BEAM PARK RIVERSIDE PHASES 1 AND 2 AN ARCHAEOLOGICAL EVALUATION

LOCAL PLANNING AUTHORITY:
LONDON BOROUGH OF BARKING AND DAGENHAM AND LONDON BOROUGH OF HAVERING

SITE CODE: THV17

MAY 2017

PRE-CONSTRUCT ARCHAEOLOGY

BEAM PARK RIVERSIDE PHASES 1 AND 2

AN INITIAL ARCHAEOLOGICAL EVALUATION

SITE CODE:	**THV 17**
LOCAL PLANNING AUTHORITY:	**LONDON BOROUGH OF BARKING AND DAGENHAM & LONDON BOROUGH OF HAVERING**
PLANNING APPLICATION NUMBER:	**PRE-APPLICATION**
CENTRAL NGR:	**TQ 5014 82908**
WRITTEN AND RESEARCHED BY:	**MATT EDMONDS** **PRE-CONSTRUCT ARCHAEOLOGY LIMITED** **MAY 2017**
PROJECT MANAGER:	**HELEN HAWKINS (MCIFA)**
COMMISSIONING CLIENT:	**RPS CONSULTANTS ON BEHALF OF COUNTRYSIDE PROPERTIES**
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**

DOCUMENT VERIFICATION

BEAM PARK RIVERSIDE PHASES 1 AND 2

Type of project

AN ARCHAEOLOGICAL EVALUATION

Quality Control

Pre-Construct Archaeology Limited Project Code			K4950
	Name	Signature	Date
Text Prepared by:	M Edmonds		22.5.2017
Graphics Prepared by:	H Baxter		22.5.2017
Graphics Checked by:	J Brown	Josephine Brown	23.5.2017
Project Manager Sign-off:	H Hawkins		23.5.2017

Revision No.	Date	Checked	Approved
Rev 1 client comments	26.5.17	HH	CM

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

CONTENTS

1 ABSTRACT

1.1 This report details the results of an archaeological evaluation on land at Beam Park Riverside (Phase 1 and Phase 2), Thames Avenue, London Borough of Barking and Dagenham & London Borough of Havering, RM9 6DE. The evaluation was undertaken in support of a 'hybrid application' for the Beam Park Riverside site and in support of a separate 'surcharging' application for the Phase 1 area at the eastern end of the site. The evaluation was undertaken by Pre-Construct Archaeology Limited, and was commissioned by RPS Consultants on behalf of Countryside Properties.

1.2 Fourteen trenches were excavated across the site, with an additional T-shaped trench excavated in the north-east area of the site to establish the extent of archaeological features found in Trench 2 (Trench 15). Geo-archaeological trial pits were excavated in nine of the trenches, where alluvial deposits were identified. The trial pits were monitored by a geo-archaeologist from QUEST and are reported in detail separately.

1.3 Natural deposits were noted in all of the trenches. These deposits were located between 2.06m and -3.45m OD. The evaluation found the presence of terrace gravels in nine of the fifteen trenches, which were located in the northern portion of the site away from the main Thames floodplain. This gravel dropped to the south-west and was not reached in the southern most trenches which extended into the edge of the Thames floodplain. Towards the far north-eastern part of the site the natural comprised an orange sandy clay interpreted as natural brick-earth.

1.4 A complex sequence of alluvial and peat deposits were encountered in eight of the trenches excavated. These trenches were located roughly in the south / south-west portion of the site to pick up the edge of the floodplain.

1.5 Prehistoric pottery and worked flint were recovered from the fills of two linear features cut into the brickearth in Trench 1.

1.6 Flood deposits thought to have formed in the medieval/post-medieval period were encountered in Trench 7 and Trench 1.

1.7 In Trench 14, which was located in the Phase 2 area of the site, a large timber was found at the base of the geo-archaeological test pit. The timber was extremely large, but as it was located at the base of the test pit it was difficult to say whether it had an anthropogenic origin such as a revetment, or if it was natural in origin.

1.8 The evaluation showed that the north-east of the site lay over terrace gravels towards the top of a ridge. In the far north-eastern corner a dry area of brick-earth had formed. The alluvial deposits were encountered as the gravel fell away to the south and into the edge of the Thames flood plain.

2 INTRODUCTION

2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited on land at Beam Park Riverside, Thames Avenue, Dagenham, RM9 6DE. The site was an irregular shaped piece of land with the east-west New Road (A1306) to the north and was bordered to the south by the London, Tilbury and Southend (and HS1) railway. The site was located either side of the north to south flowing Beam River green corridor and was also crossed north-south by Thames Avenue (not a public road) and the elevated Marsh Way. The overall site covered an area of c. 29 ha but the evaluation was restricted to the eastern areas comprising Phase 1 and parts of Phase 2. The site was centred at NGR TQ 5014 82908 (see Figure 1). The site was located in both the London Borough of Barking and Dagenham and the London Borough of Havering, the River Beam forming the borough boundary.

2.2 The evaluation was undertaken in support of a 'hybrid application' for the Beam Park Riverside site and in support of a separate 'surcharging' application for the Phase 1 area at the eastern end of the site.

2.3 The geoarchaeological specialists QUEST had utilised the records of c.600 previous Site Investigation boreholes to create a deposit model produced as part of the Historic Environment Desk Based Assessment (RPS 2017). The archaeological evaluation was focused on the perceived areas of high ground prior to the instigation of made ground in the 20th century. These perceived areas were shown in the sub-surface topographical modelling.

2.4 The archaeological evaluation works were carried out between 3rd April and 5th May 2017 and were commissioned by RPS on behalf of Countryside Properties. The work was undertaken in accordance with an approved Written Scheme of Investigation (Hawkins 2017) and following Historic England guidelines (GLAAS 2014).

2.5 The site was located within two conjoining designated Archaeology Priority Areas (APAs). The APAs comprised the area east of the Beam for Havering (on the higher terrace and alluvium) and a separate APA west of the Beam for alluvium, as designated by Barking and Dagenham.

2.6 The archaeological evaluation was supervised by Matt Edmonds 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 Barking and Dagenham & the London Borough of Havering.

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 THV 17.

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 27 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 London Plan was updated in 2016 and covers all the London Boroughs.

Policy 7.8 Heritage assets and archaeology

Policy

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

3.3 Local Policy: Archaeology in the London Borough of Barking and Dagenham & the London Borough of Havering

3.3.1 The relevant local policy is provided by the London Borough of Barking and Dagenham & the Core Strategy, which was adopted in 2010. It contains the following policy statement with regards to the Historic Environment:

POLICY CP2: PROTECTING AND PROMOTING OUR HISTORIC ENVIRONMENT

Barking and Dagenham has a rich local history. Signs of our fishing, maritime and industrial heritage can still be seen for example at Barking Town Quay, the Ford works in Dagenham, and the Malthouse and Granary buildings on Abbey Road. The Becontree Estate, the Curfew Tower and remains of Barking and Abbey, Eastbury Manor House, Valence House and Dagenham Village are also important symbols of our past.

However, compared to many other areas the Borough has relatively few protected historic environment assets such as listed buildings and conservations areas. With this in mind the Council will take particular care to:

3.3.2 The site is also within the London Borough of Havering. The Borough's Core Strategy and Development Control Policies Development Plan Document Adopted 2008 contains the following polices relating to archaeology:

DC70 – ARCHAEOLOGY AND ANCIENT MONUMENTS

The Council will ensure that the archaeological significance of sites is taken into account when making planning decisions and will take appropriate measures to safeguard that interest. Planning permission will only be granted where satisfactory provision is made in appropriate cases for preservation and recording of archaeological remains in situ or through excavation. Where nationally important archaeological remains exist there will be a presumption in favour of their physical preservation. Particular care will need to be taken when dealing with applications in archaeological 'hotspots' where there is a greater likelihood of finding remains.

Planning permission will not be granted for development which adversely affects the three Ancient Monuments in the Borough or their settings.

REASONED JUSTIFICATION

Archaeological sites of interest and their settings and Ancient Monuments are irreplaceable and, therefore, it is important that policy seeks their protection, enhancement and preservation for the benefit of current and future generations. There are three scheduled Ancient Monuments in Havering, the 14th Century Upminster Hall Barn or Tithe Barn in Hall Lane Upminster, the moated site at Dagnam Park and the Roman Road across Romford golf course.

The archaeological 'hotspots', which are areas that have a greater potential for containing remains, will be shown in the Heritage SPD. They are divided into Archaeological Priority Areas where important archaeology can be expected and Archaeological Priority Zones

- - Protect and wherever possible enhance our historic environment.
- - Promote understanding of and respect for our local context.
- - Reinforce local distinctiveness.
- - Require development proposals and regeneration initiatives to be of a high quality that respects and reflects our historic context and assets.

Local Policy: Archaeology in the London Borough of Havering

The relevant local policy is provided by the London Borough of Havering Core Strategy, which was adopted in 2008. It contains the following policy statement with regards to Archaeology and Ancient Monuments:

DC70 – ARCHAEOLOGY AND ANCIENT MONUMENTS

The Council will ensure that the archaeological significance of sites is taken into account when making planning decisions and will take appropriate measures to safeguard that interest. Planning permission will only be granted where satisfactory provision is made in appropriate cases for preservation and recording of archaeological remains in situ or through excavation. Where nationally important archaeological remains exist there will be a presumption in favour of their physical preservation. Particular care will need to be taken when dealing with applications in archaeological 'hotspots' where there is a greater likelihood of finding remains.

Planning permission will not be granted for development which adversely affects the three Ancient Monuments in the Borough or their settings.

REASONED JUSTIFICATION

Archaeological sites of interest and their settings and Ancient Monuments are irreplaceable and, therefore, it is important that policy seeks their protection, enhancement and preservation for the benefit of current and future generations. There are three scheduled Ancient Monuments in Havering, the 14th Century Upminster Hall Barn or Tithe Barn in Hall Lane Upminster, the moated site at Dagnam Park and the Roman Road across Romford golf course.

The archaeological 'hotspots', which are areas that have a greater potential for containing remains, will be shown in the Heritage SPD. They are divided into Archaeological Priority Areas where important archaeology can be expected and Archaeological Priority Zones where there is a potential need for archaeological consideration and consultation with English Heritage. The identification of these areas is as a guide to the existence of or potential for archaeological remains being present and each particular application should be dealt with on a case by case basis.

Planning Permission

3.3.3 The archaeological evaluation was carried out in advance of an application for planning permission for the site, in order to inform the archaeological adviser to the council of the potential for archaeological survival on the site.

4 EVALUATION OBJECTIVES

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

- To determine the natural topography and geology of the site.
- To establish the presence or absence of prehistoric activity, whether settled occupation or artefact scatters.
- To establish the presence or absence of Roman and 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.

5 GEOLOGY AND TOPOGRAPHY

5.1 The geological and topographical background below was taken in part from the desk based assessment (RPS 2017).

5.2 The site was located within the former floodplain of the River Thames, now 1.25km to the south. The site was generally flat with ground elevations varying between approximately 0.4m above ordnance datum (OD) to 2.4m OD. Ground levels rose above the floodplain to the north of the site. The Beam River tributary and its valley flowed north-south through the central eastern area of the site.

5.3 The Dagenham Breach is located to the south of the site, and is an area of deliberately flooded marsh. The Gores Brook runs north-south c. 0.5km west of the site.

5.4 The British Geological Survey (BGS Website, 2016) and British Geological Survey Solid & Drift Sheet 257 (BGS 1996) records the solid geology of the majority of the site as Lambeth Group (Clay, Silt and Sand) with London Clay Formation (Clay, Silt and Sand) with London Clay Formation (Clay, Silt and Sand) at the extreme north-west end and extreme east end of the site. Superficial deposits of Pleistocene and Holocene date are recorded across the site. Taplow Gravel Formation Sand and Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period are present sealing Solid Geology across the site area but outcrop at the surface in the north-eastern area of the site, to the east of the Beam River. Alluvium (Clay, Silty, Peaty, Sandy) deposits of the Holocene overlay the sand and gravels for the remainder of the site.

6 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The archaeological and historical background is taken from the Desk Based Assessment (RPS 2017). The DBA covers the whole of the site, including the area west of the Beam. The background below has been edited to reflect the Phase 1 and 2 areas covered by the archaeological evaluation.

6.1 Prehistoric

Palaeolithic

6.1.1 As noted in the Greater Thames Estuary Research Framework 'following the collapse of the ice-dammed lake at the front of the Anglian ice sheet, the River Thames was forced south to start shaping the current Thames Valley...Over the next approximately 420,000 years, the familiar Thames Terrace sequence was created through successive phases of downcutting and gravel deposition.'

6.1.2 The present Thames floodplain within which the Site is situated represents the latest phase in gravel terrace deposition sequence. This braided Pleistocene River Thames, was a shallower and more dynamic, faster flowing river. Most former land-surfaces within the floodplain have been significantly re-worked since deposition, such that the potential for encountering in-situ 'sites' (e.g. kill sites or camp sites) within the gravels is low.

6.1.3 The present Thames Valley floodplain gravels have potential to contain re-deposited flint artefacts such as handaxes and flintworking debitage and, in very rare instances, faunal remains, but the significance of re-deposited finds is generally low in the absence of context.

6.1.4 There are no Palaeolithic finds recorded on the HER within 1km of the centre of the Site, although undated animals bones, from early 18th century dam construction works at the northern extent of the Site, are referred to as dating to anywhere between the Palaeolithic and the 19th century. Their association with peat actually suggests a Neolithic or later derivation.

Mesolithic

6.1.5 The construction of dams during the early 18th century to close the Dagenham Breach revealed moorlogs consisting of partly rotten yew timber not decayed, brushwood, hazel nut and stag antlers. These were considered to possibly be prehistoric (including possibly Mesolithic) although due to the length of time since the find, it is acknowledged that they could be of any date ranging from prehistory to the post-medieval period.

6.1.6 A Mesolithic flint blade has been recovered from Walden Avenue c.100m north of the eastern area of the Site. The closest findspot to the Site itself, c.70m to the north, is a pit at 15-17 New Road loosely dated as Mesolithic to Iron Age. A flint blade of late Mesolithic or Neolithic date was found nearby. Two closely dated early Mesolithic flintwork scatters (blades, flakes and cores) are recorded for the 'Beam Washlands' flood-defence works at 15-17 New Road c.450m north of the Site. The association of such activities within the area associated with the connection of two watercourses, above the Thames Floodplain, is reflected by the associated 'Tier I' APA for the 'Beam Wantz Confluence'.

6.1.7 Just beyond the Study Area a sequence of alluvial deposits were sampled c.1km south west of the Site, including peat which was thought to have been formed from marginal woodland close to the river/fenlands during the Late Mesolithic through to the Early Bronze Age. Late Mesolithic to Early Bronze Age wood and peat was also identified at Choats Road c.900m to the west of the Site.

6.1.8 Fieldwork at the Hornchurch Marshes south-east of the Site was carried out following the discovery of fine-grained mineral sediments, peat deposits and substantial parts of well-preserved ancient woodland. The earliest sediments recorded were fine-grained mineral rich deposits, apparently deposited in a freshwater fluvial environment. Peat accumulation occurred between c.6890-6560 years BP through to c.4160-3710 years BP, a period which was characterised by mixed fen woodland and followed by a return to fine-grained mineral

rich sedimentation.

6.1.9 Based on recent and consistent geotechnical surveys from the former Ford Stamping Plant to the immediate west of the Site, and the BGS held borehole data discussed above, it is apparent that peat of a probably similar Mesolithic (and Neolithic) date to that identified by Batchelor at Hornchurch Marshes, is present beneath the Site.

Neolithic

6.1.10 As noted above Thames-side peat deposits that began to accumulate in the late Mesolithic period, continued to be deposited throughout the Neolithic and throughout the Bronze Age. This preceded changes in climate and hydrology resulting in a period overbank flooding in the Iron Age, which capped the peat with a thick deposit of alluvial clay.

6.1.11 Despite the advent of Neolithic farming, the Site area was almost certainly still characterised by natural low-lying wetlands of the Thames Valley floor and by the north-south flowing Beam River valley corridor. As in the Mesolithic the Site probably continued to be characterised by exploitation of natural resources (fishing and fowling).

6.1.12 Within the Study Area the famous 'Dagenham Idol', an anthropomorphic wooden figurine radiocarbon dated to the Late Neolithic period (2459-2110 BC), was discovered in 1922 during installation of sewer pipes on the edge of the marshes near to Gores Brook, c.750m west of the western end of the Site. The skeleton of a deer was discovered nearby, possibly within the same peat layer.

6.1.13 Neolithic date peat deposits have been confirmed by a geo-archaeological assessment in 2013 by MOLA at Merrielands Crescent, c.750m west of the Site.

6.1.14 An early Neolithic pit or post hole was located during excavations by Wessex Archaeology in 2010 at Dagenham Park Community School, c.750m north-west of the north-west extent of the Site.

6.1.15 Some evidence for early Neolithic (and Bronze Age) exploitation of the local wetlands is provided by a leaf arrowhead, and later flintwork c.450m to the north of the Site within the Beam Wantz Confluence APA.

Bronze Age

6.1.16 The Early Bronze Age is equated with the construction of funerary monuments, usually round barrows monuments, whilst settlements remain ephemeral. This situation may reflect a still fluid and potentially seasonal settlement pattern predicated on pastoralism. The Middle Bronze Age witnessed the development of large-scale field-systems associated with dispersed roundhouses of settlements practising mixed farming. The period thus characterises the emergence of more settled farming systems, which typically exploited the lighter gravels and Brickearth geologies of the Thames Valley above the floodplain. The marshlands continued to be used for salt marsh grazing and resource exploitation and were accessed in places by timber trackways.

6.1.17 Where large-scale projects that have entirely removed substantial quantities of peat and alluvial for engineering purposes, archaeological remains actually within the peat/alluvium itself proved sporadic. For example a 300m length stretch of the A2016 Erith Spine Road construction (for 'Bronze Age Way', on the analogous south side of the River Thames, provided only sporadic indication of Bronze Age activity, in the form of part of an insubstantial wattle hurdle re-used as a trackway, whilst the alluvium was archaeologically sterile. Similar Middle Bronze Age trackways are known from the foreshore in Newham and Havering, whilst 'working platforms' and a possible revetment are recorded from Barking.

6.1.18 Nevertheless, where wooden artefacts and structures are present the high degree of preservation enhances their significance. The presence or absence of such remains is difficult to predict due to their inaccessibility below Made Ground and earlier sediments.

6.1.19 Within the Study Area peat of Bronze Age has also been identified at Kent Avenue, immediately to the south of the Site. In addition a borehole sample of peat from the

embankment just to the north of the current Wantz Stream channel c.425m north of the northern central area of the Site (and part of the Beam Wantz Confluence APA), has been radiocarbon dated to the Late Neolithic or Early Bronze Age period and included the aforementioned leafshaped arrowhead find.

6.1.20 Further Bronze Age peat deposits are recorded c.100m south of the western end of the Site with another identification of Early Bronze Age to medieval peat at Chequers Lane just to the west of the Site. Less specifically dated peat of prehistoric date is recorded at Manor Way/Consul Avenue in the Hornchurch Marshes and at another location in the Hornchurch Marshes c.400m south-east of the Site. At Creekside, c.700m to the east of the Site, a water channel is dated to the Bronze Age.

6.1.21 An excavation at 105-109 New Road, Rainham in 2009, just c.150m east of the Site, identified four Early Bronze Age pits/ post-holes containing pottery. The gravel geology was 3.2m to 3.5m OD confirming the location was sufficiently above the floodplain for such activity to take place. This location is within the Havering APZ for 'Gravel and Sand Deposits' (Geology) and is topographically similar to the north-eastern extent of the present Site, partly commensurate with proposed development Phase 1. Potentially settlement related features of Middle to Late Bronze Age date, including a pit, stake hole and post-hole, were identified at 137-139 New Road, Rainham c.300m east of the Site, also within the APZ.

6.1.22 Excavations at 15-17 New Road identified post-holes of Late Bronze Age date whilst further to the north-east at South Hornchurch a Bronze Age site included pottery and a bronze ingot of similar date.

6.1.23 Excavations at the Mardyke Estate/Orchard Village, 75m to the north of the site, found extensive prehistoric remains of probable Bronze Age date (PCA pers. Comm, the assessment report for this site has not yet been commissioned). The stratigraphy suggests that a phase of pitting, possibly associated with some small-scale occupation activity of possible Bronze Age date, was overlain by a series of boundary ditches; probably relating to a field system of later prehistoric date. the site is interpreted as representing a probable Bronze Age field system with occupation to the east of the site continuing outside the development area, with a later field system imposed during the Roman period. The dense area of pitting to the north-east corner may represent settlement activity of Bronze Age date, but may also represent later – possibly Roman – activity in the form of brickearth quarrying.

6.1.24 Archaeological investigations at Dagenham School, c.750m north of the western end of the Site, uncovered evidence of a Late Bronze Age to Early Iron Age landscape, including a ditched enclosure and associated finds. Quantities of briquetage were found in the various ditches and on top of the possible relict land surface, which may have come from a pottery kiln or were used in salt production.

6.1.25 A pit or post hole of possible prehistoric date was discovered during a watching brief at Dagenham Park Community School c.750m north of the western end of the Site.

6.1.26 A 'prehistoric' ditch is recorded at New Road c.180m east of the Site and undated features containing burnt flint of probable prehistoric date are reported from excavations at Dagenham Park Community c.900m north-west of the Site.

6.1.27 Several ditches were observed during an archaeological evaluation at Digby Garden allotments c.750m north-west of the study site; they were tentatively dated to the prehistoric period due to the presence of burnt flint in one of the ditches.

6.1.28 Current evidence indicates that there was activity within the study area during the earlier prehistoric periods, and that activity of various levels took place across the wider area, both within marsh areas (as found beneath the Site) and the dry land locations (to the north and north-east).

Iron Age

6.1.29 Iron Age settlements are relatively frequent, representing rising population and perhaps an intensification of farming, along with the emergence of large tribal entities. An excavation at

105-109 New Road, Rainham, c.140m north-east of the Site, identified three post-holes of Middle Iron Age date potentially associated with a settlement related structure.

6.1.30 Iron Age sites include Middle Iron Age ditches and finds were also found during excavations at the Beam Washlands site adjacent to the Beam River, c.590m to the north of the northern central area of the Site. A Late Iron Age/Early Roman settlement site was also identified during excavations at the Beam Washlands site, comprising an agricultural area to the south, an industrial area to the north and a cremation cemetery.

6.1.31 It seems likely that there was agricultural (arable) and possibly industrial salt production within the wider study area during the Late Bronze Age, Iron Age and Roman period. However, it seems likely that the settlement related activity and arable land would have been concentrated to the north, beyond the marsh land limit, during these periods. The marsh itself may have been used for grazing. However, it is also possible that former marshy areas, former palaeo-channels and in particular the brook corridor itself, may contain isolated water management features such as revetments or bridge supports, or other water related finds (such as small boats).

6.2 Roman

6.2.1 A Romano-British farmstead site has also been located c.125m to the north of the eastern area of the Site at Walden Avenue. It is unclear whether features and landscape associated with the farm extended south towards the Site. Indeed an excavation c.130m to the north-east of the eastern end of the Site at 105-109 New Road, Rainham found a Romano-British farm boundary ditch representing Roman period farmland.

6.2.2 Romano-British activity also includes the aforementioned Beam Washlands site where a settlement site, along with cremations and an industrial area has been excavated.

6.2.3 Pits and a post hole were also investigated at Lower Road/Walden Avenue (Mardyke Estate), Rainham c.400m to the north-east of the eastern area of the Site. The PCA excavation in 2008 found evidence for ditches and pits of 1st-2nd century AD date, with two complete vessels in a pit suggestive of an element of ritual activity. Further excavations in 2009 and 2010 found settlement activity to the north and field systems to the south. Available dating evidence suggests that the Roman occupation during the 1st century AD possibly went out of use by the end of the 1st century and was replaced by agricultural activity with pottery production during the mid-2nd/3rd century AD. This chronology appears to conform to the chronology noted in the Beam Washland excavations, and would suggest that the two settlements were occupied at the same time, and that broadly similar activities were happening at each site (PCA pers comm, assessment report not yet commissioned).

6.2.4 The Ripple Road APA includes reference to aerial photographs of three double ditch cropmarks at Goresbrook Sports Centre to the west of the Site. Following geophysical survey it was suggested these might relate to elements of a prehistoric track or a Roman road. There is also reference to Roman burials along Ripple Road suggestive of a contemporary version of the routeway. These included four 1st or 2nd century AD cremation burials from Goresbrook Sports Centre within an enclosure. These indicate a settlement, whilst further ditches of the associated agricultural system were also identified. Several 3rd century AD skeletons were found within a stone coffin, along with a cremation and complete pots, during construction at 496 Ripple Road.

6.3 Early Medieval and Medieval

6.3.1 The settlement of Dagenham, to the east of Barking and Ilford, was one of the earliest recorded Anglo-Saxon settlements in Essex, first mentioned in a Charter of AD 687 whilst at the time of the 1086 Domesday Survey, the manor of Dagenham fell within the larger holding of Barking. Dagenham was recorded as Deccanhaam in c.690 which in Old English means 'Homestead or village of a man called Daecca'.

6.3.2 Historically part of the county of Essex, Rainham (now within Havering) was a village by AD 811 when referred to, in a charter granting it to Wulfrid of Canterbury, as 'Roegingaham'. The 1086 Domesday Book records the settlement as Raineham, which can be translated as

'homestead or village of a man called Regna' (the Old English 'hām' meaning settlement). However, there is no former Saxon or medieval village cores within the close proximity of the Site.

6.3.3 The Grade I Listed Church of St Helen and St Giles at Rainham dates from c.1170.

6.3.4 Dagenham Breach, located south of the Site was previously known as the 'Gulph' and had been formed in the 14th century by breaching the River Beam's bank to form a lake.

6.3.5 Documentary sources suggest edge of marsh houses and that flooding in the 14th and 15th centuries breached the flood defences and inundated the area south of the Site, which was allowed to become permanent. The records for Barking Abbey include reference to late medieval flooding causing significant lost revenue and resulting in attempts to drain and reclaim the marshland.

6.3.6 Ripple Road is known from the medieval period onwards and according to documentary records there was ribbon development along it at edge of the marsh in the 15th and 16th centuries, including Willishaws and Osborne's farms. In 1921 Osbourne's Farm was as a 16th century building 'with a cross wing at the eastern end with a projecting upper storey at the north end of the cross wing'.

6.3.7 Archaeological evidence for early Saxon occupation is slight but a gully and pit were excavated at the Beam Washlands excavation site at Oval Road North, c.425m north of the Site suggesting some local settlement. The only reference to medieval archaeology within the Study Area is a medieval figurine and tokens from Lower Mardyke Avenue to the north of the Site.

6.4 Post-Medieval and Modern

6.4.1 Chapman and Andre's Map of 1777 shows the Site crossed by the stream within an area of marshland called 'Dagenham Marsh'. Settlements are shown at 'Mear Ditch' and 'Marshfoot Farm' on drier ground adjacent to the marsh within the northern edge and to east of the eastern end of the Site respectively. The village of Dagenham is located c.1.25km north of the Site. The stream is depicted running through the Site with Horn Church labelled in the marsh to the south and Dagenham Bridge labelled on its road crossing to the north. There is a body of water south of the Site called 'the Gulph', which appears to be the early name for the Dagenham Breach.

6.4.2 The 1799 Ordnance Survey Drawing illustrates the Beam River, labels Mardyke (north of the later position of Little Mardyke) and the 'Gulph' which appears as a substantial inlet. The line of the later 'New Road' is partially in place, flanking the northern edge of the west end of the Site. A north-south road is shown through the Site connecting with 'New Road at its northern end. The landscape is entirely rural comprising fields.

6.4.3 The 1841 Dagenham Tithe Map shows that New Road to Rainham now runs along the entire northern extent of the Site. The maps show plot numbers associated with field/plot names provided in the associated apportionment.

6.4.4 The residential plots referred to relate to a series of houses and gardens fronting New Road to the west of Beam River and east of the connecting north-south road. A north-south stream in the western area of the Site flows to the Gulph (later Dagenham Reach) to the south.

6.4.5 The area to the east of the Beam River is accounted for by the 1848 Hornchurch and Romford tithe map, which shows New Road continuing as a straight route 'from London' with a series of field commensurate with the Site and its surrounds listed in the apportionment as 126 – Marsh; 127 - seven acre marsh; 129 – marsh; 130 - gulf marsh; 131, nine acres (meadow); 132 -two acres (meadow); 133 - thirteen acres (meadow); 134 - Brick Yard and 135 – Bridge Marsh. The only residence east of the river appears to be a single plot at New Road between fields 135 and 134.

6.4.6 The Ordnance Survey Map of 1864 shows the residences referred to above as a triangular plot 932 containing several properties and gardens, fronting New Road, east of the now named north-south route 'Sickle Corner Manor Way'. To the north-east and on the north side

of New Road (beyond the Site) is an extension of the settlement, comprising at least seven houses and the 'Beam River Wind Mill'. The remainder of the west area of the Site is open farmland. Significantly, the Tilbury & Southend Railway, constructed in 1854, now flanks the south edge of the Site. To the east of the Beam River are a series of fields and two separate homesteads fronting New Road (the western of which is now labelled 'Little Mardyke' (Mardyke being located to the north on earlier maps). A small stream connecting the Beam is shown running east west between the fields. Two further drainage ditches carrying flowing water run south from this stream either side of field plot 1006.

6.4.7 The problems associated with flooding had been occasionally acute since medieval times, as reflected by the continued use of marshlands as undeveloped seasonal rough grazing for livestock until the late 19th century (Barking Level and Dagenham Marsh APA text).

6.4.8 The 1897 Ordnance Survey shows few changes to the Site with Barking Level and Dagenham Marsh remaining largely undeveloped until the mid 19th century. A residence or farm known as 'Marshgreen' is shown on the north side of New Road to the north-west of the Site. 'Sickle Corner', bisected by the railway is an area of farmland labelled to the west side of 'Sickle Corner Manor Way'. The terrace of houses to the east side of Sickle Corner Manor Way fronting New Road had been extended to c.33 properties. Beam Bridge, across the river on New Road, is depicted, as is the property known as Little Mardyke. A further building is shown a field to the east. The remainder of the Site is fields, with a now straightened tributary stream of the Beam River flowing east-west through the eastern area of Site.

6.4.9 Industrialisation around this time, facilitated by the Barking and Rainham Railway, began with chemical and powder works along Barking Reach and at Creekmouth. Dagenham Dock Industrial Estate, which became one of the largest coal wharves for export on the Thames, was established to the south of the Site on the edge of Dagenham Breach in the late 19th century.

6.4.10 The Third Edition Ordnance Survey Map of 1919-20 shows few changes to the Site. The railway has been expanded with the construction of Dagenham Dock station in 1908 and various goods and coal sidings. These were connected to the works to the south west of the station. Sickle Corner and Sickle Corner Manor Way are labelled. A linear area of 'allotments' are labelled along the south-side of New Road within the northern fringe of the northwestern area of the Site.

6.4.11 The area was extensively built on following reclamation of the marshes during the late 1920s and 1930s and industrial development continued along the Thames east and south of Dagenham. The Ford factory opened in December 1928 following large scale reclamation of the marshes (that accounts for much of the modern Made Ground under the Site). Ford became the largest local employer.

6.4.12 The Revised Edition Ordnance Survey Map of 1939 shows significant changes at the Site, including the conversion of the 'Sickle Corner' area in the south-west to a 'Sports Ground', with buildings to the west side including a 'Pavilion'. 'Allotment Gardens' are marked in the northwestern Site area but may now relate to a much wider zone of allotment use than previously. Sickle Corner Manor Road runs north-south through the Site to the east of the Sports Ground. Terraced houses still flank New Road along the northern edge of the Site west of the junction with Sickle Corner Road.

6.4.13 'Beam Bridge' is labelled and the areas either side of the river are cleared of the former fields to form large open undivided areas. 'Little Mardyke' is still shown, whilst a line of pylons and their power lines cross these open areas east to west. Beyond the Site further residential expansion has occurred north of New Road. The Ford works have been constructed south of the railway and various railway connections have been constructed to connect these works to the railway. The Briggs Motor Bodies and Kelsey-Hayes Wheel Company manufactories factory to the south were constructed to the immediate west of the Site in 1932, after the land was bought for the Ford Motor Company.

6.4.14 A high explosive bomb is shown to have fallen in the vicinity of Kent Avenue during the Blitz of 1940-41 although there doesn't appear to have been serious damage caused to the Ford

factory to the west of Kent Avenue (NB the website does not include evidence for east of the Beam River as that area was within Essex the source is for the former extent of Greater London).

6.4.15 The 1945 Google Earth Image shows a new complex of buildings including an E-shaped form to the north of the sports complex and pavilion. Cricket pitches were laid out within the sports field.

6.4.16 The combined Ordnance Survey Map of 1950 (Barking & Dagenham) and 1961 (Havering) shows. the Beam River with Beam Bridge at New Road, and a band of marsh depicted to the west of the river. To the east of the river Little Mardyke is now shown with additional outbuildings, whilst a new 'Works' building is shown to its east side at the extreme east end of the Site. The remainder remains open apart from the pylons. To the south of the Site and the railway the 'Havering and Dagenham Level and Hornchurch Marshes remained open land around the Dagenham Breach, with the largest Ford 'Manufactory (Motor Cars)' factory fronting the Thames to the south.

6.4.17 The 66 acre factory on the riverside east of Dagenham Dock required 22,000 concrete piles through the marsh and employed 40,000 workers in 1953. The plant was intended as a counterpart to the huge Dearborn plant in Michigan. The Operation originally operated as a trading estate with Briggs Motor Bodies and Kelsey-Hayes Wheel Company also present prior to being subsumed into Ford Motor Company in the 1950s. The plant included its own power station, foundry, coke ovens and gas plant along with the largest private wharf on the Thames and a railway dedicated to transporting material from the dock.

6.4.18 Major changes are shown to the buildings west of the Site on the 1963 Ordnance Survey Map, which have now been amalgamated into one building. This presumably took place after Briggs and Kelsey-Hayes were purchased and absorbed by Ford in the early 1950s. The sports pavilion and facilities had been cleared from the western area of the Site and may at this time have been replaced by concrete hard-standing.

6.4.19 The Ordnance Survey Map of 1975-1976 shows the central and western areas now dominated by a large new Ford 'Motor Works' structure built over the former sports ground and allotments c.1963. Thames Avenue is now built as a north-south route along the west side of the river. The eastern area (either side of the Beam River) comprised several (probably) fenced areas of hardstanding with a smaller 'Works' building fronting New Road at the eastern end of the Site. Little Mardyke was still extant at the west edge west of the Works.

6.4.20 A Site Plan of c.1971 for the Ford Motor Company Dagenham Estate provides an inventory of the function of the various structures, with the main structure labelled as 'Assembly Plant'. To the east of the factory the hardstanding to the west of the river is labelled as 'Car Despatch', whilst the area east of the Beam is labelled 'Traffic Compound'.'

6.4.21 The 1999 Google Earth Image shows no change to the majority of Site, although the north-south road (Marsh Way) crossing the east end of the Site, west of the now demolished location of the former Works building and over the demolished location of Little Mardyke, is now in place. Two small factory-related structures are now shown east of the green corridor of the river. The hardstanding area (on raised Made Ground east of the river) is shown in use as parking area for constructed cars ahead of export.

6.4.22 In terms of the GLHER the majority of post-medieval sites and finds) are of 16th to 19th/20th century date and are located beyond the Site. These include an infectious disease hospital, human burials, Dagenham Old Road Manor House, lakes, a dam, a farmhouse, landfill sites, boat remains and sluice and flood related features, ploughsoils and stray finds.

6.4.23 Of these the dam was located within the north-eastern area of the Site, just east of Thames Avenue. Small scale archaeological recording there also identified peat of probable earlier date (e.g. prehistoric) and undated animal bone.

7 METHODOLOGY

7.1 The evaluation was undertaken according to a Written Scheme of Investigation (Hawkins 2017) which was approved in advance by Adam Single, GLAAS, archaeological adviser to the London Borough of Barking and Dagenham and the London Borough of Havering. 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.

7.2 The evaluation saw the excavation of fourteen principal trenches with the addition of a further T-shaped contingency trench (Trench 15), and a small 5m long trench was added to the western side of Trench 2. All trenches were laid out with GPS survey equipment and checked with a CAT scanner prior to excavation. The trenches were backfilled with the upcast material and compressed by the machine until the surfaces were level.

7.3 Ten of the fifteen trenches were stepped to safely reach the alluvium or natural gravel. Trench 1, Trench 2 and Trench 11 were originally designed to be stepped but a step wasn't required as natural deposits were encountered at a higher level than originally anticipated.

7.4 The trench dimensions and highest and lowest levels are tabulated below:

Trench Number	Length	Width	Depth	Highest level	Lowest level
1	31m	4m	0.62m	1.67m OD	1.05m OD
2	33m	4m	0.47m	1.70m OD	1.23m OD
3	22.5m	3.5m	2.25m	2.97m OD	0.72m OD
4	20m	2.5m	1.14m	2.46m OD	1.32m OD
5	23m	4.25m	0.82m	2.55m OD	1.73m OD
6	22.5m	4.5m	1.35m	2.46m OD	1.11m OD
7	31.75m	4.5m	1.73m	2.40m OD	0.67m OD
8	30m	4.75m	1.96m	2.08m OD	0.12m OD
9	30m	5.5m	2.01m	2.28m OD	0.27m OD
10	34m	4.5m	2.48m	2.30m OD	-0.18m OD
11	33m	4.5m	0.97m	2.21m OD	1.24m OD
12	30.5m	4.5m	1.81m	1.90m OD	0.09m OD
13	30.5m	4.5m	1.84m	1.94m OD	0.10m OD
14	32m	4.5m	1.16m	1.04m OD	-0.12m OD
15	25.50m	2.00m	0.56m	1.63m OD	1.07m OD

7.5 All excavations were supervised by the author or an experienced archaeologist and proceeded in 100mm spits using a 360 degree tracked machine with a toothless bucket. Modern surface concrete and thick tarmac were broken out with a breaker attached to the 360

digger.

7.6 Trenches were CAT scanned after each spit was removed in order to check for buried services which might not have been marked on the service plan.

7.7 All open trenches were secured with secured Heras fence panels to prevent unauthorised access.

7.8 The trenches were cleaned by hand, recorded and photographed. Recording of the deposits was accomplished using the Single Context Recording Method on proforma context and planning sheets. Contexts were numbered and are shown in this report within squared brackets. Plans were drawn at a scale of 1:20 and 1:50 and sections at a scale of 1:10 and 1:20.

7.9 The proposal follows CIFA guidelines, and the methodologies set out in Historic England (GLAAS) Guidance Papers for standards and practices in archaeological fieldwork watching briefs and assessments and evaluation.

7.10 Six Temporary Bench Marks (TBMs) were established on the site using GPS survey equipment. TBM1 was established on top of a wall northeast of Trench 1 and Trench 2 at a value of 3.31m OD. TBM2 was established on a concrete block to the north of Trench 12 at a value of 2.74m OD. TBM3 was located on the top of the concrete Gas sign to the north of Trench 3 at a value of 3.53m OD. TBM4 was established on a small concrete block to the northwest of Trench 5 at a value of 3.13m OD. TBM5 was located on the top of an 'electric' man-hole cover west of Trench 8 at a value of 2.06m OD. TBM6 was located on the corner of a kerb stone to the south of Trench 14 at a value of 1.27m OD.

7.11 A small programme of geo-archaeological work was also included and tied into the evaluation work carried out. Eight of the fifteen trenches had an extra sondage/trial hole excavated by machine through with a narrow toothless bucket. This work was supervised by the author and a geo-archaeologist from QUEST. The sondage was excavated through the alluvium in the base of the trench until natural drift geology was encountered or water ingress made it dangerous/difficult to continue. These sondages/trial holes were recorded and back-filled straight away with up-cast material.

8 ARCHAEOLOGICAL PHASE DISCUSSION

Five phases of activity were noted during investigations:

- Phase 1 represented the natural drift geology encountered during investigations
- Phase 2 represented an alluvial sequence
- Phase 3 represented a period of possible prehistoric activity
- Phase 4 represented a period of medieval/post-medieval activity
- Phase 5 represented the modern deposits across site

8.1 The geo-archaeological trial pit sequence is described archaeologically below, but is discussed in detail in the QUEST report (Appendix 7)

Trench 1 (Figures 4, 8)

8.2 Phase 1

8.2.1 The earliest deposit [10] encountered in this trench was a firm mid orange greyish brown sandy clay. This layer was interpreted as natural brick earth and was recorded at 1.17m OD.

8.3 Phase 3

8.3.1 Cutting the natural brick-earth [10] was a linear east-west feature [12] which had gently sloping sides and a flat base. The feature had a length of 4.50m continuing both sides of the trench and a width of 1.75m and was 0.97m deep. The feature was filled by [11] a firm light grey slightly sandy silt with very occasional flint pebbles. A few flakes of worked flint were found in this fill alongside a few sherds of fragmented pottery. It was encountered at 1.13m OD with a level of 0.97m OD on the base.

8.3.2 The struck flints were interpreted as a side-and end scraper, an end scraper and two flakes of worked flint, one which was slightly burnt. They were diagnostic of flint working from the Late Neolithic / Early Bronze Age (Appendix 2).

8.3.3 The pottery assemblage consisted of coarse flint tempered fabric and was dated as Late Bronze Age / Early Iron Age (Appendix 1).

8.3.4 One fragment of fired clay was also recovered which was thought to be prehistoric (Jarrett pers comm).

8.3.5 Also cutting the brickearth was another east-west linear feature [15] which had sharp edges sloping to the centre of a concave base. The feature had a length of 3.00m and a width of 0.80m and its depth was 0.16m. The feature was filled by [14] a compact light greenish grey sandy silt. This feature was recorded at 1.17m OD with a level of 1.00m OD on the base.

8.3.6 Four fragments of fired clay were recovered from this context including a piece of loom weight dated to the prehistoric period (Jarrett pers comm.).

8.4 Phase 3/4

8.4.1 Towards the south of the trench a layer [13] of firm mid brown sandy clay with occasional sub-rounded flint pebbles was encountered. It was sealing the natural [10] and was interpreted as a possible flood deposit although not part of the upper alluvial sequence encountered elsewhere on the site. The presence of a sherd of Roman pottery and a few flakes of struck flint suggested that the deposit was Roman or later in date, representing a later inundation of the area.

8.4.2 The four flint flakes recovered were dated to the Late Neolithic / Early Bronze Age (Appendix 2).

8.4.3 The fragment of Roman pottery recovered from this context was a rim sherd from a Roman-British jar dated to the 1st-2nd century AD (Appendix 1).

8.5 Phase 5

8.5.1 The trench was sealed with a layer of coarse gravel and rubble which was capped with reinforced concrete.

Trench 2 (Figure 8)

8.6 Phase 1

8.6.1 The earliest deposit [17] encountered in this trench was a firm greyish yellow silty sandy clay with occasional sub angular stones. This layer was interpreted as natural brick earth and was recorded at 1.23m OD.

8.7 Phase 4/5

8.7.1 Sealing the natural deposit was a layer [16] of firm greyish yellow silty sandy clay with occasional sub-angular stones and moderate fragments of concrete fragments and hydro-carbon staining. The layer was encountered at 1.30m OD. The deposit was similar in some ways to the natural brick earth [17] but had an appearance of being re-worked and so was interpreted as a redeposited natural, possibly used as a levelling layer.

8.8 Phase 5

8.8.1 The trench was sealed with a layer of coarse gravel and rubble this in turn was capped with a layer of reinforced concrete.

Trench 3 (Figure 2)

8.9 Phase 1

8.9.1 Natural terrace gravels [4] were observed at 0.89m OD.

8.10 Phase 5

8.10.1 The gravels were capped by a layer [3] of loose light mid brownish grey silty sand with fragments of tarmac and CBM which represented the modern made-ground. This layer was 1.30m thick and was seen at 1.97m OD. The top of the gravel had clearly been truncated during the construction of the overburden. There was no evidence for any brickearth capping, and the top of the gravel had been scoured during the construction of the modern car park.

8.10.2 The trench was sealed with 0.40m of gravel hogging and thick tarmac.

Trench 4 (Figure 2)

8.11 Phase 1

8.11.1 Natural terrace gravels [2] were observed at 2.06m OD.

8.12 Phase 5

8.12.1 The gravels were capped by a layer [1] of loose mid-light brownish grey silty sand with fragments of tarmac and CBM which represents the modern-ground. This layer was 0.22m thick and was seen at 2.26m OD. The gravel had clearly been truncated by the construction of the modern made ground. There was no evidence of the brickearth capping and the top of the gravel had been scoured and impacted during the construction of the car park.

8.12.2 The trench was sealed with 0.40m of gravel hogging and thick tarmac

Trench 5 (Section , Figure)

8.13 Phase 1

8.13.1 Natural terrace gravels [6] were observed at 2.00m OD in the base of the trench.

8.14 Phase 5

8.14.1 The gravels were sealed by a layer of [7] friable dark brownish grey gravelly sand which represented a layer of made-ground. This layer was 0.10m thick and was seen at 2.07m OD.

8.14.2 This layer was capped by further made ground deposits [5] which consisted of a loose mid-light brownish grey silty sand with fragments of tarmac and brick. This layer was 0.25m thick and was seen at 2.32m OD. Again, the top of the gravel had clearly been truncated by the construction of the overburden.

8.14.3 The trench was covered with gravel hogging and thick tarmac that was 0.40m in thickness.

Trench 6 (Figure 2)

8.15 Phase 1

8.15.1 Natural terrace gravels [9] were seen in the base of the trench at 1.22m OD.

8.16 Phase 5

8.16.1 The gravels were sealed by a 0.70m thick layer of mid-light brownish grey silty sand with occasional CBM and flecks of tarmac. This layer represented a sequence of dumped made ground seen across the site. This layer was seen at 1.85m OD. The construction of this bedding layer for the car park surface had truncated the top of the gravel.

8.16.2 The trench was sealed with 0.10m of gravel hogging and capped with a thick layer of tarmac 0.40m in thickness.

Trench 7 (Figure 2)

8.17 Phase 1

8.17.1 Natural terrace gravels [21] were seen in the base at the eastern end of the trench. They were encountered at 0.81m OD.

8.17.2 Natural gravels [51] were also encountered towards the west of the trench at a deeper level of -0.42m OD. The gravel had been truncated throughout the trench by the construction of the modern car park.

8.17.3 Layers of mixed natural deposits [49] and [50] were also encountered in this trench. They consisted of soft to firm mid to light yellow brown sand clay and gravel. They were recorded at between 0.46m OD and 0.08m OD.

8.17.4 In the middle of the trench a layer of natural brick earth was recorded. It was a firm mid orangey brown sandy clay with occasional flint pebbles and was encountered at 0.78m OD.

8.18 Phase 2

8.18.1 Sealing the natural deposits on the eastern side of the trench was a layer [19] of firm greenish grey clay. It was interpreted as an alluvial deposit and was encountered at 0.67m OD.

8.19 Phase 4

8.19.1 In the western end of the trench a slightly different alluvial deposit [20] was encountered. It was a firm reddish yellow clay sandy gravel and was encountered at 0.75m OD.

8.20 Phase 5

8.20.1 The alluvium and gravel was sealed by a layer of modern made ground which was contaminated and contained a large amount of modern material (car tyres etc). this in turn was sealed by tarmac and hogging. The construction of the car park surface had truncated the top of the gravel and alluvium.

Trench 8 (Figure 2)

8.21 Phase 1

8.21.1 Natural terrace gravels [36] were seen in the base of a geo-archaeological hole in the western end of the trench. This deposit was seen at -3.45m OD.

8.22 Phase 2

8.22.1 Sealing the gravel was a layer [35] of light-mid brown clay which represented a lower alluvium

flood deposit. This layer was 1.30m in thickness and was seen at -2.15m OD.

8.22.2 Above this alluvial deposit was layer [34] of friable dark brown organic material described as a peat horizon. This layer was 0.40m thick and was seen at -1.85m OD.

8.22.3 Sealing this peat layer was another alluvial layer [18] of stiff blueish grey clay which represented the upper alluvium. This layer was 1.90m thick and was seen at 0.22m OD.

8.23 Phase 5

8.23.1 Modern levelling and rubble deposits capped with tarmac sealed the trench.

Trench 9 (Figure 2)

8.24 Phase 1

8.24.1 A light yellowish brown sandy clay deposit [39] with gravel inclusions was noted in the base of the geo-archaeological trial hole at the southern end of the trench. It was recorded at -3.23m OD.

8.25 Phase 2

8.25.1 Sealing the sandy deposit was a layer [38] of light-mid brown clay which represented a lower alluvium deposit. This layer was seen at -2.93m OD and was 0.30m thick.

8.25.2 Above this alluvium, a thin layer of peat [37] was recorded. It consisted of a friable dark brown silt with a high organic content and some recognisable organic elements – twigs, fragments of wood etc. This layer was between 0.30m-0.40m in thickness and was seen at -2.63m OD.

8.25.3 Sealing this peat deposit was another alluvial layer [22] which was a firm greenish grey clay that represented the upper alluvial sequence. This deposit was 3.25m in thickness and was seen at 0.43m OD.

8.26 Phase 5

8.26.1 The alluvium was covered by a series of dumped deposits which formed the modern made-ground and was capped with thick tarmac.

Trench 10 (Figure 2)

8.27 Phase 1

8.27.1 Natural terrace gravel [24] was seen in the base of the northern end of the trench at 0.90m OD. The gravel in this trench seemed to be located towards the top of the terrace before falling way to the south.

8.27.2 Natural deposits seen at the southern end of the trench, sealing the gravel [24], consisted of a light sandy clay [42] with gravel inclusions. This deposit was seen towards the base of a geo-archaeological trial hole at the southern end of the trench at -4.08m OD.

8.28 Phase 2

8.28.1 Sealing these natural deposits was a mid brown clay deposit [41] which formed part of the lower alluvial sequence recorded in the geo-archaeological trial hole. This deposit was 0.70m thick and was seen at -3.38m OD.

8.28.2 A layer of peat [40] sealed the lower alluvial deposit. The layer was 0.40m in thickness and was seen at -2.98m OD.

8.28.3 Sealing this layer of peat was a layer [23] of firm greenish grey clay with lenses of sand which formed the upper alluvial sequence. This deposit was 3.00m thick and had a highest level of 0.54m OD.

8.29 Phase 5

8.29.1 The alluvial sequence was covered by a series of dump deposits which formed the modern made-ground and was capped with tarmac.

Trench 11 (Figure 2)

8.30 Phase 1

8.30.1 Natural terrace gravel [26] was seen in the base of the trench sloping from north-west to the south-east corner of the trench. It was noted at 1.39m OD, falling to 1.24m OD.

8.31 Phase 2

8.31.1 Sealing the gravels towards the south-east corner of the trench a layer of alluvium [25] was identified. It was a firm greenish grey slightly sandy clay deposit. The layer was seen at 1.91m OD.

8.32 Phase 5

8.32.1 The trench was filled with 1.0m of modern backfill deposits covered with tarmac. The construction of the car park had truncated the top of the natural deposits.

Trench 12 (Figure 2)

8.33 Phase 2

8.33.1 The earliest deposit identified in this trench was an organic rich layer [43] which had large fragments of identifiable wood remains. It was interpreted as a peat horizon and was seen at -1.97m OD in the base of a geo-archaeological trial hole in the western end of the trench.

8.33.2 Sealing the peat was a thick layer of alluvium [27] which was a firm greenish grey clay. It was 2.40m thick and was seen at 0.13m OD.

8.34 Phase 5

8.34.1 The trench was sealed with a thick dump deposit and covered in tarmac.

Trench 13 (Figure 2)

8.35 Phase 2

8.35.1 An organic rich deposit [44] was the earliest deposit identified in this trench. It was a soft dark brown organic silt with fragments of wood and twigs. It was interpreted as a peat horizon and was seen at -2.05m OD in the base of a geo-archaeological trial hole in the eastern end of the trench.

8.35.2 A thick layer of alluvial clay [28] sealed this layer of peat and was described as a firm blueish grey clay with occasional flint pebbles. It was 2.25m in thickness and was observed at 0.35m OD.

8.36 Phase 5

8.36.1 The trench was sealed by modern made-ground and tarmac.

Trench 14 (Figure 2)

8.37 Phase 2

8.37.1 The earliest deposit identified in this trench was a layer of alluvium [30]. The layer comprised a firm grey clay deposit and was identified in the base of the trench at 0.25m OD.

8.37.2 At the western end of the trench a slightly unusual mixture of peat and a large piece of timber were identified in the geo-archaeological trial hole. The timber itself [52] was a substantial piece of oak with extremely good preservation. Its full length is unknown but it was greater than 0.60m in length, its width was between 0.30m-0.40m and it was observed at -0.90m OD. Its full extent is unknown as it continued beyond the limit of excavation in the geo-archaeological trial hole. At this stage, it is difficult to say if this piece of timber is placed by human activity or if it represented a fallen tree.

8.37.3 To the east of this timber a layer of peat [53] was identified. It was a soft friable dark brown

organic sandy silt. The peat layer was seen at -0.90m OD.

8.37.4 To the west of the timber a layer of peat which was different to [53] was identified. This was layer [54] a soft dark brown organic deposit with large pieces of identifiable wood and twigs. It was identified at -0.90m OD.

8.37.5 Sealing the peat and timber in the western end of the trench was a slightly different alluvial deposit to [30. The layer was firm reddish brown clay [29]. It was interpreted as an alluvial deposit but one formed slightly differently, maybe later than the prehistoric period by the flooding of the River Beam to the east of the trench. The layer was identified at 0.39m OD.

8.38 Phase 5

8.38.1 The trench was sealed by 1.02m of modern made-ground and tarmac.

Trench 15 (Figures 2 and 8)

8.39 Phase 1

8.39.1 The earliest deposit encountered in this trench was a layer of brick-earth [31]. The layer was a firm mid orange brown deposit and was identified in the base of the trench at 1.20m OD

8.39.2 Sealing this layer was another natural deposit [32] of firm light brown to light orange brown sandy clay. It was encountered at 1.32m OD and was interpreted as a natural deposit with a similar appearance to [31] but was lighter in colour. The layer was interpreted as possibly some kind of early sub-soil.

8.40 Phase 4/5?

8.40.1 Sealing these natural deposits was a layer [33] of firm dark to mid brown clay which was encountered 1.33m OD. It was similar in some ways to the natural deposit but was darker in appearance and so seems to be most likely to have been redeposited and used as a possible levelling layer.

8.41 Phase 5

8.41.1 The trench was sealed with a layer of coarse gravel and rubble which was capped with reinforced concrete.

9 CONCLUSIONS

9.1 The archaeological work encountered terrace gravels in Trench 3, Trench 4, Trench 5, Trench 6, Trench 7 and Trench 11 at levels of 0.89m OD (Trench 3), 2.06m OD (Trench 4), 2.00m OD (Trench 5), 1.22m OD (Trench 6), 0.81m OD (Trench 7) and 1.39m OD (Trench 11). The height variation suggests a gravel ridge with a highest point in (Trench 4) dropping towards the south-west, which is what was expected prior to investigations. A similar high ridge of gravel with a drop to the south-west was noted during the geo-archaeological bore-hole exercise and subsequent deposit model (Figure 3, QUEST Appendix 7).

9.2 Further to the east in the extreme north-east of the site, natural deposits of orange brown clay brick-earth were present in Trench 1, Trench 2 and the additional Trench 15 at levels of 1.23m OD (Trench 2), 1.17m OD (Trench 1) and 1.20m OD (Trench 15). These brick-earth deposits suggest the forming of an area of high dry ground in the extreme north-east corner of the site. This is a slight variation of the bore-hole exercise which suggested that the deposits encountered at this level would be alluvium. This evaluation exercise has demonstrated that natural brick-earth deposits survive at this level, therefore in this part of the site there is a higher potential for archaeological features to be present. The brick earth deposits were directly below the concrete overburden however, which indicated that the construction of the industrial factory has caused some horizontal truncation (Figure 8).

9.3 Alluvium or alluvial type deposits were recorded in Trench 8, Trench 9, Trench 10, Trench 11, Trench 12, Trench 13 and Trench 14. Lower alluvium was identified in Trench 8, Trench 9 and Trench 10. Peat deposits were identified in Trench 8, Trench 9, Trench 10, Trench 12, Trench 13 and Trench 14. The upper alluvial sequence was present in Trench 8, Trench 9, Trench 10, Trench 12, Trench 13 and Trench 14.

9.4 The peat deposits in Trench 14 are worth noting as they were different in nature but also seemed to be separated by a large piece of timber. At this stage, it is difficult to assess whether this timber was placed by human activity or natural processes.

9.5 Prehistoric features and artefacts were recorded and collected from Trench 1, cutting the natural brick-earth. Two east-west linear features were excavated and recorded. Flakes of worked flint, including two scrapers, a few sherds of pottery and a few fragments of fired clay were recovered from the these features. The nature of these linear cuts would suggest that they are more likely to be boundary features as no associated hearths or post-holes were identified to suggest evidence of domestic use with an associated structure.

9.6 Prehistoric features have been identified very close by in an evaluation and subsequent excavation on the Mardyke Estate (PCA report forthcoming) where several prehistoric pits, post-holes and ditches were excavated. Prehistoric features including pits, post-holes and agricultural features at nearby Spencer Road (Buczak 2016) and a substantial number of prehistoric features; including a burnt mound at Manser Road (Compass 2004).

9.7 One sherd of Roman pottery was recovered from Trench 1 but as there were no associated cut features or deposits it is thought that this find is residual.

9.8 Evidence of flood deposits formed in the medieval/post-medieval were encountered in Trench 1 and Trench 7. The nature of the deposit in Trench 7 and its proximity to the River Beam suggest that it originated from the flooding of this particular watercourse. It is presumed that the seasonal flooding of the Beam in this area would have led to formation of this deposit rather than being derived from the Thames and part of the associated floodplain. The source of the flood deposit in Trench 1 is harder to define. It sealed the natural brick-earth in the southern end of the trench but it contained some residual Roman Pottery and some flakes of worked flint. It was originally thought to be a Roman or later flood deposit from the edge of the marsh but it doesn't seem substantial enough to fit this interpretation. We know that it was a wetland environment right up until the early 20th Century so its source might be from the Thames or the nearby Gores Brook to the east, or alternatively it may represent a seasonal pond or other more temporary water feature.

9.9 There was an absence of capping Brickearth in the higher terrace trenches (excluding the

north eastern zone east of Marsh Way) suggesting some truncation of the natural, probably when the made ground was emplaced. This interpretation may be supported by an absence of former topsoil at the base of the made ground deposits and by the absence of archaeological remains within these trenches. The top of the gravel was also undulating due to truncation in some of the trenches. Some gravel may have been locally extracted prior to the placement of the made ground. The absence of brickearth between Marsh Way and the Beam Valley may also indicate extraction, which may explain the absence of archaeology there.

9.10 Foundations from the Victor Engineering Works that were in the north-east corner of the site were seen in Trench 1, Trench 2 and Trench 15 (Figure 8). The post depositional impact from these foundations caused the highest level of truncation in Trench 2 and Trench 15. Where truncation was less, mainly in Trench 1, the survival of intact brick-earth was relatively good and the chance of encountering further archaeological features is high. Further post-depositional impact has been visible across the rest of the site and was encountered in all the trenches to some degree or another. This took the form of buried services or the landscaping and deliberate dumping of material to consolidate the ground before the laying of tarmac. This area was then used by the Ford Motor Company to store manufactured vehicles before export during the 20th Century.

10 BIBLIOGRAPHY

10.1 Printed Sources

Batchelor, C. R. & Young, D. S. 2017. *Beam Park Riverside (Phase 1 Surcharging) London Boroughs of Havering and Barking & Dagenham: desk-based geoarchaeological deposit model report*. Quaternary Scientific (QUEST) unpublished report

Buczak, M. 2016. *Land at Spencer Works, Spencer Road, Rainham, Essex, Assessment of An Archaeological Excavation*. PCA unpublished client report

Compass Archaeology. 2004. *Former Manser Works 137-139 New Road Rainham Essex London Borough of Havering. Interim Archaeological Post-Excavation Assessment*. upublished client report

Hawkins, H. 2017. Beam Park Riverside Phases 1 and 2, *London Borough of Barking and Dagenham & London Borough of Havering, Written Scheme of Investigation for Archaeological Evaluation*. PCA unpublished client report.

RPS, 2017. *Beam Park Riverside, Havering / Barking & Dagenham, TQ 50021 82962, An Historic Environment Desk Based Assessment*. unpublished client report

11 ACKNOWLEDGEMENTS

11.1.1 Pre-Construct Archaeology would like to thank Rob Masefield of RPS for commissioning and funding this investigation on behalf of Countryside Properties. Thanks are also extended to Mike French from Countryside Properties for his help during the fieldwork.

11.1.2 Pre-Construct Archaeology would like to thank Adam Single of Historic England for monitoring the work on behalf of the London Boroughs of Barking, Dagenham and Havering, and Rob Batchelor of QUEST for his geo-archaeological advice and site work.

11.1.3 The author would like to thank Alistair Douglas and James Langthorne for supervising the works in my absence. Thanks to Tanya Jones, Corso Domenici, Guy Seddon, Faye Slater, Chloe Sinclair for their work on site. Thanks are given to Richard Archer for the surveying, and Hayley Baxter for the illustrations.

11.1.4 Special thanks are given to Helen Hawkins for her project management and the editing of this report.

APPENDIX 1: POTTERY REPORT

Mike Seager Thomas

The early pottery assemblage consisted of five sherds, four in a medium to coarse flint tempered fabric (context 11), and one in a hard sandy fabric (context 12). The four flint tempered sherds closely resemble pottery belong to the LBA/EIA post Deverel-Rimbury tradition, but are of a type associated with several different prehistoric pottery traditions locally and, owing to the absence of other chrono-typologically diagnostic features, cannot be dated with certainty. Most likely they were fragmented from a single sherd on excavation. The sandy sherd comes from the rim of a globular, closed-mouth jar of earlier Romano-British date (1st–2nd century AD). Except as evidence of date, the present assemblage is too small to be of any interpretative value.

APPENDIX 2: FLINT REPORT

Dr Barry Bishop

Context [11] produced 4 struck flints:

- Side-and end scraper of translucent dark grey flint in a slightly chipped condition. Has medium, steep scalar retouch around its convex distal end and along its straight left lateral margin. 31mm long by 19mm wide by 7mm thick.

- End scraper of translucent dark grey flint in a slightly chipped condition. It has fine to medium, steep scalar retouch around its slightly sinuous distal end. 27mm long by 25mm wide by 7mm thick.

- Flake of translucent mid brown flint in good condition

- Flake fragment of mottled dark grey flint which has been slightly burnt.

Context [13] also produced 4 struck flints:

- Edge trimmed flake of semi-opaque light brown flint in a slightly chipped condition. It has fine, steep edge retouch around its convex left lateral margin and around its distal end. Possibly a minimally worked scraper. 32mm long by 38mm wide and is 10mm wide.

- Flake of semi-opaque mid grey flint in a slightly chipped condition. Narrow, thin and well struck. It measures 31mm long by 19mm wide and is 3mm wide.

- Distal end of a flake of mottled mid brown flint in a slightly chipped condition. > 36mm long by 26mm wide and 6mm thick.

- Decortication flake on mottled dark grey flint in a slightly chipped condition. 36mm long by 40mm wide and 14mm thick.

The flintwork from the two contexts is broadly technologically homogeneous and is the product of a competent flake based reduction system. No truly diagnostic pieces are present but overall it is most comparable to Later Neolithic or Early Bronze Age industries. The prevalence of retouched pieces, which provide three of the eight pieces, suggests tool use, possibly involving animal processing such as hides working, was an important aspects of the activities conducted there.

APPENDIX 3: CONTEXT INDEX

Site Code	Context No.	Trench	Plan	Section	Type	Description	Highest Level	Dimensions (N-S)	Dimensions (E-W)	Thickness /Depth	Photos	Phase	Spot Date
THV17	1	4	Tr. 4	1	Layer	Made-Ground	2.26m OD	2m	20m	0.22m	D1	5	N/A
THV17	2	4	Tr. 4	1	Layer	Natural	2.06m OD	2m	20m	Unknown	D1	1	N/A
THV17	3	3	Tr. 3	2	Layer	Made-Ground	1.97m OD	2m	20m	1.3m	D1	5	N/A
THV17	4	3	Tr. 3	2	Layer	Natural Gravel	0.89m OD	2m	20m	Unknown	D1	1	N/A
THV17	5	5	Tr. 5	3	Layer	Made-Ground	2.32m OD	4.3m	23m	0.25m	D2	5	N/A
THV17	6	5	Tr. 5	3	Layer	Natural Gravel	2m OD	4.3m	23m	Unknown	D2	1	N/A
THV17	7	5	Tr. 5	3	Layer	Made-Ground	2.07m OD	4.3m	23m	0.10m	D2	5	N/A
THV17	8	6	Tr. 6	4	Layer	Made-Ground	1.85m OD	4.4m	22.5m	0.7m	D1	5	N/A
THV17	9	6	Tr. 6	4	Layer	Natural Gravel	1.22m OD	2m	20m	Unknown	D1	1	N/A
THV17	10	1	Tr. 1	5	Layer	Natural	1.17m OD	23m	4m	Unknown	D1	1	N/A
THV17	11	1	Tr. 1	5	Fill	Fill of Ditch [12]	1.13m OD	1.75m	4.5m	0.16m	D1	3	
THV17	12	1	Tr. 1	5	Cut	Cut of Ditch	1.13m OD	1.75m	4.5m	0.16m	D1	3	
THV17	13	1	Tr. 1	N/A	Layer	Alluvium	1.33m OD	5m	4.5m		D1	4	
THV17	14	1	Tr. 1	N/A	Fill	Fill of Ditch [15]	1.17m OD	0.96m	0.8m	0.16m	D1	3	
THV17	15	1	Tr. 1	N/A	Cut	Cut of Ditch	1.17m OD	3.00m	0.8m	0.16m	D1	3	

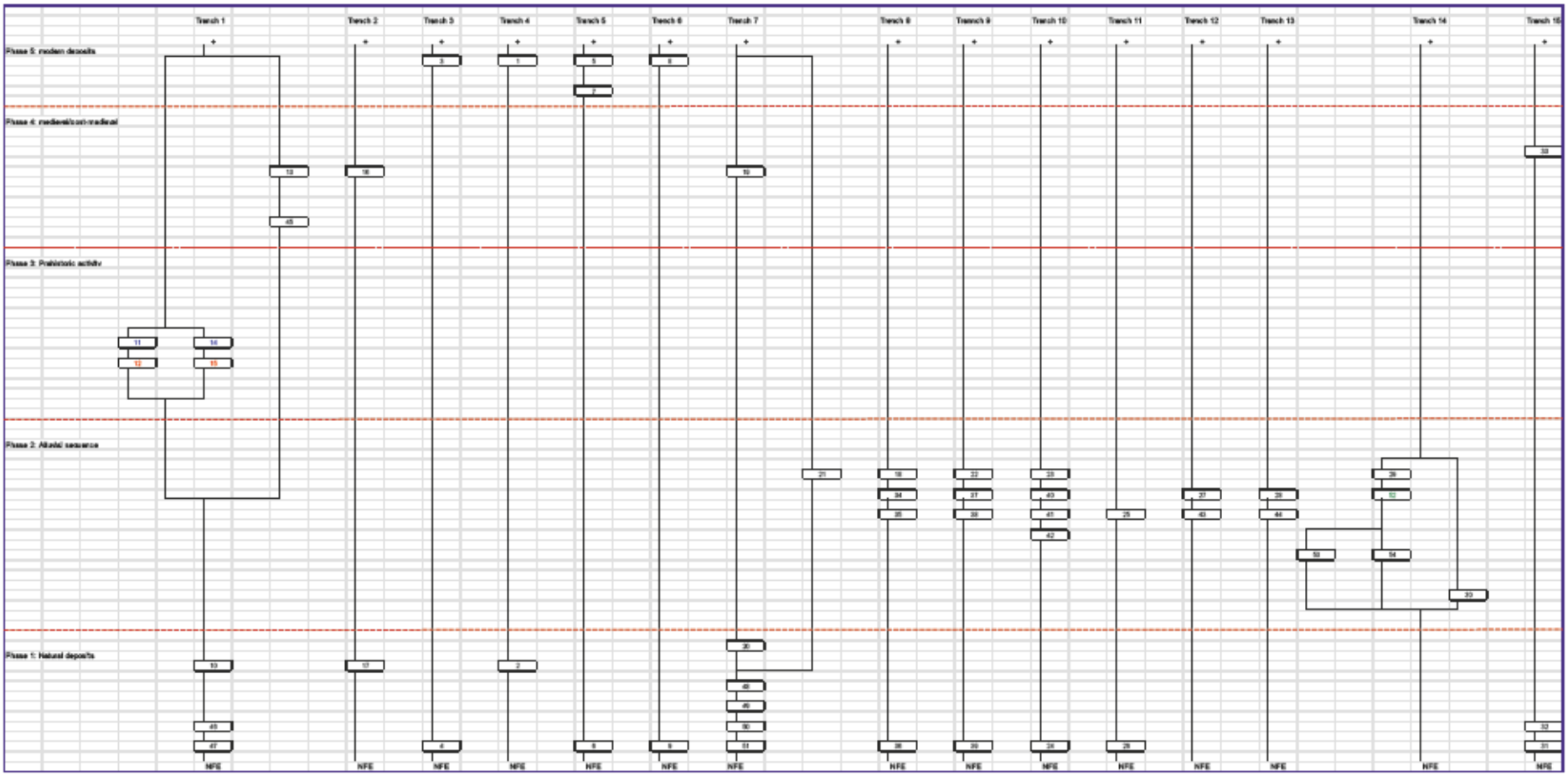
Site Code	Context No.	Trench	Plan	Section	Type	Description	Highest Level	Dimensions (N-S)	Dimensions (E-W)	Thickness /Depth	Photos	Phase	Spot Date
THV17	16	2	Tr. 2	N/A	Layer	Redeposited Natural	1.30m OD	7.1m	3m	Unknown	D1	4/5	N/A
THV17	17	2	Tr. 2	N/A	Layer	Brick-Earth	1.23m OD	3m	1.3	Unknown	D1	1	N/A
THV17	18	8	Tr. 8	6, 15	Layer	Alluvium	0.22m OD	2m	27.2m	1.9m	D3	2	N/A
THV17	19	7	Tr. 7	7	Layer	Alluvium	0.67m OD	1.2m	9.65m	Unknown	D3	4	N/A
THV17	20	7	Tr. 7	7	Layer	Gravel/Alluvium	0.75m OD	1.75m	5.4m	Unknown	D3	1	N/A
THV17	21	7	Tr.7	7	Layer	Natural Gravel	0.81m OD	1.75	4m	Unknown	D3	2	N/A
THV17	22	9	Tr. 9	8, 16	Layer	Alluvium	0.43m OD	27.3m	2.25m	3.25m	D3	2	N/A
THV17	23	10	Tr. 10	9, 17	Layer	Alluvium	0.54m OD	26.25m	2.13m	3.00m	D3	2	N/A
THV17	24	10	Tr. 10	9	Layer	Natural Gravel	0.90m OD	3.26m	2.25m	Unknown	D3	1	N/A
THV17	25	11	Tr. 11	N/A	Layer	Alluvium	1.91m OD	4.52m	10m	Unknown	D3	2	N/A
THV17	26	11	Tr. 11	10	Layer	Natural Gravel	1.39m OD	5m	42.5m	Unknown	D3	1	N/A
THV17	27	12	Tr. 12	11, 18	Layer	Alluvium	0.13m OD	2m	27.5m	2.40m	D3	2	N/A
THV17	28	13	Tr. 13	12, 19	Layer	Alluvium	0.35m OD	30m	4.75m	2.25m	D3	2	N/A
THV17	29	14	Tr. 14	13	Layer	Alluvium	0.39m OD	2m	5.5m	Unknown	D3	2	N/A

Site Code	Context No.	Trench	Plan	Section	Type	Description	Highest Level	Dimensions (N-S)	Dimensions (E-W)	Thickness /Depth	Photos	Phase	Spot Date
THV17	30	14	Tr. 14	13	Layer	Alluvium	0.25m OD	2m	2m	0.30m	D3	2	N/A
THV17	31	15	Tr. 15	N/A	Layer	Natural Brick-Earth	1.20m OD	7m	1.4m	Unknown	D3	1	N/A
THV17	32	15	Tr. 15	N/A	Layer	Natural	1.32m OD	32m	4.5m	Unknown	D3	1	N/A
THV17	33	15	Tr. 15	N/A	Layer	Redeposited clay	1.33m OD	16m	19m	Unknown	D3	4/5	N/A
THV17	34	8	N/A	15	Layer	Peat	-1.85m OD	30m	4.75m	0.40m	D3	2	N/A
THV17	35	8	N/A	15	Layer	Lower Alluvium	-2.15m OD	30m	4.75m	1.30m	D3	2	N/A
THV17	36	8	Tr. 8	15	Layer	Natural Gravel	-3.45m OD	30m	4.75m	Unknown	D3	1	N/A
THV17	37	9	N/A	16	Layer	Peat	-2.63m OD	30m	5.5m	0.30m	D3	2	N/A
THV17	38	9	N/A	16	Layer	Lower Alluvium	-2.93m OD	30m	5.5m	0.30m	D3	2	N/A
THV17	39	9	Tr. 9	16	Layer	Natural Sandy/Clay	-3.23m OD	30m	5.5m	Unknown	D3	1	N/A
THV17	40	10	N/A	17	Layer	Peat	-2.98m OD	34m	4.5m	0.40m	D3	2	N/A
THV17	41	10	N/A	17	Layer	Lower Alluvium	-3.38m	34m	4.5m	0.70m	D3	2	N/A

Site Code	Context No.	Trench	Plan	Section	Type	Description	Highest Level	Dimensions (N-S)	Dimensions (E-W)	Thickness /Depth	Photos	Phase	Spot Date
							OD						
THV17	42	10	Tr. 10	17	Layer	Natural Sandy/Clay	-4.08m OD	34m	4.5m	Unknown	D3	1	N/A
THV17	43	12	Tr. 12	18	Layer	Peat	-1.97m OD	30.5m	4.5m	Unknown	D3	2	N/A
THV17	44	13	Tr. 13	19	Layer	Peat	-2.05m OD	30.5m	4.5m	Unknown	D3	2	N/A
THV17	45	1	Tr. 1	20	Layer	Natural Sandy/Clay	1.13m OD	5.00m	2.00	0.10m	D3	4	N/A
THV17	46	1	N/A	20	Layer	Natural Layer	-0.07m OD	5.00m	2.00	0.30m	D3	1	N/A
THV17	47	1	Tr. 1	20	Layer	Natural Sandy Layer	-0.37m OD	5.00m	2.00	Unknown	D3	1	N/A
THV17	48	7	N/A	14	Layer	Natural Brick-Earth	0.78m OD	4.00m	2.80m	0.40m	D3	1	N/A
THV17	49	7	N/A	14	Layer	Mixed Natural	0.08m OD	4.00m	6.00m	0.80m	D3	2	N/A
THV17	50	7	N/A	14	Layer	Natural Clay/Sand	0.46m OD	4.00m	3.00m	Unknown	D3	1	N/A
THV17	51	7	N/A	14	Layer	Gravel	-0.42m OD	4.00m	6.00m	Unknown	D3	1	N/A
THV17	52	14	N/A	N/A	Timber	Large Piece of Wood	-0.90m OD	0.60m	0.30m	Unknown	D3	2	

Site Code	Context No.	Trench	Plan	Section	Type	Description	Highest Level	Dimensions (N-S)	Dimensions (E-W)	Thickness /Depth	Photos	Phase	Spot Date
THV17	53	14	N/A	N/A	Layer	Finer Peat Sediment	-0.90m OD	0.60m	0.30m	Unknown	D3	2	N/A
THV17	54	14	N/A	N/A	Layer	Organic Rich Peat	-0.90m OD	0.60m	1.00m	Unknown	D3	2	N/A

APPENDIX 4: SITE MATRIX



APPENDIX 5: OASIS REPORT FORM

OASIS ID: preconst1-285153

Project details

Project name	Beam Park Riverside
Short description of the project	This report details the results of an archaeological evaluation on land at Beam Park Riverside (Phase 1 and Phase 2), Thames Avenue, London Borough of Barking and Dagenham and London Borough of Havering, RM9 6DE. Fifteen trenches were excavated across the site. Natural deposits were noted in all of the trenches between 2.06m and -3.45m OD. The presence of terrace gravels was noted in nine of the trenches, located in the northern portion of the site away from the main Thames floodplain. The gravel dropped to the south-west and was not reached in the southern most trenches on the edge of the Thames floodplain. Towards the far north-eastern part of the site the natural comprised an orange sandy clay interpreted as natural brick-earth. A complex sequence of alluvial and peat deposits were encountered in eight of the trenches excavated. These trenches were targetted roughly in the south / south-west portion of the site to pick up the edge of the floodplain. Prehistoric pottery and worked flint were recovered from the fills of two linear features in Trench 1. Flood deposits thought to have formed in the medieval/post-medieval period were encountered in Trench 7 and Trench 1. The evaluation showed that the northeast of the site lay over terrace gravels towards the top of a ridge. In the far north-eastern corner of the site a dry area of land had formed. The alluvial deposits started to be encountered as the gravel fell away to the south and into the edge of the Thames flood plain.
Project dates	Start: 03-04-2017 End: 05-05-2017
Previous/future work	Yes / Yes
Any associated project reference codes	THV17 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Vacant Land 3 - Despoiled land (contaminated derelict and ?brownfield? sites)
Monument type	CUTS Bronze Age
Monument type	LAYERS Medieval
Monument type	LAYERS Post Medieval
Significant Finds	POTTERY Bronze Age
Significant Finds	WORKED FLINT Bronze Age

Project location

Country	England
Site location	GREATER LONDON HAVERING HAVERING Beam Park Riverside (Phase 1 and Phase 2)
Postcode	RM9 6DE
Study area	29 Hectares
Site coordinates	TQ 50021 82962 51.525110513926 0.162802918289 51 31 30 N 000 09 46 E Point
Height OD / Depth	Min: -4.08m Max: 2.06m

Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	RPS Planning

Project design originator	Rob Masefield
Project director/manager	Helen Hawkins
Project supervisor	Matt Edmonds
Type of sponsor/funding body	House builder
Name of sponsor/funding body	Countryside Properties

Project archives

Physical Archive recipient	LAARC
Physical Archive ID	THV17
Physical Contents	"Ceramics","Worked stone/lithics"
Digital Archive recipient	LAARC
Digital Archive ID	THV17
Digital Contents	"none"
Digital Media available	"Database","Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	LAARC
Paper Archive ID	THV17
Paper Contents	"none"
Paper Media available	"Context sheet","Diary","Drawing","Plan","Report","Section","Survey "

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Beam Park Riverside (Phase 1 and 2): An Archaeological Evaluation
Author(s)/Editor(s)	Edmonds, M.
Date	2017
Issuer or publisher	PCA
Place of issue or publication	London
Entered by	archive (archive@pre-construct.com)
Entered on	22-May-17

APPENDIX 6: PLATES

Plate 1: Trench 4 looking east

Plate 2: Trench 3 looking east

Plate 3: Trench 1 looking North

Plate 4: Trench 1 looking south

Plate 5: Trench 5 ditch [12] looking west

Plate 6: Trench 6 looking east

Plate 7: Trench 2 looking north

Plate 8: Trench 2 looking south

Plate 8: Trench 5 looking east

Plate 9: Trench 8 looking west

Plate 10: Trench 7 looking east

Plate 11: Trench 9 looking south

Plate 12: Trench 10 looking south

Plate 13: Trench 11 looking north-west

Plate 14: Trench 11 looking south-east

Plate 15: Trench 12 looking west

Plate 16: Trench 14 looking east

Plate 17: Trench 14 looking west

Plate 18: Trench 15 looking north

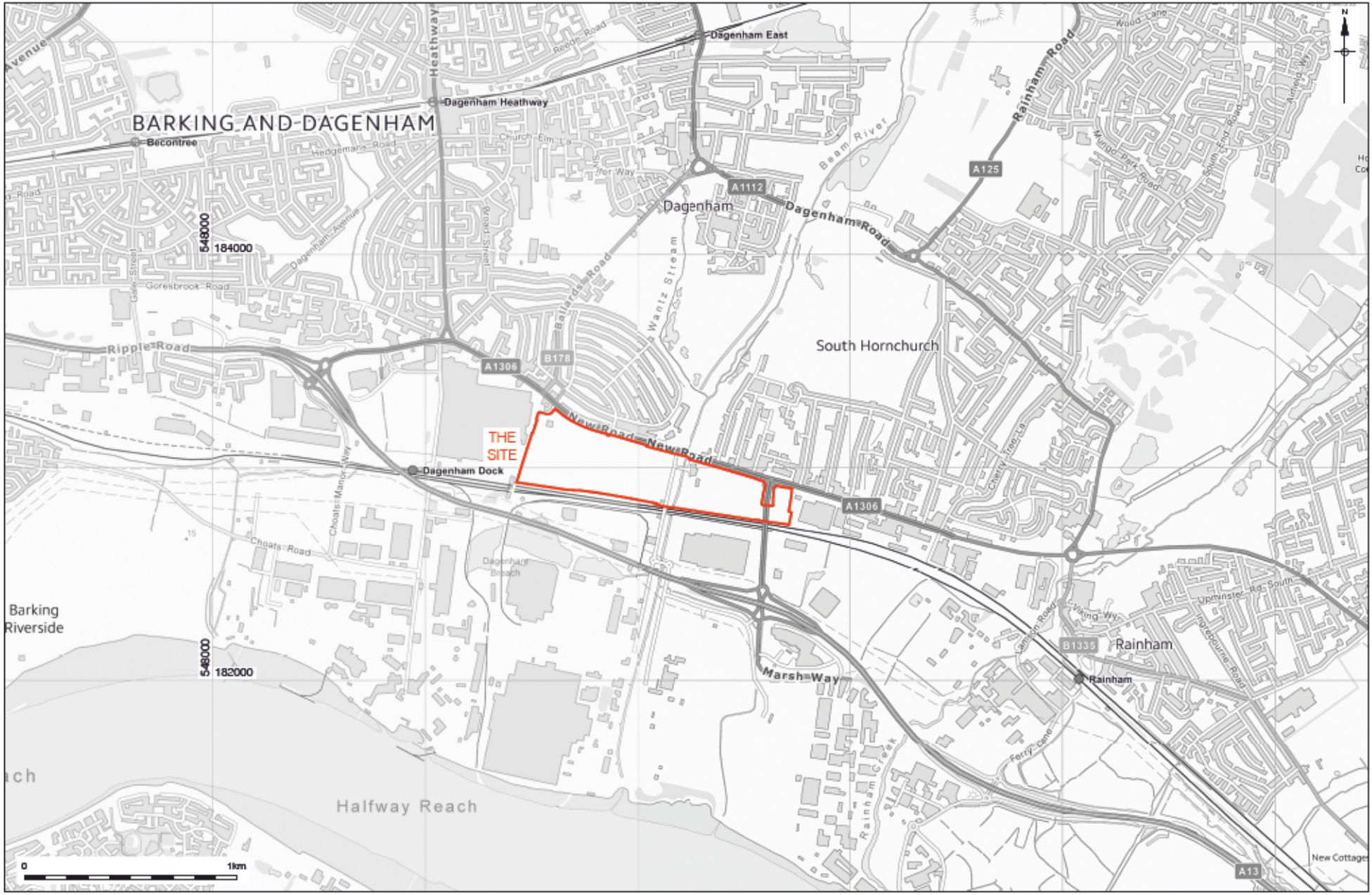
Plate 19: Trench 1 looking north

Plate 20: Trench 15 looking west

Plate 21: Trench 6 looking west

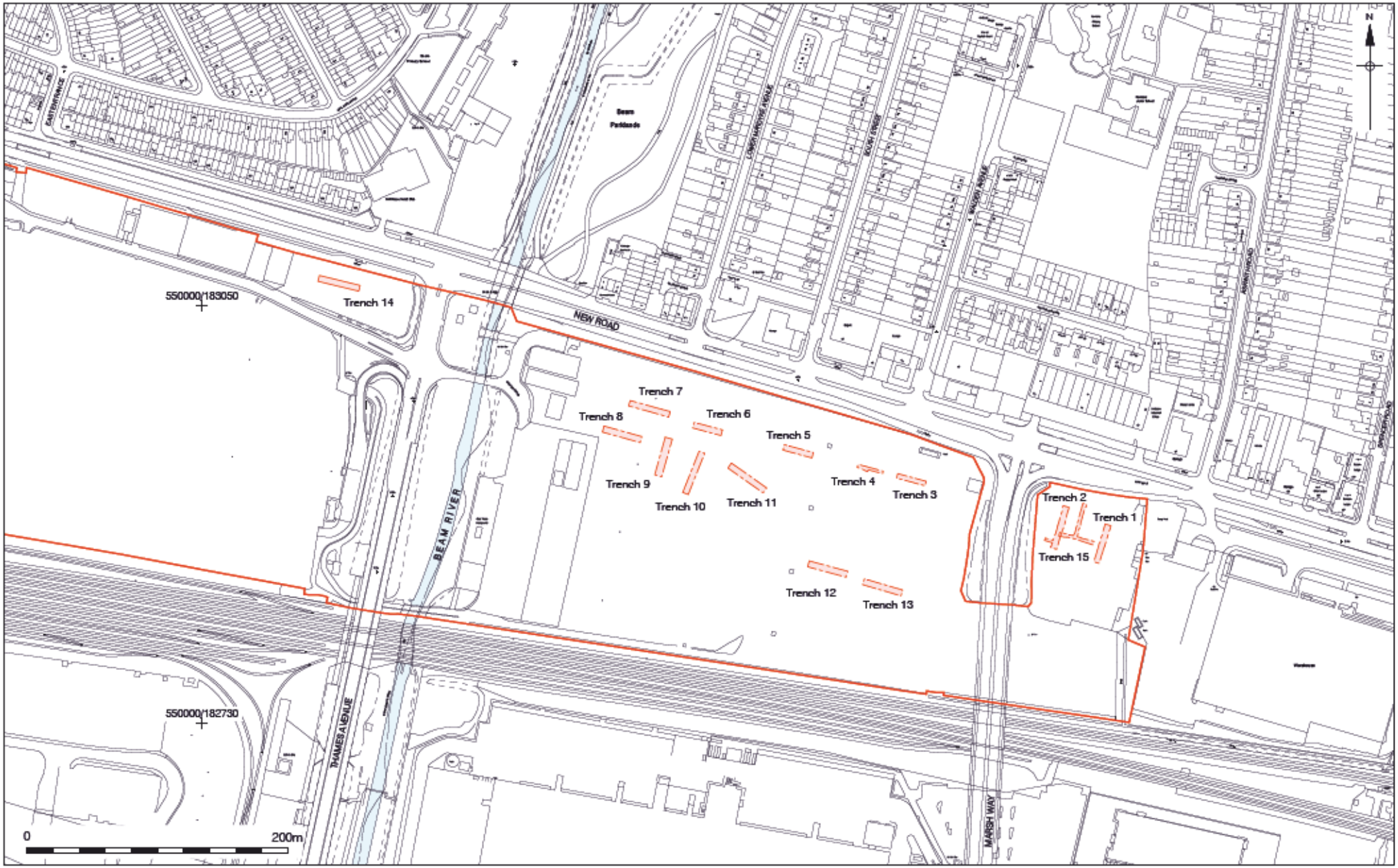
Plate 22: Trench 14 timber looking north

APPENDIX 7: QUEST GEO-ARCHAEOLOGICAL REPORT



18/05/17 HB

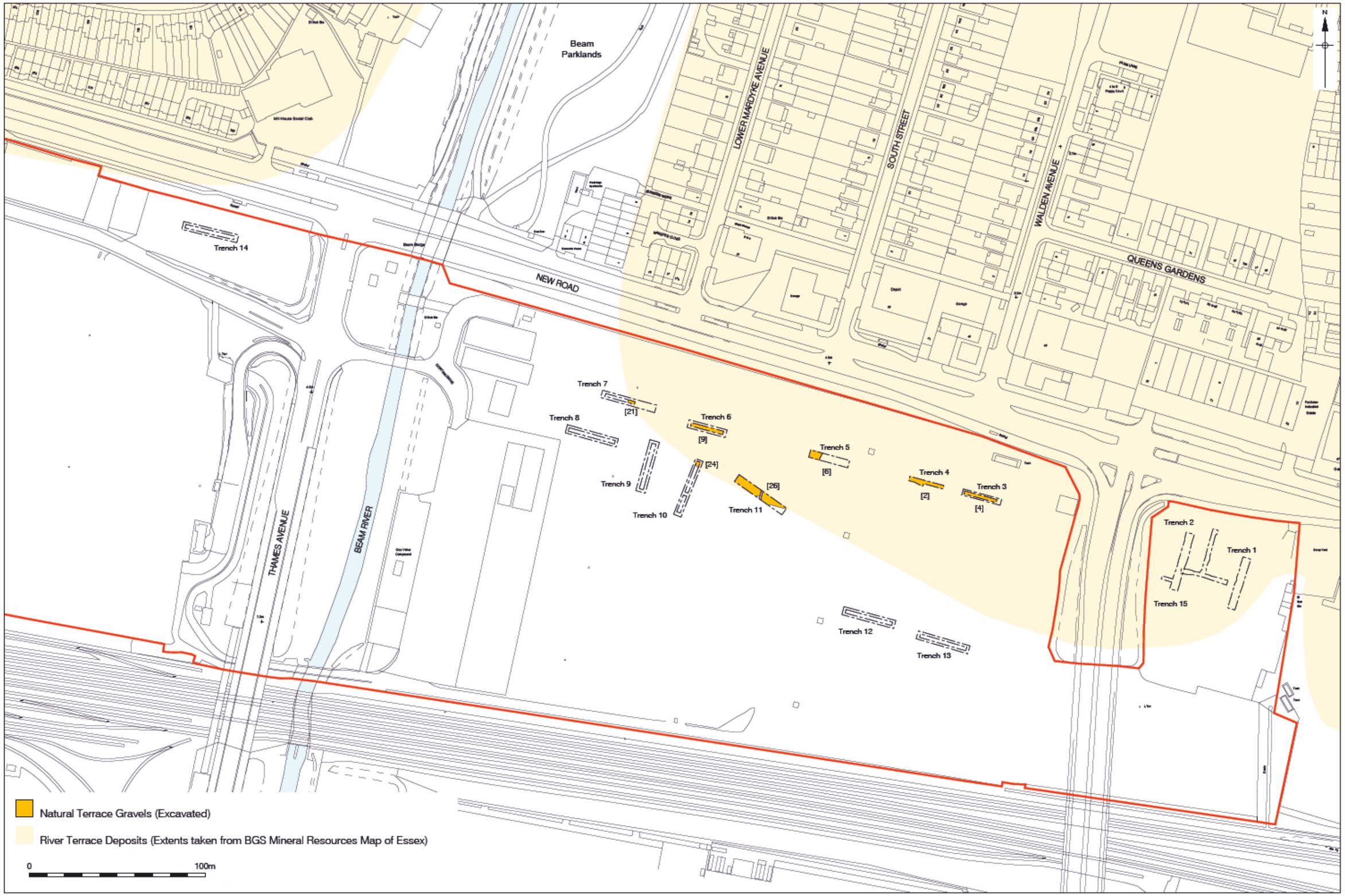
Figure 1
Site Location
1:25,000 at A4



Based on Survey data supplied by the client, 2017

22/05/17 HB

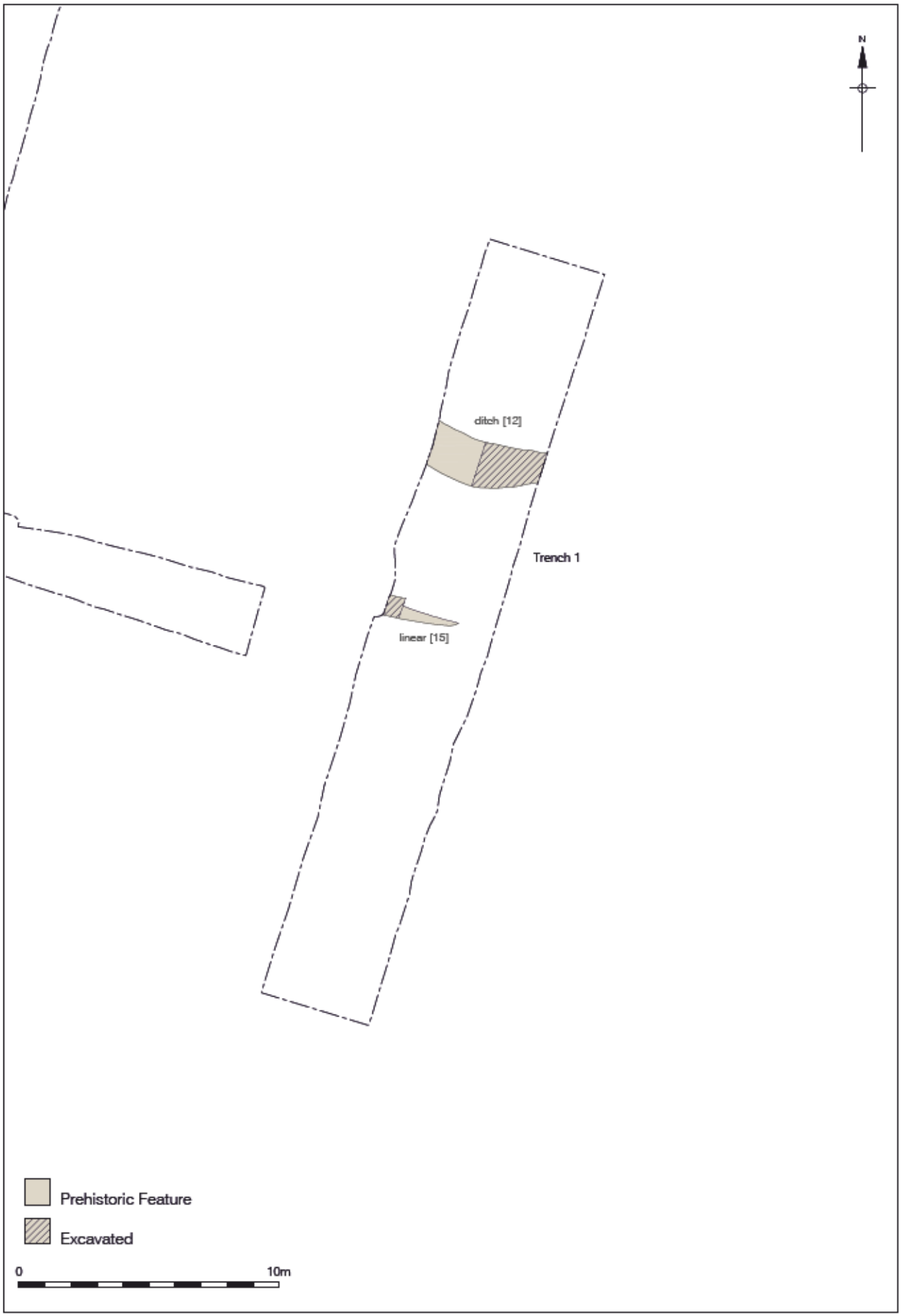
Figure 2
Trench Location
1:4,000 at A4



Based on Ordnance Survey data supplied by the client, 2017

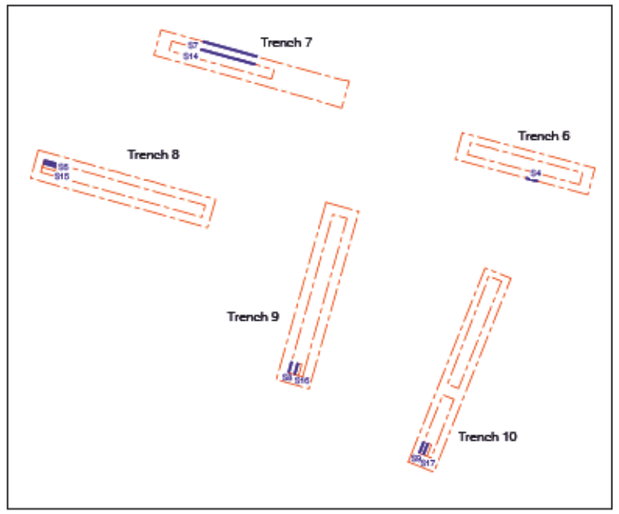
18/05/17 HB

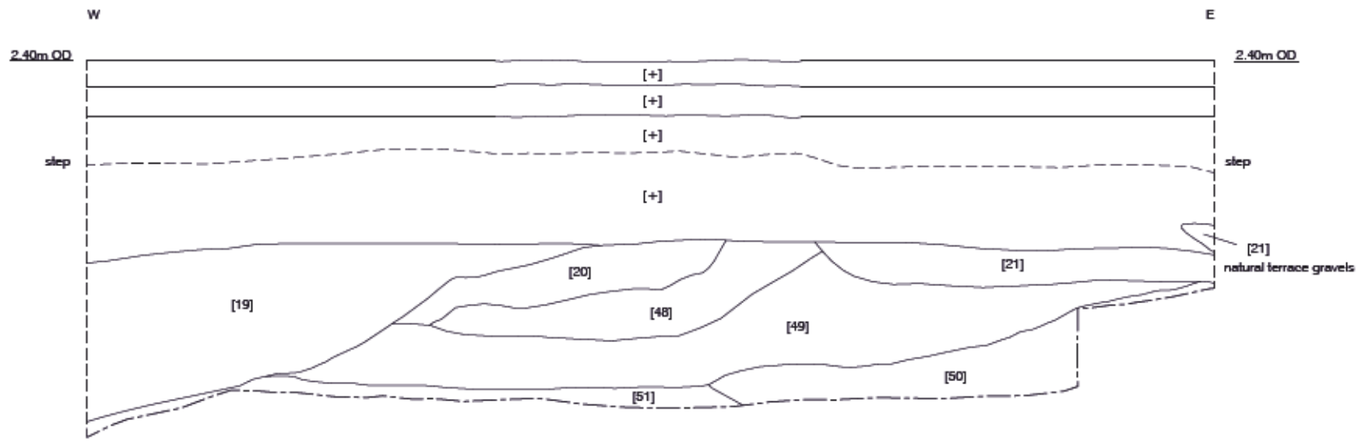
Figure 3
Trench Plan showing Natural Terrace Gravels
1:2,000 at A3



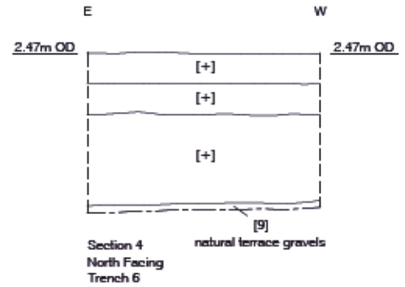
22/05/17 HB

Figure 4
Plan of Trench 1
1:200 at A4

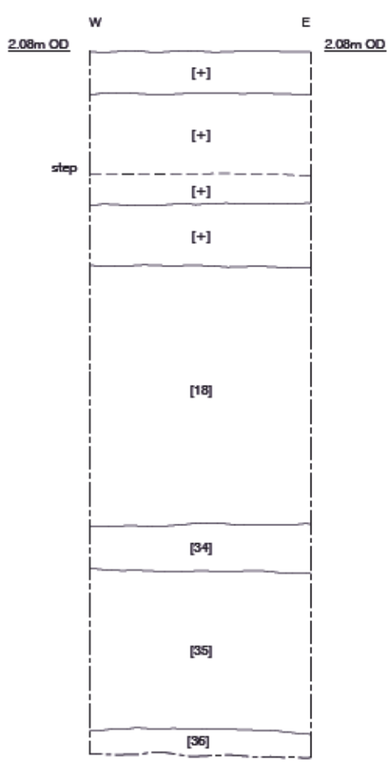




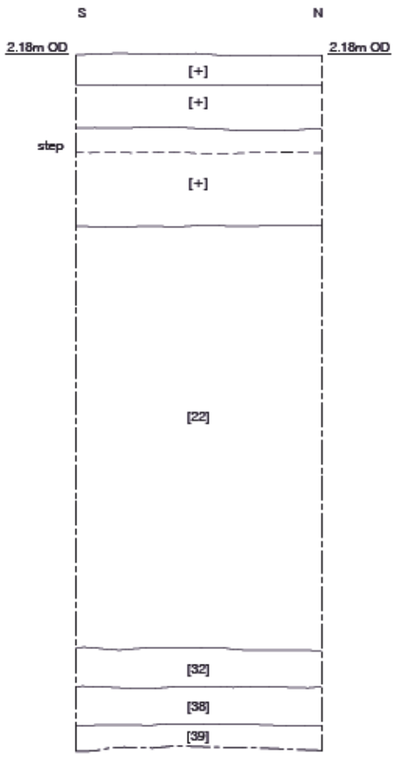
Sections 7 & 14
South Facing
Trench 7



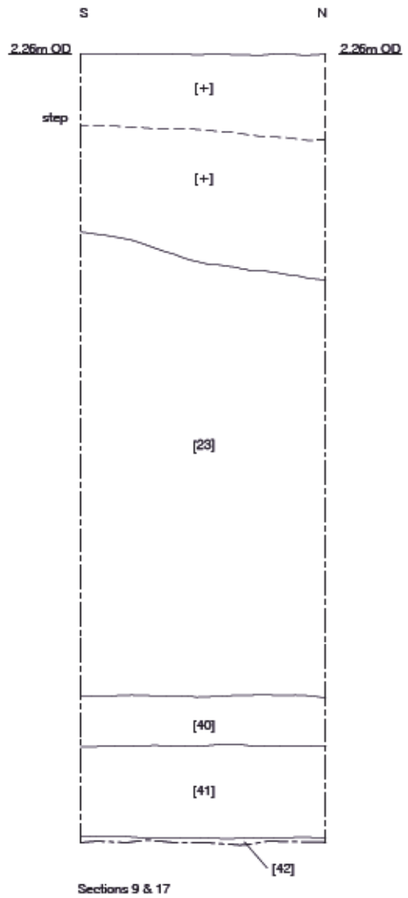
Section 4
North Facing
Trench 6



Sections 6 & 15
South Facing
Trench 8



Sections 8 & 16
East Facing
Trench 9

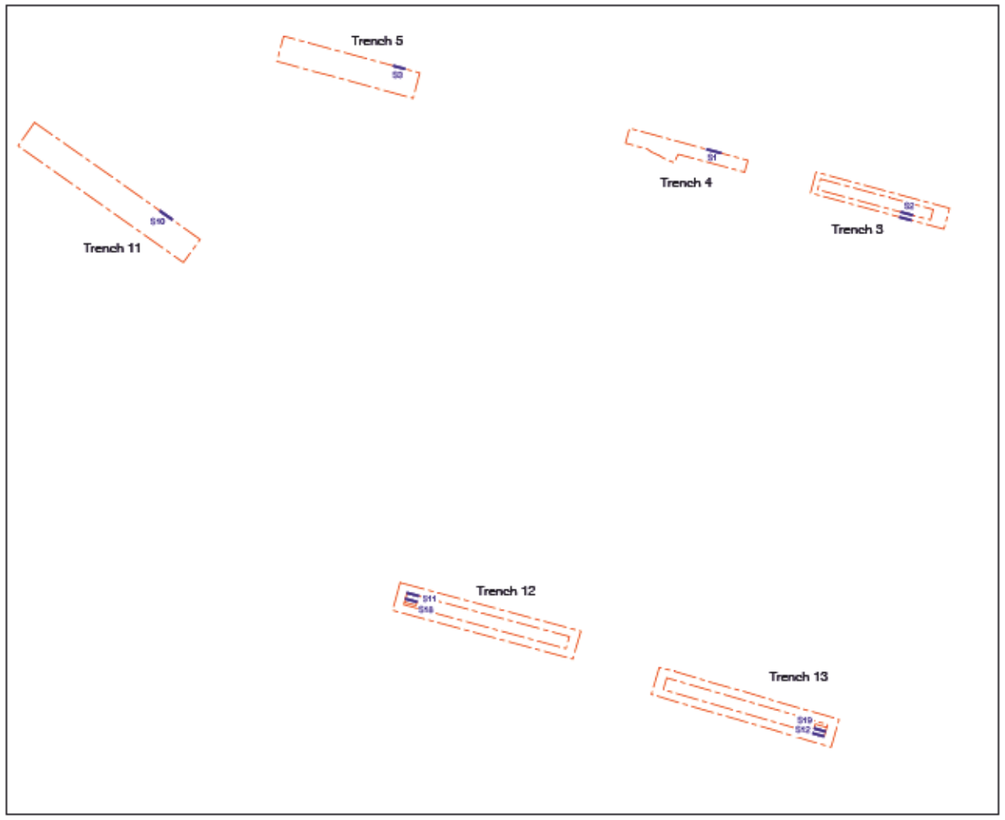


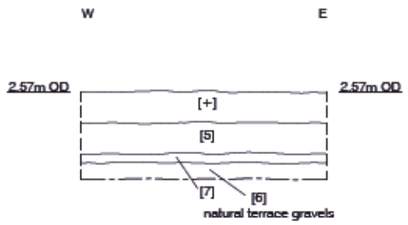
Sections 9 & 17
East Facing
Trench 10

0 2m

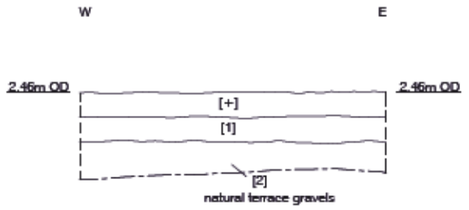
22/05/17 HB

Figure 5
Sections from Trenches 6-10
1:50 at A3

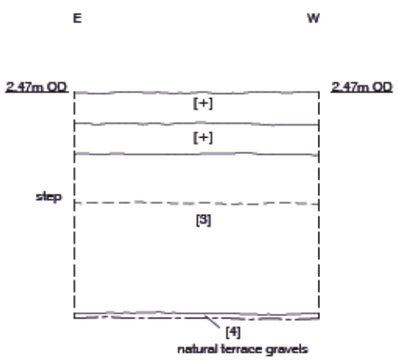




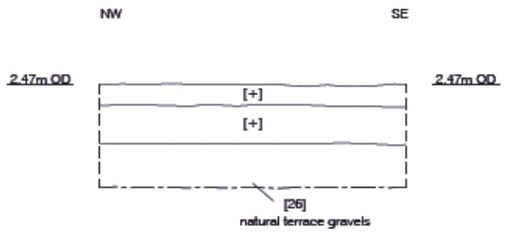
Section 3
South Facing
Trench 5



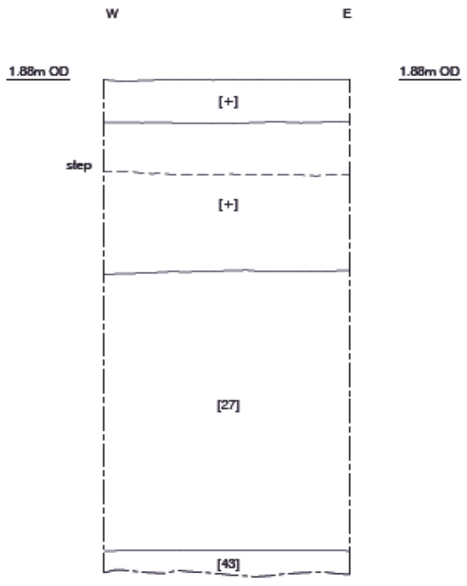
Section 1
South Facing
Trench 4



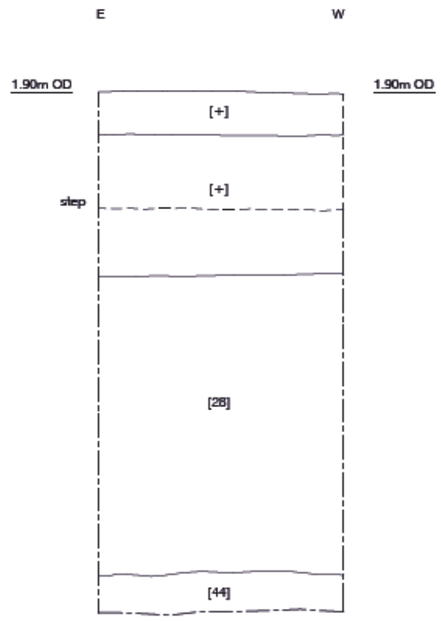
Section 2
North Facing
Trench 3



Section 10
Southwest Facing
Trench 11



Sections 11 & 18
South Facing
Trench 12

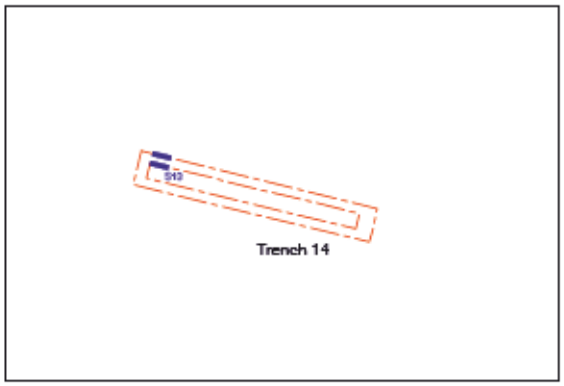


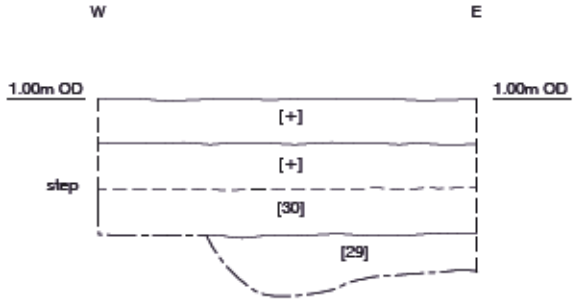
Sections 12 & 19
North Facing
Trench 13

0 2m

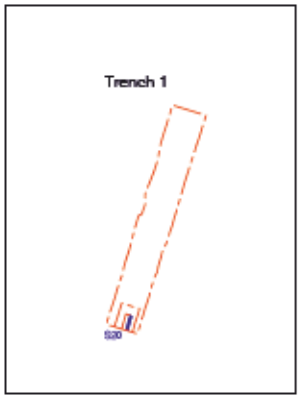
22/05/17 HB

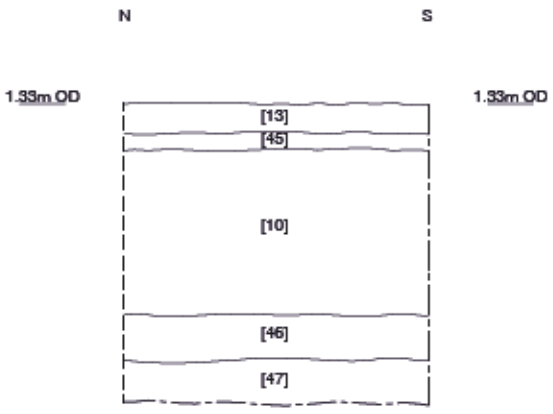
Figure 6
Sections from Trenches 3-5 & 11-13
1:50 at A3





Section 13
South Facing
Trench 14





Section 20
West Facing
Trench 1

0 2m

22/05/17 HB

Figure 7
Sections from Trenches 1 & 14
1:50 at A4

22/05/17 HB

Figure 8
Plan of Trenches 1, 2 & 15
1:625 at A4

P C A

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