was exposed. Although they varied in their colouration enough to delimit three separate alluvial layers, they were ultimately very similar. The uppermost alluvial layer was located in some trenches only 250mm below the ground level. This interaction with the upper layers gave it a more 'mixed' appearance with integrated small inclusions such as charcoal flecking and the occasional artefactual find. The layer was, however, still believed to be a 'natural' deposit due to its homogeneity across the site and it appeared to represent the archaeological horizon. The top of this layer was recorded between 5.14m OD and 5.84m OD, and, though no strong trend across the whole of the site is noticeable, Trenches 1–3 in the northern area of the site were distinctly higher, with the lowest level being from Trench 6 which was located relatively central to the site. This rise to the north fitted with the topography of the site sloping up slightly to the north and Oliver Close.
- 8.2 To establish the presence or absence of prehistoric activity, its nature and (if possible) date. Does the material found at Oliver Close continue on the site, or is the site in marginal marshland/foreshore?
 - 8.2.1 Three similarly sized, round shallow pits were recorded in Trenches 3 and 4, with small amounts of worked flint and the character of the fill suggestive of a prehistoric date. The flints were dated to the Mesolithic to Early Neolithic period. No prehistoric pottery was found to refine the dating sequence.
 - 8.2.2 No worked or struck flints were recovered from the upcast of the Taplow Gravel.
 - 8.2.3 Despite the presence of a small number of potential prehistoric features, the level of activity and material found at Oliver Close does not appear to continue on to the site, suggesting instead that this area was marginal marshland/foreshore.
- 8.3 To establish the presence or absence of medieval activity.
 - 8.3.1 No evidence for medieval activity was recorded on the site.
- 8.4 To establish the presence or absence of post-medieval activity at the site.
 - 8.4.1 Evidence for post-medieval activity limited to a small pit in Trench 2 within which a small piece of pottery and a clay pipe stem fragment were found, and generalised, *ex situ* finds of post-medieval material within the modern dump layers in Trenches 1 and 2. Post-medieval activity at the site appeared therefore to be limited and/or the evidence for this activity was impacted upon during modern usage of the site.
- 8.5 To establish the nature, date and survival of activity relating to any archaeological periods at the site.
 - 8.5.1 There is limited evidence for prehistoric and post-medieval activity on the site. In the case of the prehistoric, the nature of the archaeological remains suggests only a small amount of activity in the area, potentially related to the foreshore/marshland environment. The nature of the post-medieval archaeological remains is significantly limited and is therefore suggestive of only light activity in the area and a low level of survival.
- 8.6 To establish the extent of all past post-depositional impacts on the archaeological resource.
 - 8.6.1 Trenches 1 and 2 show a high level of dumping and/or ground modification had taken place at some point, potentially during the early 20th century when the sports ground was created. This may have had an impact on the underlying archaeological resource, but in actuality appears predominantly to have raised the ground level in these areas rather than truncating into the archaeological horizon.
 - 8.6.2 The presence of modern ceramic field drains was common throughout the trenches, with

these features sitting just above the alluvium and not typically cutting into it.

- 8.6.3 No modern truncations or terracing have therefore been found to impact upon the archaeological resource. However, due to the significant lack of evidence for post-medieval activity on the site, it may be that impacts at this level were widespread. If, for example, impacts were in the form of ground levelling activity across the whole of the site, this may not have been visible during the course of the evaluation.

9 BIBLIOGRAPHY

9.1 Printed Sources

1st Line Defence 2016, *Detailed Unexploded Ordnance (UXO) Risk Assessment Ive Farm Sports Ground*. Unpublished client report

Ground Engineering Limited 2016, *Site Investigation Report at Ive Farm Sports Ground, Ive Farm Lane, Leyton, London E10*. Unpublished client report

Hawkins, H. 2017, *Ive Farm, Ive Farm Lane, Leyton, London Borough of Waltham Forest, EH10 5HL: Written Scheme of Investigation for an Archaeological Evaluation*. Unpublished Pre-Construct Archaeology report.

NPS Archaeology 2016, *Ive Farm, Leyton, Walthamstow, London E10 5HL: Archaeological Desk Based Assessment*. Unpublished client report

Taylor, J with Brown, G 2009, *Fieldwork Induction Manual: Operations Manual 1*. Pre-Construct Archaeology Limited

GLAAS 2015. *Guidelines for Archaeological Projects in greater London*. April 2015 revision. Historic England: Greater London Archaeological Advisory Service Technical Guidance Paper.

10 ACKNOWLEDGEMENTS

- 10.1 Pre-Construct Archaeology would like to thank Edwin O'Connell of NPS London for commissioning and funding this investigation.
- 10.2 Pre-Construct Archaeology would like to thank Adam Single of Historic England for monitoring the work on behalf of the London Borough of Waltham Forest.
- 10.3 The author would like to thank James Webb and Leslie Wilkinson for their work on site. Thanks are also given to Lee and John for their UXO expertise, Richard Archer for the surveying, Hayley Baxter for the illustrations, Barry Bishop for the lithic identification, and Chris Jarrett for his identification of the pottery.
- 10.4 Special thanks are given to Helen Hawkins for her project management and the editing of this report.

APPENDIX 1: CONTEXT INDEX

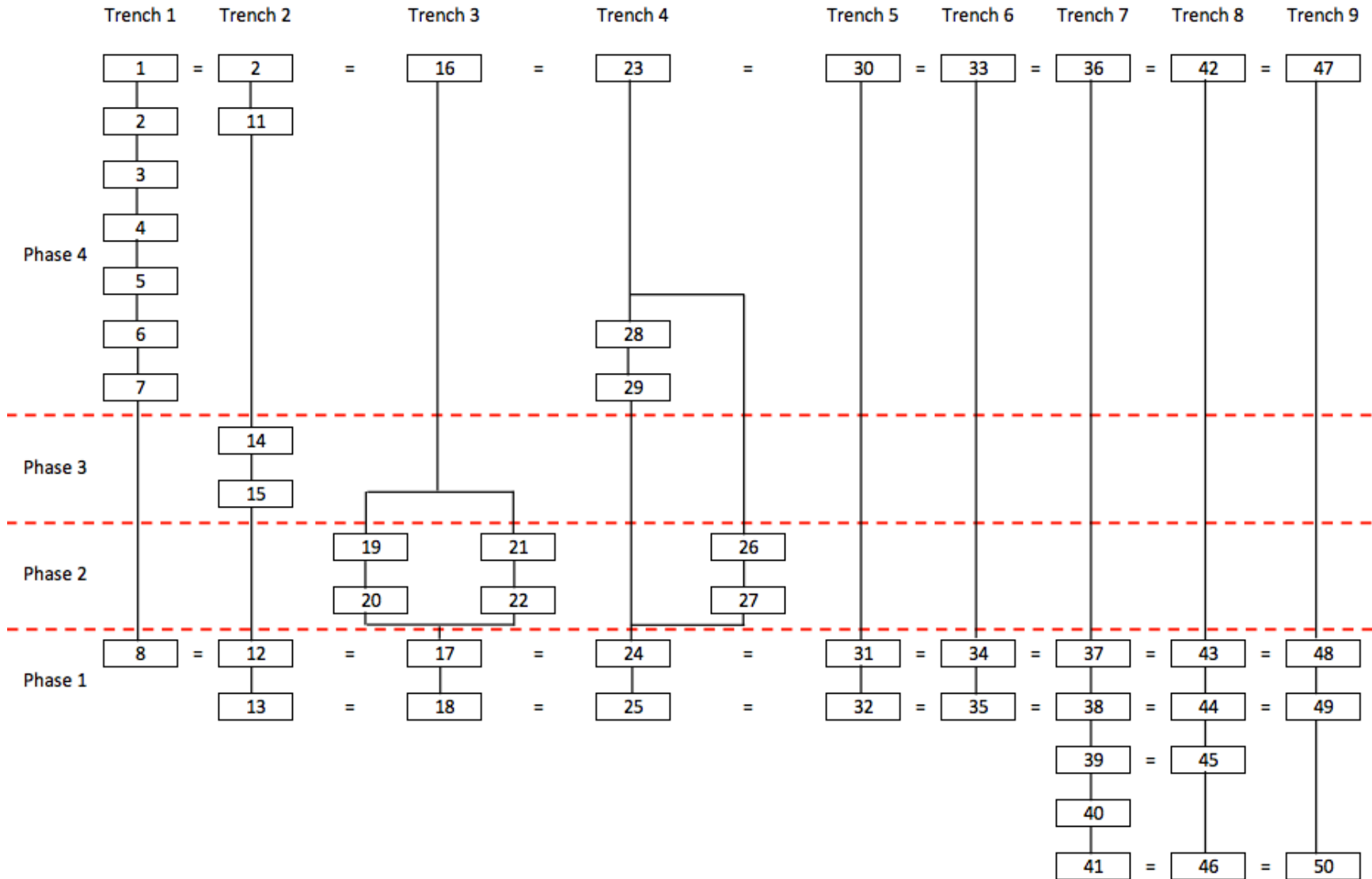
Site Code	Context No	Location	Plan	Section	Type	Description	Date	Phase	OD heights	
									Max	Min
IVE17	1	Tr 1	Tr 1	1	Layer	Topsoil	Modern	4	6.97	6.90
IVE17	2	Tr 1	Tr 1	1	Layer	Made Ground / Dumping	Modern	4	6.75	6.61
IVE17	3	Tr 1	Tr 1	1	Layer	Made Ground / Dumping	Modern	4	6.57	6.53
IVE17	4	Tr 1	Tr 1	1	Layer	Made Ground / Dumping	Modern	4	6.55	6.41
IVE17	5	Tr 1	Tr 1	1	Layer	Made Ground / Dumping	Modern	4	6.36	6.21
IVE17	6	Tr 1	Tr 1	1	Layer	Made Ground / Dumping	Modern	4	6.23	6.07
IVE17	7	Tr 1	Tr 1	1	Layer	Made Ground / Dumping / Fly Ash	Modern	4	6.15	5.99
IVE17	8	Tr 1	Tr 1	1	Layer	Alluvium	Natural	1	5.68	5.65
IVE17	9	Tr 2	Tr 2	2	Layer	Topsoil	Modern	4	6.61	6.52
IVE17	10	Tr 2	Tr 2	2	Layer	Made Ground	Modern	4	6.18	6.18
IVE17	11	Tr 2	Tr 2	2	Layer	Made Ground / Dumping	Modern	4	5.74	5.74
IVE17	12	Tr 2	Tr 2	2	Layer	Mixed Alluvium	Natural	1	5.64	5.64
IVE17	13	Tr 2	Tr 2	2	Layer	Natural Alluvium	Natural	1	5.50	5.46
IVE17	14	Tr 2	Tr 2	n/a	Fill	Fill of [15]	Post-Med	3	5.60	5.60
IVE17	15	Tr 2	Tr 2	n/a	Cut	Cut of a small pit	Post-Med	3	5.60	5.53

Site Code	Context No.	Location	Plan	Section	Type	Description	Date	Phase	OD heights	
IVE17	16	Tr 3	Tr 3	n/a	Layer	Topsoil	Modern	4	6.21	6.09
IVE17	17	Tr 3	Tr 3	n/a	Layer	Mixed Alluvium	Natural	1	5.84	5.78
IVE17	18	Tr 3	Tr 3	n/a	Layer	Natural Alluvium	Natural	1	5.65	5.65
IVE17	19	Tr 3	Tr 3	n/a	Fill	Fill of [20]	Prehistoric	2	5.65	5.65
IVE17	20	Tr 3	Tr 3	n/a	Cut	Cut of a small pit / posthole	Prehistoric	2	5.65	5.52
IVE17	21	Tr 3	Tr 3	n/a	Fill	Fill of [22]	Prehistoric	2	5.78	5.78
IVE17	22	Tr 3	Tr 3	n/a	Cut	Cut of a small pit / posthole	Prehistoric	2	5.78	5.68
IVE17	23	Tr 4	Tr 4	n/a	Layer	Topsoil	Modern	4	5.70	5.64
IVE17	24	Tr 4	Tr 4	n/a	Layer	Mixed Alluvium	Natural	1	5.42	5.40
IVE17	25	Tr 4	Tr 4	n/a	Layer	Natural Alluvium	Natural	1	5.25	5.24
IVE17	26	Tr 4	Tr 4	n/a	Fill	Fill of [27]	Modern?	4	5.16	5.16
IVE17	27	Tr 4	Tr 4	n/a	Cut	Cut of a linear feature	Modern?	4	5.16	5.05
IVE17	28	Tr 4	Tr 4	n/a	Fill	Fill of [29]	Prehistoric	2	5.31	5.31
IVE17	29	Tr 4	Tr 4	n/a	Cut	Cut of a small pit / posthole	Prehistoric	2	5.31	5.13
IVE17	30	Tr 5	Tr 5	n/a	Layer	Topsoil	Modern	4	5.76	5.69
IVE17	31	Tr 5	Tr 5	n/a	Layer	Mixed Alluvium	Natural	1	5.35	5.33
IVE17	32	Tr 5	Tr 5	n/a	Layer	Natural Alluvium	Natural	1	5.24	5.24

Site Code	Context No.	Location	Plan	Section	Type	Description	Date	Phase	OD heights	
IVE17	33	Tr 6	Tr 6	n/a	Layer	Topsoil	Modern	4	5.69	5.55
IVE17	34	Tr 6	Tr 6	n/a	Layer	Mixed Alluvium	Natural	1	5.14	5.14
IVE17	35	Tr 6	Tr 6	n/a	Layer	Natural Alluvium	Natural	1	5.01	5.01
IVE17	36	Tr 7	Tr 7	3	Layer	Topsoil	Modern	4	5.73	5.73
IVE17	37	Tr 7	Tr 7	3	Layer	Mixed Alluvium	Natural	1	5.33	5.33
IVE17	38	Tr 7	Tr 7	3	Layer	Natural Mid Orange Alluvium	Natural	1	5.03	5.03
IVE17	39	Tr 7	Tr 7	3	Layer	Natural Light Orange Alluvium	Natural	1	4.63	4.63
IVE17	40	Tr 7	Tr 7	3	Layer	Natural Sand	Natural	1	4.21	4.21
IVE17	41	Tr 7	Tr 7	3	Layer	Natural Sandy Gravel	Natural	1	3.98	3.97
IVE17	42	Tr 8	Tr 8	4	Layer	Topsoil	Modern	4	6.00	5.90
IVE17	43	Tr 8	Tr 8	4	Layer	Mixed Alluvium	Natural	1	5.48	5.48
IVE17	44	Tr 8	Tr 8	4	Layer	Natural Mid Orange Alluvium	Natural	1	5.23	5.23
IVE17	45	Tr 8	Tr 8	4	Layer	Natural Light Orange Alluvium	Natural	1	4.82	4.82
IVE17	46	Tr 8	Tr 8	4	Layer	Natural Sandy Gravel	Natural	1	4.18	4.18
IVE17	47	Tr 9	Tr 9	5	Layer	Topsoil	Modern	4	5.87	5.74
IVE17	48	Tr 9	Tr 9	5	Layer	Mixed Alluvium	Natural	1	5.37	5.24
IVE17	49	Tr 9	Tr 9	5	Layer	Natural Mid Orange Alluvium	Natural	1	4.99	4.86

Site Code	Context No	Location	Plan	Section	Type	Description	Date	Phase	OD heights	
IVE17	50	Tr 9	Tr 9	5	Layer	Natural Sandy Gravel	Natural	1	4.09	3.86

APPENDIX 2: SITE MATRIX



APPENDIX 3: LITHIC ASSESSMENT

An Archaeological Evaluation at Ive Farm Lane, Leyton, London Borough of Waltham Forest.

Site Code: IVE 17

Lithic Assessment

Barry Bishop March 2017

Introduction

The archaeological investigations at the site resulted in the recovery of four struck flints and a small quantity of unworked burnt stone. This report describes the material, assesses its significance in terms of its potential to contribute to the stated research aims and objectives and recommends any further work needed for it to achieve its full research potential.

Description of the Assemblage

The made ground at the site (context [2]) produced a decortication flake that has c. 90% of its dorsal surface covered with a rough but weathered cortex. It is in a good condition and, although clearly residual, has not experienced any extensive post-depositional movement.

The alluvium / sub-soil produced two struck flints. Context [17] <1> furnished a well struck prismatic blade with a small patch of cortex remaining on its distal end. Although it is in a slightly chipped condition, it has damage along both lateral margins that is suggestive of it having been utilized as a cutting tool. The other piece, which came from context [34], also comprises a blade although its dorsal surface consists almost entirely of thermal (frost) fractured scars and it is thick, relatively short and not so well struck.

Feature [29] (fill [28]) contained a well-maintained and extensively reduced lenticular core that has produced blades on both faces; on one side from a single platform and centripetally from around the edge of the other. It retains a small patch of weathered cortex and is relatively small, weighing 28g. This feature also produced two pieces of unworked but heavily burnt flint weighing 11g.

Discussion

The struck pieces have been made from good knapping-quality dark grey to brown flint that varies from being translucent to semi-opaque and has frequent mottling. Three of the pieces have remnants of a rough but weathered cortex and one has thermal scars forming its dorsal surface. The variations in the flints' colour and the weathered cortex suggest that the raw materials were obtained from derived deposits, most probably the local gravel terrace that outcrops in the vicinity.

At least two pieces, the blade core from feature [29] and the prismatic blade from layer [17], can be confidently dated to the Mesolithic or Early Neolithic periods and whilst such a date could easily apply to the other two, they are less chronologically diagnostic and could potentially belong to later periods. Feature [29] also produced unworked burnt flint which, although inherently undateable, is perhaps more commonly encountered in prehistoric contexts; large quantities were, for example, found at the predominantly Late Bronze Age site at Oliver Close (Bishop and Boyer 2014).

Significance

The struck flint assemblage indicates activity at the site commencing by at least the Early Neolithic and potentially during later parts of the prehistoric period. However, the assemblage is small and, by itself, its interpretational value is limited and little more can be added concerning the chronology or the nature of the occupations represented. It does, however, fit within a wider picture of flint use and prehistoric activity in the area which demonstrates extensive activity by transient communities during the Mesolithic and Neolithic as well as by more sedentary communities during the later prehistoric period, these occurring both along the terrace edges and within the Lea Valley floodplain (e.g. Bradley 2005; Stafford 2012; Boyer *et al.* 2013; Bishop and Boyer 2014).

Recommendations

The assemblage by itself is too small to warrant further technological, functional or metrical analyses and no further analytical work is recommended. However, it demonstrates prehistoric activity at the site which further archaeological investigation could potentially clarify. Should further work be considered, the assemblage reported here should be re-documented in conjunction with any additional material found following the completion of the archaeological programmes. From the point of view of the lithic material, any further fieldwork should focus on obtaining as large and closely contextually defined lithic assemblage as possible, in order to attempt to understand the nature, extent and chronology of any prehistoric lithic-based activities.

Bibliography

Bishop, B. and Boyer, P. 2014 A Late Bronze Age Enclosed Settlement at the Oliver Close Estate, Leyton, London Borough of Waltham Forest. *Transactions of the London and Middlesex Archaeological Society* 65, 51-102.

Boyer, P., Nicholls, M. and Bishop, B. 2013 Bronze Age environments and burial in the Lower Lea Valley: archaeological investigations in the Stratford City Development. *London Archaeologist* 13(10), 276-280.

Bradley, P. 2005 Worked Flint. In: Hiller, J. and Wilkinson, D.R.P., *Archaeology of the Jubilee Line Extension: prehistoric and Roman activity at Stratford Market Depot West Ham 1991-1993*, 36-38. Oxford Archaeology/Museum of London Archaeology Service.

Stafford, E. 2012 *Landscape and Prehistory of the East London Wetlands: investigations along the A13 DBFO roadscheme, Tower Hamlets, Newham and Barking and Dagenham, 2000-2003*. Oxford Archaeology Monograph 17.

APPENDIX 4: POTTERY ASESMENT

Pottery Assessment (IVE17)

By Chris Jarrett

INTRODUCTION

A small sized assemblage of pottery was recovered from the site (less than one box). The pottery dates from the post-medieval period and more precisely the late 19th-early 20th century. The pottery demonstrates no evidence for abrasion and indicates that the material was fairly rapidly deposited after breakage and probably under secondary circumstances. The assemblage comprises mostly sherd material, except that five vessels have complete profiles and only one vessel is intact. The pottery was quantified by sherd count (SC) and estimated number of vessels (ENVs), besides weight. The assemblage was recovered from one context and the size of that group is small (fewer than 30 sherds).

In total the assemblage consists of nine sherds, 9 ENV, 407g (of which none was unstratified). The assemblage was examined macroscopically and microscopically using a binocular microscope (x20), and entered into a database format, by fabric, form and decoration. The classification of the pottery types follows the Museum of London Archaeology (Museum of London Archaeology 2014) typology (form and fabric series). The pottery is discussed as an index.

POTTERY INDEX

Context [2], spot date: late 19th-20th century

Bone china with under-glaze blue transfer-printed decoration (BONE), 1794–1900, 1 sherd, 1 ENV, 17g, form: saucer. Complete profile, scalloped rim and foot ring.

Bone china with under-glaze three-colour transfer-printed decoration (BONE TR5), 1845–1900, 1 sherd, 1 ENV, 53g, form: saucer. Complete profile, fluted curving wall, footring. Internally the rim has gilded feathering, the wall has a pink and green rose lithograph transfer and the centre has a gilded circle.

Coloured-glazed refined whiteware (COLGE), 1800-1900, 1 sherd, 1 ENV, 27g, form: lid. Complete profile, the base of the domes is scalloped, a rounded edge and 'footring'. Yellow-glazed with a brown glaze restricted to the area around the missing knob.

Continental porcelain (CONP), 1710-1900, 1 sherd, 1 ENV, 4g, form: vase. Body sherd and moulded lower vertical loop rod handle terminal. External dark green glaze, with gilding and a possible 'white' panel.

English stoneware with Bristol glaze (ENGS BRST), 1830–1900, 1 sherd, 1 ENV, 149g, form: jar, squat cylindrical. Intact, simple rim with a groove on the outside edge. The wall has narrow panels formed of vertical incised lines, and the base underside is concave with a possible moulded mark. Grey Bristol glaze. A jam or preserve jar. Rim diameter: 56mm, height: 61mm.

London-area post-medieval redware (PMR), 1580–1900, 1 sherd, 1 ENV, 20g, form: flowerpot. Wall sherd with a possible horizontal band of moulded largely illegible lettering '.....HKI Y...'. The sherd is encrusted in a deposit.

Refined white earthenware (REFW), 1805-1900, 1 ENV, 96g, form: condiment dish. Complete profile, with chips to rim otherwise the vessel is nearly complete. A saucer-shaped vessel with a solid short pedestal base and a flat underside. The top of the vessel is divided into quarters by bevelled ridges.

Refined white earthenware (REFW), 1805-1900, 1 12g, form: Dish, oval. Flat base with a coarse glaze.

Refined whiteware with under-glaze colour transfer-printed decoration (TPW4), 1825-1900, 1 sherd, 1 ENV, 29g, form: plate, dinner. Complete profile, footring. The rim has a late 19th-20th century dated geometrical border of dark greenish-blue scrolls with garlands

Significance of the collection, potential of the assemblage and Recommendations for further work

The pottery has little significance at a local level and consists of pottery types frequently found in the Greater London area. However, the refined whiteware, saucer-shaped condiment dish is an unusual form. The pottery has the potential to date the features in which it was found in. There are no recommendations for further work on the assemblage and it can be discarded, as the material has been fully recorded, although a photographic record of the pottery group shot may be of use for the archive.

References

Museum of London Archaeology 2014. Medieval and post-medieval pottery codes. <http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes>. Accessed January 2017.

APPENDIX 5: GLASS ASSESSMENT

Glass and hardened rubber stopper assessment report (IVE17)

Chris Jarrett

Introduction

The glass is recorded as a small sized assemblage dating to the end of the 19th and early-mid 20th century. All of the five fragments of glass (representing five vessels and weighing 522g, none of which is unstratified), are in a very good condition and consist entirely of intact containers. These vessels were discarded soon after the contents had been finished with and probably deposited under secondary circumstances. The glass occurs in a single context as a small (under 30 fragments) sized group. Additionally a hardened rubber stopper, that would have been a closure for a glass lemonade bottle, is recorded. The material is discussed as an index.

Spot dating catalogue

No.: no of fragments; HLLA: high-lime low-alkali glass

Context [2], spot date: early–mid 20th century

Glass

All of the glass vessels were mould made.

Bottle, flat octagonal section: blue-green hlla glass. 1 fragment, 1 ENV, 170g. Intact, extract- type rim finish, short cylindrical neck, rounded shoulder and an octagonal section body with narrow panels found at the corner. Three sides of the body have recessed panels with bevelled edges, while the back is flat and plain. The base has an octagonal recess on the underside. Rim diameter: 21mm, body: 46mm x 31mm, height: 140mm

Bovril bottle: brown hlla glass. 1 fragment, 1 ENV, 99g. Intact, extract- type rim finish, deep neck, oval profile body in both profile and section. The base has a footring and concave underside. Embossed on the rounded sides of the body is '2 oz/bovril/limited/211' and on the underside of the base is embossed 'ugb': the glass manufacturer's initials. Rim diameter: 35mm, height: 80mm. The Bovril brand was launched in 1889

Bovril bottle (small): brown HLLA glass. 1 fragment, 1 ENV, 38g. The shape of the vessel is as above and has embossed only on the rounded sides of the body 'bovril/limited' and on the underside of the base are illegible numbers. Rim diameter: 20 mm, height: 52mm

Jar, squat cylindrical: clear soda glass. 1 fragment, 1 ENV, 102g. Intact: the rim has an external thread finish attached to a very narrow shoulder, a cylindrical wall and concave base. Rim diameter: 36mm, base diameter: 43mm, height: 72mm

Oxo bottle: dark amber soda glass. 1 fragment, 1 ENV, 113g. Intact: extract- type rim finish, deep neck, rounded shoulders and flaring walls in profile, oval in plan body section and the base has an oval recess. Embossed on the rounded sides of the body is 'oxo/2oz' and on the underside of the base is an '8'. Rim diameter: 35 mm, height: 82mm. The Oxo brand was launched in 1899

Hardened rubber stopper

The moulded hardened rubber stopper is grey in colour and at the top of the squat 'chisel' upper part is the company name 'WHITE LD', while a recess on each side has either 'W' or '3' and all of the lettering is incuse. The lower half of the stopper has a screw thread. The item weighs 16g, has a maximum diameter of 22mm and a height of 39mm. The stopper would have fitted an R. White's lemonade bottle. The company was established in 1845 and the grey colour of the rubber stopper indicates that it is more likely to be mid 20th century in date.

Significance, potential and recommendations for further work

The glass has little significance as the material occurs in a small group and it is recorded as types and forms that are frequently encountered in the London area. The occurrence of three bottles for beef extract products is of some interest for demonstrating that the residents of the study area enjoyed consuming this type of product. The only potential of the glass and rubber stopper is to date the context it was recovered from. There are no recommendations for further work on the assemblage and as the material can be discarded because it has been fully recorded. A photographic record of the bottles and the stopper would be a useful addition to the archive.

APPENDIX 6: PLATES



Plate 1: Trench 1, facing east



Plate 2: Trench 1, facing south / north facing section



Plate 3: Trench 2, facing east, showing feature [15]



Plate 4: Trench 3, facing east



Plate 5: Trench 3, facing north, features [20] and [22]



Plate 6: Trench 3, facing west / east facing section of sondage



Plate 7: Trench 4, facing east, showing linear feature [27]

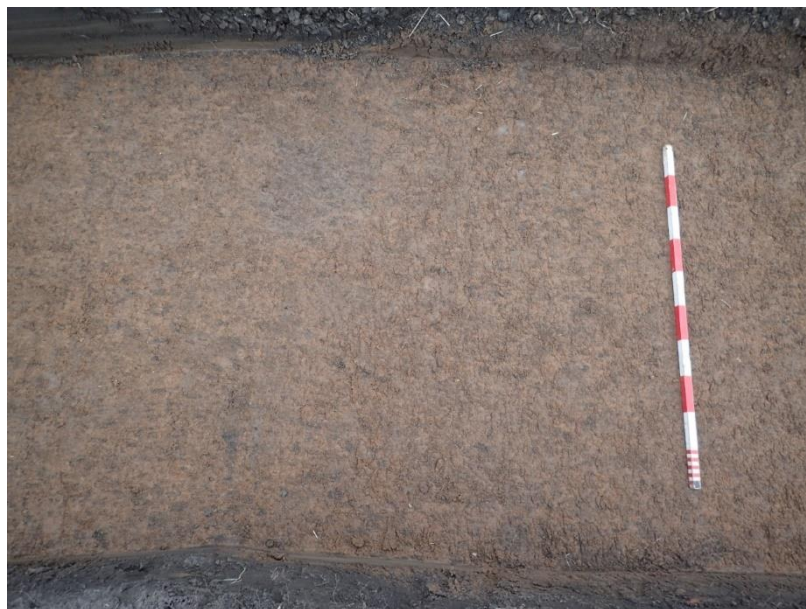


Plate 8: Trench 4, facing north, feature [29]



Plate 9: Trench 4, facing north, feature [29] post-excitation



Plate 10: Trench 5, facing south-east



Plate 11: Trench 6, facing south



Plate 12: Trench 7, facing east / west facing section



Plate 13: Trench 8, facing south



Plate 14: Trench 9, south facing / north facing section



Plate 15: General view of Ive Farm, facing south



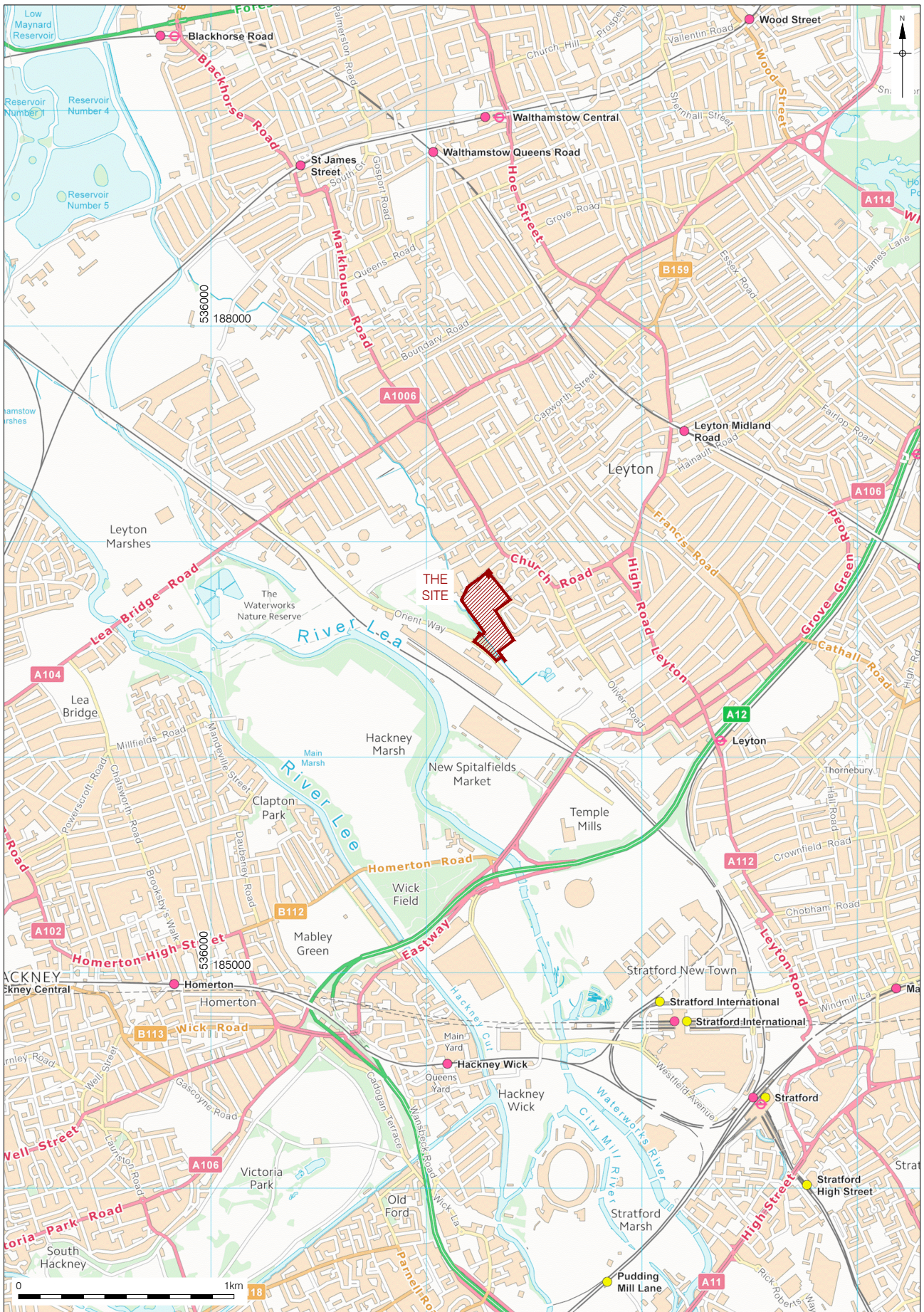
Plate 16: General view of Ive Farm, facing north

APPENDIX 7: OASIS FORM

OASIS ID: preconst1-278018	
Project details	
Project name	Ive Farm
Short description of the project	An archaeological evaluation was conducted at Ive Farm, Ive Farm Lane, Leyton, London Borough of Walthamstow, E10 5HL. A limited amount of evidence for prehistoric activity was recorded, suggesting only light activity in this area during the prehistoric period. One feature of potential post-medieval date was also recorded.
Project dates	Start: 20-02-2017 End: 24-02-2017
Previous/future work	No / Not known
Any associated project reference codes	IVE17 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Other 14 - Recreational usage
Monument type	PIT Uncertain
Significant Finds	LITHIC IMPLEMENT Uncertain
Methods & techniques	"Sample Trenches"
Development type	Amenity area (e.g. public open space)
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application
Project location	
Country	England
Site location	GREATER LONDON WALTHAM FOREST LEYTON Ive Farm

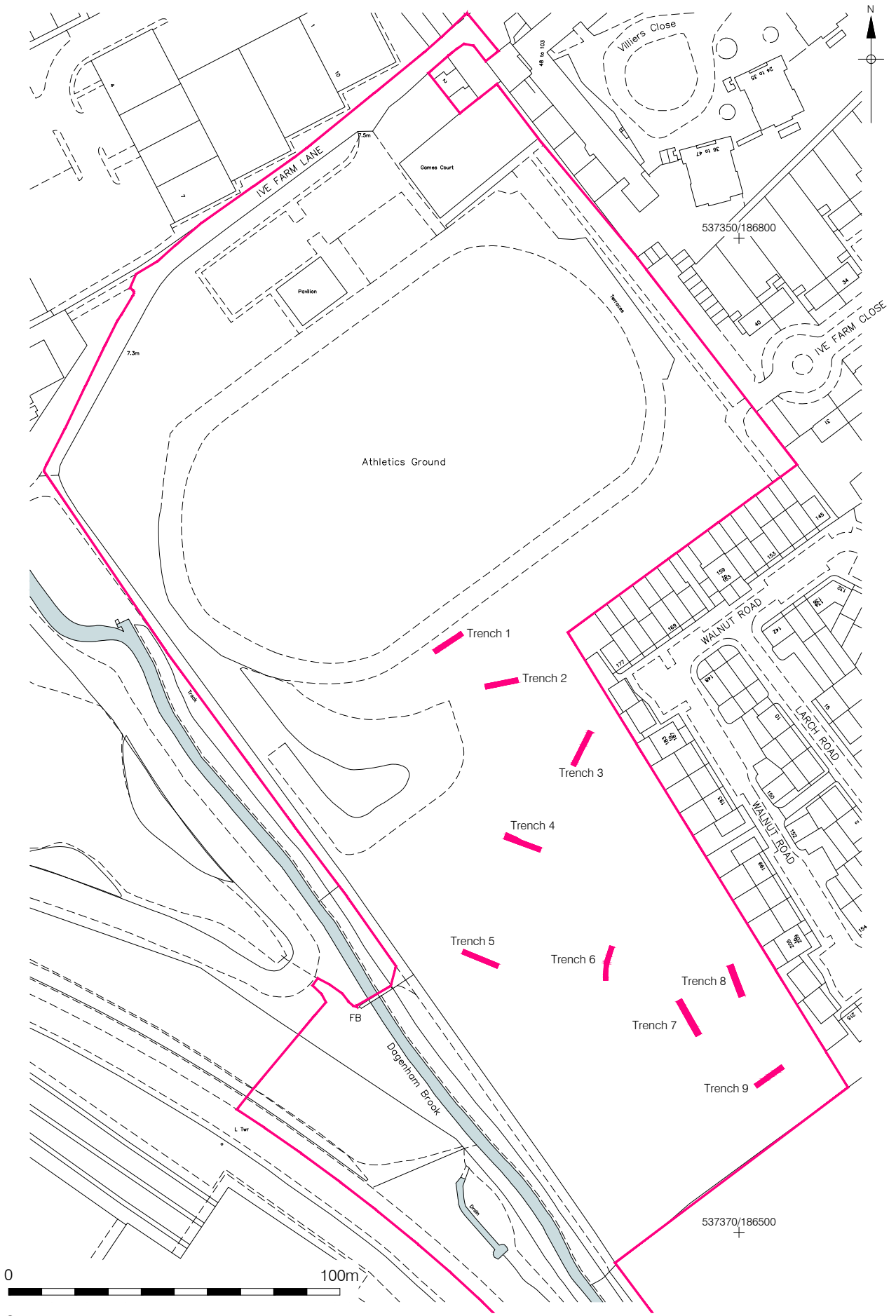
Postcode	E10 5HL
Study area	8250 Square metres
Site coordinates	TQ 537270 186690 50.94635886016 0.188591040855 50 56 46 N 000 11 18 E Point
Height OD / Depth	Min: 5.14m Max: 5.84m
Project creators	
Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Adam Single
Project design originator	Helen Hawkins
Project director/manager	Helen Hawkins
Project supervisor	Christina Reade
Type of sponsor/funding body	Developer
Name of sponsor/funding body	NPS london
Project archives	
Physical Archive recipient	LAARC
Physical Archive ID	IVE17
Physical Contents	"Ceramics","Glass","Worked stone/lithics"
Digital Archive recipient	LAARC
Digital Archive ID	IVE17
Digital Contents	"Ceramics","Glass","Worked stone/lithics"
Digital Media available	"GIS","Images raster / digital photography","Images vector","Spreadsheets","Text"
Paper Archive recipient	LAARC
Paper Archive ID	IVE17
Paper Contents	"none"
Paper Media available	"Context sheet","Matrices","Plan","Section","Unpublished Text"

Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	IVE FARM, IVE FARM LANE, LEYTON, LONDON BOROUGH OF WALTHAM FOREST, E10 5HL: AN ARCHAEOLOGICAL EVALUATION
Author(s)/Editor(s)	Reade, C
Date	2017
Issuer or publisher	Pre-Construct Archaeology Ltd
Place of issue or publication	London
Description	Grey Literature report
Project bibliography 2	
Publication type	Grey literature (unpublished document/manuscript)
Title	Ive Farm, Ive Farm Lane, Leyton, London Borough of Waltham Forest, EH10 5HL: Written Scheme of Investigation for an Archaeological Evaluation
Author(s)/Editor(s)	Hawkins, H.
Date	2017
Issuer or publisher	Pre-Construct Archaeology
Place of issue or publication	London
Description	Grey Literature WSI



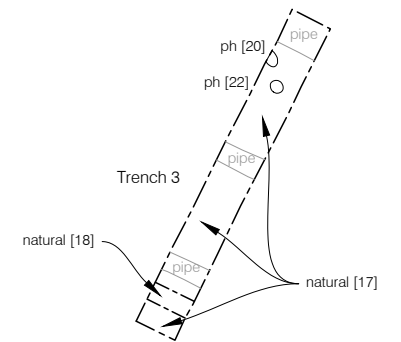
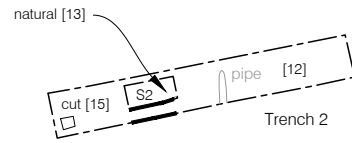
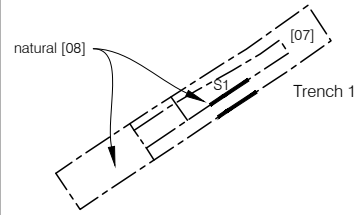
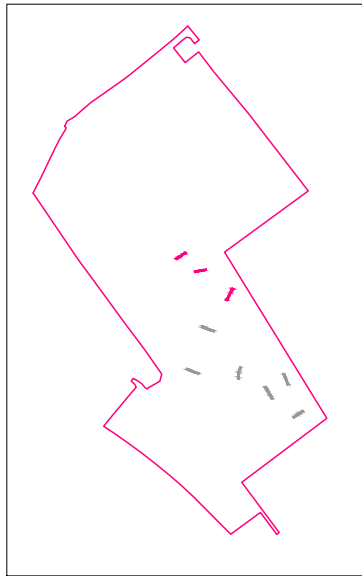
Contains Ordnance Survey data ©Crown copyright and database right 2017
 © Pre-Construct Archaeology Ltd 2017
 02/03/17 HB

Figure 1
 Site Location
 1:25,000 at A4



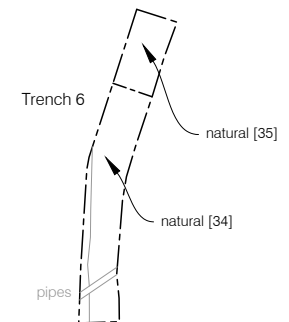
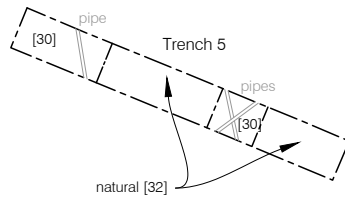
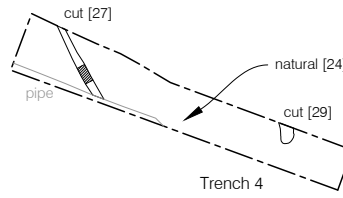
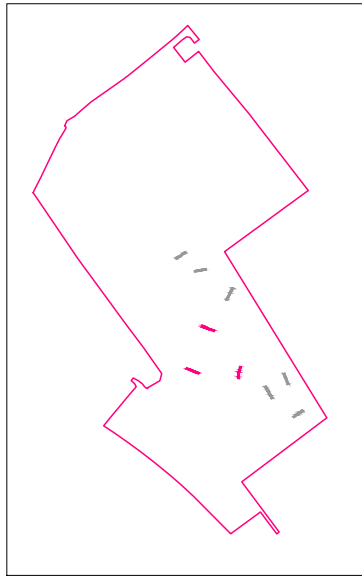
© Crown copyright 2017. All rights reserved. License number PMP36110309
 © Pre-Construct Archaeology Ltd 2017
 02/03/17 HB

Figure 2
 Trench Location
 1:1,600 at A4



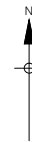
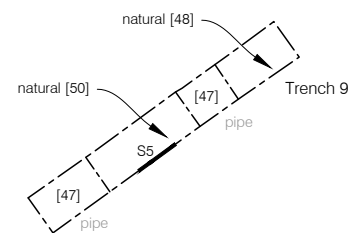
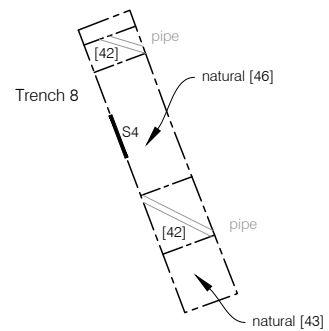
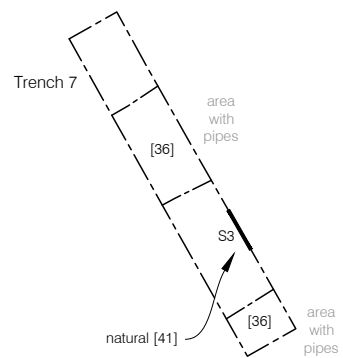
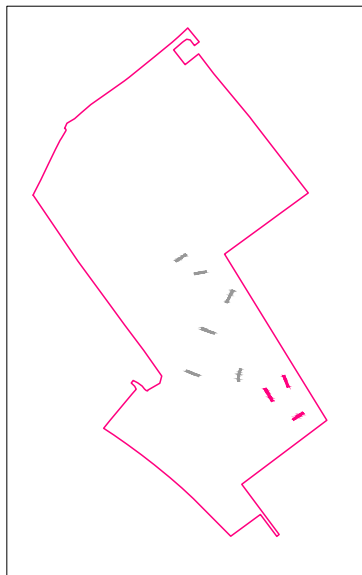
© Pre-Construct Archaeology Ltd 2017
02/03/17 HB

Figure 3
Plan of Trenches 1-3
1:250 at A4



© Pre-Construct Archaeology Ltd 2017
02/03/17 HB

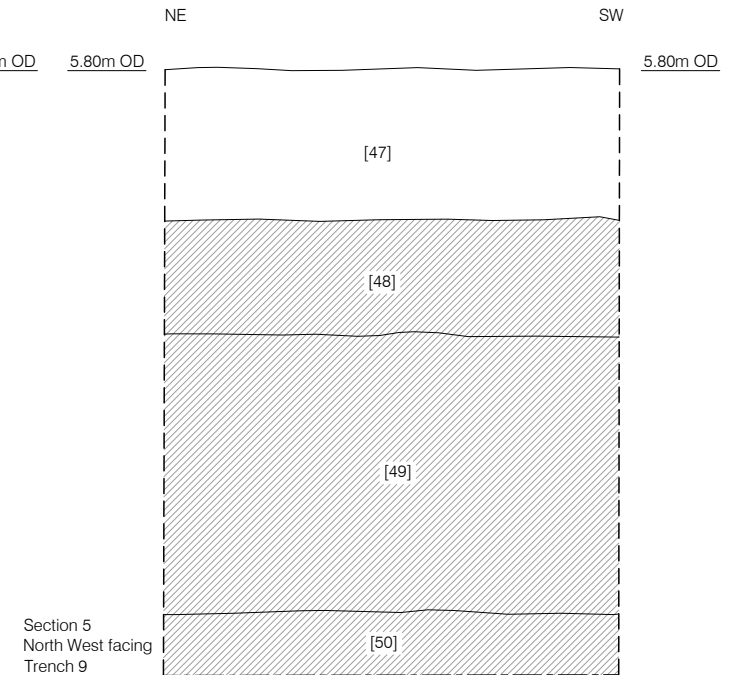
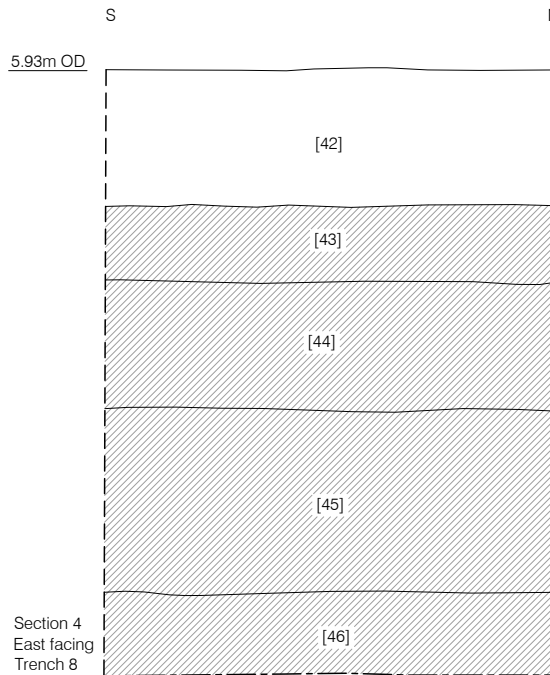
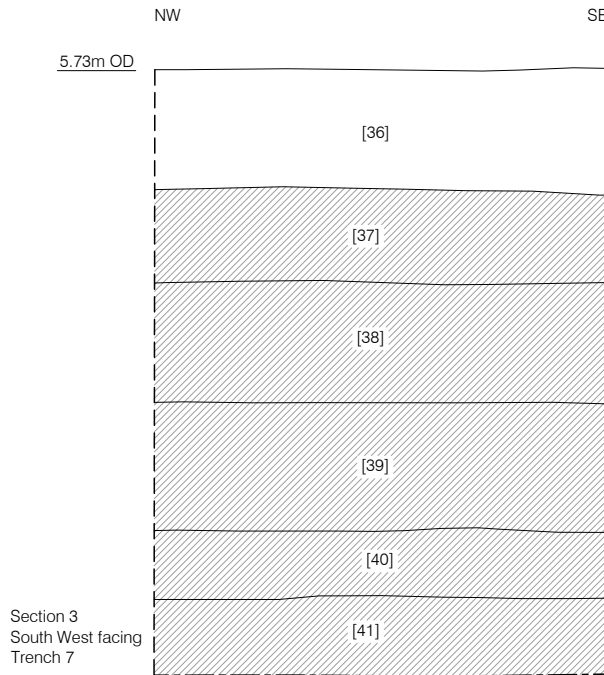
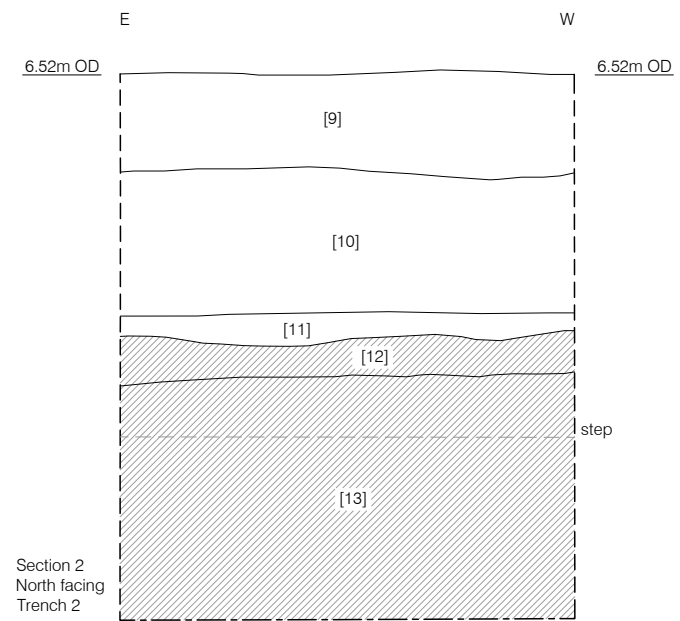
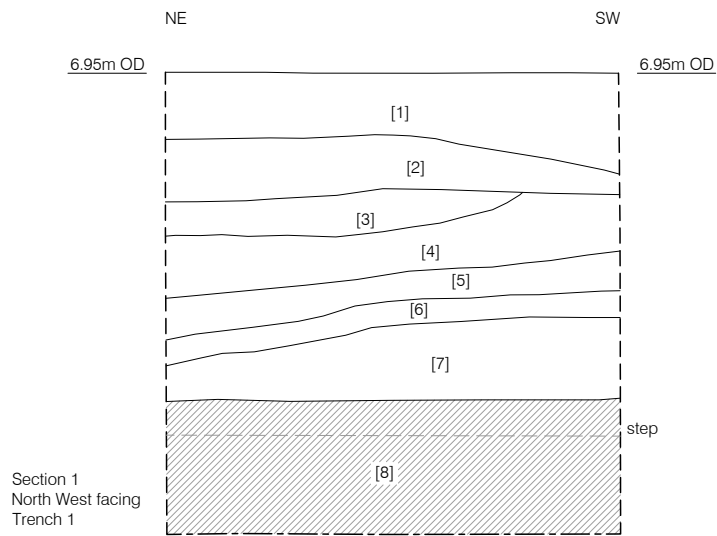
Figure 4
Plan of Trenches 4-6
1:250 at A4



0 10m

© Pre-Construct Archaeology Ltd 2017
02/03/17 HB

Figure 5
Plan of Trenches 7-9
1:250 at A4




 natural deposits



Figure 6
Sections 1-5
1:25 at A4

PCA

PCA SOUTH

UNIT 54
BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD
BROCKLEY
LONDON SE4 2PD
TEL: 020 7732 3925 / 020 7639 9091
FAX: 020 7639 9588
EMAIL: info@pre-construct.com

PCA NORTH

UNIT 19A
TURSDALE BUSINESS PARK
DURHAM DH6 5PG
TEL: 0191 377 1111
FAX: 0191 377 0101
EMAIL: info.north@pre-construct.com

PCA CENTRAL

THE GRANARY, RECTORY FARM
BREWERY ROAD, PAMPISFORD
CAMBRIDGESHIRE CB22 3EN
TEL: 01223 845 522
FAX: 01223 845 522
EMAIL: info.central@pre-construct.com

PCA WEST

BLOCK 4
CHILCOMB HOUSE
CHILCOMB LANE
WINCHESTER
HAMPSHIRE SO23 8RB
TEL: 01962 849 549
EMAIL: info.west@pre-construct.com

PCA MIDLANDS

17-19 KETTERING RD
LITTLE BOWDEN
MARKET HARBOROUGH
LEICESTERSHIRE LE16 8AN
TEL: 01858 468 333
EMAIL: info.midlands@pre-construct.com

