LAND AT MORSON ROAD,
PONDERS END, LONDON
BOROUGH OF ENFIELD
EN3 4NQ: AN ARCHAEOLOGICAL

EVALUATION

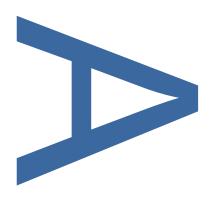




LOCAL PLANNING AUTHORITY: LONDON BOROUGH OF ENFIELD

SITE CODE: MRO17

JANUARY 2017



PRE-CONSTRUCT ARCHAEOLOGY

LAND AT MORSON ROAD, PONDERS END, LONDON BOROUGH OF ENFIELD

EN3 4NQ: AN ARCHAEOLOGICAL EVALUATION

Site Code: MRO17

Central NGR: TQ 3617 9509

Local Planning Authority: LONDON BOROUGH OF ENFIELD

Planning Reference:

Other reference if any:

Commissioning Client: CgMs on behalf of Mr Plant Hire

Written/Researched by: Joe Brooks

Pre-Construct Archaeology Limited

Project Manager: Helen Hawkins (MClfA)

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

Web: www.pre-construct.com

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DOCUMENT VERIFICATION

LAND AT MORSON ROAD, PONDERS END, LONDON BOROUGH OF ENFIELD EN3 4NQ $\,$

Type of project

AN ARCHAEOLOGICAL EVALUATION Quality Control

Pre-Construct Archaeology Limited Project Code			K4821
	Name	Signature	Date
Text Prepared by:	J Brooks		27.01.2017
Graphics Prepared by:	R Murphy		27.01.2017
Graphics Checked by:	J Brown	Josephie Sam	30.01.2017
Project Manager Sign-off:	H Hawkins		30.01.2017

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

CONTENTS

1	ABSTRACT	3
2	INTRODUCTION	4
3	PLANNING BACKGROUND	4
4	EVALUATION OBJECTIVES	5
5	GEOLOGICAL AND TOPOGRAPHICAL BACKGROUND	6
6	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	6
7	METHODOLOGY	7
8	ARCHAEOLOGICAL SEQUENCE	8
9	INTERPRETATION AND CONCLUSION	9
10	ACKNOWLEDGEMENTS	10
11	BIBLIOGRAPHY	11
FIGUR	RES	
FIGUF	RE 1: SITE LOCATION	12
FIGUE	RE 2: TRENCH LOCATION	13
FIGUF	RE 3: PLAN OF TRENCH 1	14
FIGUF	RE 4: SECTIONS	15
APPEN	NDICES	
APPE	NDIX 1: CONTEXT INDEX	16
APPE	NDIX 2: PHOTOGRAPHS	17
APPE	NDIX 3: STRATIGRAPHIC MATRICES	20
APPE	NDIX 4: OASIS REPORT FORM	21

1 ABSTRACT

- 1.1 This report details the results of an archaeological evaluation on land at Morson Road, Ponders End, London Borough of Enfield EN3 4NQ. The work was undertaken by Pre-Construct Archaeology Limited and was commissioned by CgMs on behalf of Mr Plant Hire.
- 1.2 Two evaluation trenches were excavated (Trenches 1 and 2, see Figure 2) to a maximum depth of 2m below the current ground level.
- 1.3 The trenches revealed that the earliest deposit on site was a layer of natural Kempton Park gravel, recorded between 11.91mOD and 11.55mOD.
- 1.4 This was overlain by a thin layer of alluvial silty clay 0.20m thick in Trench 2.
- 1.5 A shallow undated gully 0.34m deep by 0.80m wide, with an east/west alignment was encountered in Trench 1 cutting the Kempton Park gravel. This feature, which constituted the only archaeological feature discovered during the evaluation, contained no dating evidence.
- 1.6 A thick horizon of modern made ground, sealing the natural and archaeological deposits, was found to extend to a depth of 11.55m OD in Trench 1 and 12.03mOD in Trench 2 forming the modern ground surface to a level of 13.50m OD.

PCA Report Number: R12778

2 INTRODUCTION

- 2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited on land at Morson Road, Ponders End, London Borough of Enfield EN3 4NQ.
- 2.2 The Site measured approximately 0.405 hectares (ha, 4048 square metres) and was centred on National Grid Reference TQ 3617 9509, located in the London Borough of Enfield (see Figure 1). The site was bounded by Morson Road to the north and west, a golf course to the south and an industrial site to the east. A sub-station was present in the north-west of the site and a subterranean water tank was present in the centre of the site.
- 2.3 CgMs produced a written scheme of investigation for the site (CGMS 2016), which describes how a planning condition was recommended by Historic England Greater London Archaeological Advisory Service (GLAAS).
- As a result, the Archaeology Adviser recommended that the site should be subject to an archaeological trial trench evaluation in the first instance. The Written Scheme of Investigation prepared by CGMS (Smalley 2016) detailed all requirements for the evaluation trenching. The WSI was supported by a method statement produced by PCA (Hawkins 2016).
- 2.5 The HER indicated no evidence of archaeological activity on the site itself. However, the site is located within a larger *Archaeological Priority Area* (DLO 35151) which contains River valley deposits that have potential for prehistoric and palaeo-environmental evidence. Evidence for glacial fauna is recorded by the HER approximately 300m south of the site.
- 2.6 The evaluation, carried out between 16th and 20th January 2017, was supervised by Joe Brooks and project managed by Helen Hawkins both of Pre-Construct Archaeology Limited. The work was monitored by Sandy Kidd of Historic England on behalf of the London Borough of Enfield and was overseen by the client's archaeological consultant, Richard Smalley of CgMs.
- 2.7 The complete 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 MRO17.

3 PLANNING BACKGROUND

- A planning condition was recommended by Historic England Greater London Archaeological Advisory Service (GLAAS) to safeguard potential archaeological remains within the site, in accordance with Section 12 of the National Planning Policy Framework (NPPF). The condition requires archaeological trial trenching in the first instance:
 - 15. No demolition or development shall take place until a stage 1 written scheme of investigation (WSI) has been submitted to and approved by the local planning authority in writing. For land that is included within the WSI, no demolition or development shall take place other than in accordance with the agreed WSI, and the programme and methodology of site evaluation and the nomination of a competent person(s) or organisation to undertake the agreed works. If heritage assets of archaeological interest are identified by stage 1 then for those parts of the site which have archaeological interest a stage 2 WSI shall be submitted to and approved by the local planning authority in writing. For land that is included within the stage 2 WSI, no demolition/development shall take place other than in accordance with the agreed stage 2 WSI which shall include:
 - A) The statement of significance and research objectives, the programme and methodology of site investigation and recording and the nomination of a competent person(s) or organisation to undertake the agreed works.

4

B) The programme for post-investigation assessment and subsequent analysis, publication & dissemination and deposition of resulting material. This part of the condition shall not be discharged until these elements have been fulfilled in accordance with the programme set out in the stage 2 WSI.

Reason: Heritage assets of archaeological interest may survive on the site. The planning authority wishes to secure the provision of appropriate archaeological investigation, including the publication of results, in accordance with Section 12 of the NPPF.

4 EVALUATION OBJECTIVES

- 4.1 The site specific aims, as defined in the WSI, are:
 - To establish the presence/absence, extent and character of any archaeological features on the site and to consider the archaeological interest of these in the context of the regional archaeological framework.
 - To examine any available evidence for economic activity and environmental conditions
 - To generate an archive which will allow future research of the evidence to be undertaken if appropriate
 - To disseminate the results of the work in a format and manner proportionate to the significance of the findings

5 GEOLOGICAL AND TOPOGRAPHICAL BACKGROUND

- The site was located on the Kempton Park Gravel Formation Sand and Gravel which comprises Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Directly to the east of the site, Alluvium is noted (BGS website). The site was adjacent to the former channel of the River Lea which has now been canalised and diverted into reservoirs. Geotechnical information for the site suggested that a layer of alluvium was present, below the made ground and above the gravel, which was located at c. 1.90m below ground level.
- The site was flat, and the nearest watercourse is the Lea Navigation, 177m to the east of the site. The site was located at roughly 13m OD.
- 5.3 A Written Scheme of Investigation was prepared for the site (CGMS 2016). The information below is taken from that document.

6 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- The HER records no evidence of archaeological activity on the site itself. However, the site is located within a larger Archaeological Priority Area (DLO 35151) which contains River valley deposits that have potential for prehistoric and palaeo-environmental evidence. Evidence for glacial fauna is recorded by the HER approximately 300m south of the site.
- All other records for the wider study area are Post-Medieval or Modern in origin, including industrial activity related to Wright's Flour Mills 340m to the north, and First World War activity, such as the ordnance factory 200m to the north, and the airfield 250m east.
- An archaeological evaluation undertaken 30m north of the site identified a number of undated features in addition to the remains of 19th century factory buildings and natural gravels, which were observed between 10m and 11m OD.
- Historic mapping shows that the site comprised agricultural land in the mid-19th century. By the late 19th century (1896) a number of factory buildings relating to the Corticine (Linoleum) Works had been constructed on site. This continued to be the case until the mid-20th century when the Corticine factory was demolished and replaced by new, larger structures relating to a timber yard. The layout of the site was again changed in the mid-1970s when a large warehouse was constructed. This continued through the 1980s and 1990s until the warehouse was demolished between 1999 and 2006.
- A number of archaeological investigations have taken place in the local area and that have not yet been included in the HER. The most significant of these is an archaeological excavation undertaken by Oxford Archaeology, approximately 150m to the north-east of the site. This excavation uncovered a settlement dating from the middle Bronze Age. The settlement was situated between two ditches that may have formed part of a pre-existing arrangement of field boundaries set within a square, fenced enclosure. One possible roundhouse was identified, as well as a second, smaller possible building and numerous pits and postholes. An evaluation was also carried out directly to the north of the Mr Plant Hire site, also by OA. A number of possible prehistoric features were identified cut into the top of the natural alluvium. One of the larger ditches ran north-south towards the current site.

PCA Report Number: R12778

7 METHODOLOGY

- 7.1 The purpose of the archaeological investigation was to determine the presence or absence of surviving features at the site and, if present, to assist in formulating an appropriate archaeological mitigation strategy. All works were undertaken in accordance with the guidelines set out by English Heritage (now Historic England) and the Chartered Institute of Archaeologists.
- 7.2 The research design set out in the Written Scheme of Investigation (Hawkins 2016) aimed to address the research objectives detailed in Chapter 4 (see above).
- 7.3 The evaluation consisted of two trenches (Trenches 1 and 2) both situated in the south-east corner of the site.
- 7.4 Trench 1 was oriented north-east/south-west, near to the eastern boundary of the site and was 34.2m long by 4.2m wide by 2m deep.
- 7.5 Trench 2, located to the west of trench 1, was oriented north-west/south-east and was 24.2m long by 4.2m wide by 1.86m deep. Both trenches were excavated to 1 metre deep and then stepped down another metre so that the archaeological horizons could be safely investigated.
- 7.6 No ground contamination survey was carried out for the site, but asbestos sheet was found previously in the made ground. As a result, all archaeologists were required to wear asbestos appropriate PPE during the machine excavation through made ground.
- 7.7 The excavation of all trenches was undertaken using a 21 tonne 360° mechanical excavator and driver provided to PCA by O'Connell plant hire. Once the reinforced concrete was broken out, the machine used a toothless ditching bucket to remove modern overburden under the constant supervision of an archaeologist. Spoil was mounded a safe distance from the edge of the trenches and kept damp.
- 7.8 Machine excavation continued in spits of 100mm at a time until either significant archaeological strata were found or natural ground exposed.
- 7.9 Following machine excavation, relevant faces of the trenches that required examination or recording were cleaned using appropriate hand tools. The majority of the investigation of archaeological levels was carried out by hand, with cleaning, examination and recording both in plan and in section.
- 7.10 All archaeological features (stratigraphical layers, cuts, fills, structures) were evaluated by hand tools and recorded in plan at 1:20 or in section at 1:10 using standard single context recording methods. Features were evaluated so as to characterise their form, function and date.
- 7.11 The recording systems adopted during the investigations were fully compatible with those widely used elsewhere in London that is those developed out of the Department of Urban Archaeology Site Manual, now published by the Museum of London Archaeological Service (MoLAS 1994) and with the PCA Site Manual (Taylor and Brown, 2009). The site archive was organised to be compatible with the archaeological archives produced in the Local Authority area.
- 7.12 A full photographic record was made consisting of a digital photographic archive that was maintained during the course of the archaeological investigation.
- 7.13 The complete archive produced during the evaluation comprising written, drawn and photographic records, will be deposited at the LAARC, with the Museum of London site code MRO17.
- 7.14 One temporary benchmark (TBM1) was established with a GPS with a height of 13.50m OD. TBM1 was located in the north part of the site to the east of Trench 1 and to the northwest of Trench 2.

7

7.15 Trenches 1 and 2 were backfilled and compacted by O'Connell plant hire at the end of the evaluation.

8 ARCHAEOLOGICAL SEQUENCE

- 8.1 Trench 1
- 8.1.1 Phase 1
- 8.1.2 The earliest deposit discovered in Trench 1 was a layer of mid orangey grey sandy gravel with occasional patches of clay, and was recorded as context [5] (see Figure 3). This deposit, which was encountered at 11.55mOD, was found across the entire extent of the trench and was interpreted as part of the naturally deposited Kempton Park gravel member (see Appendix 2).
- 8.1.3 Phase 2
- A small gully [4] aligned east/west and filled with mid brownish silty clay [3] was discovered in the southern end of trench 1, cutting into the natural Kempton Park gravel [5]. Gully [4], which was recorded at a height of 11.54m OD, was 0.80m wide, 2.20m long and had a depth of 0.34m. No dating evidence was retrieved from the fill of the gully [4], despite it being excavated fully to try and establish its date (see Appendix 3).
- 8.1.5 Phase 3
- 8.1.6 Sealing this undated gully [4] were several layers of modern made ground [+] that constituted the current ground level at 13.44m OD. These layers were probably deposited during the most recent development of the site in the late 20th century. The layers were bedded on a porous membrane type fabric which suggested that the site had been extensively truncated quite recently.
- 8.2 Trench 2
- 8.2.1 Phase 1
- A layer of mid orangey grey sandy gravel [2] discovered at a depth of 11.91m OD was the earliest deposit recorded in Trench 2 (see Figure 4). This natural deposit was part of the Kempton Park gravel member and was observed across the entire base of a slot measuring 3.28m long by 0.88m wide (see Appendix 4).
- 8.2.3 Phase 2
- 8.2.4 Capping the Kempton Park gravel [2] was a layer of mottled mid orangey brown silty clay [1] which was interpreted as being an alluvium deposit. This silty clay [1] was discovered across the entirety of the trench at a maximum level of 12.03mOD and was 0.20m thick. The deposit [1] was heavily stained with hydrocarbons that had presumably leached from the made ground above. No dating evidence was recovered from context [1].
- 8.2.5 Phase 3
- 8.2.6 Sealing this silty clay layer [1] was a sequence of modern made ground [+] which was probably deposited during the most recent development of the site in the late 20th century.

9 INTERPRETATION AND CONCLUSION

9.1 Natural topography

- 9.1.1 Naturally deposited Kempton Park gravel layers were recorded in both of the archaeological evaluation trenches at a highest level of 11.91m OD in Trench 2 and at 11.57m OD in Trench 1. Levels taken on the surface of the Kempton Park gravel indicated that this deposit sloped gradually downwards towards the south and east of the site. This sloping topography can be attributed to erosion of the Kempton Park gravel by the River Lea, which prior to its canalisation during the 19th century, flowed just to the east of the site.
- 9.1.2 A thin 0.20m layer of alluvial silty clay which was likely to have been deposited by the River Lea and that sealed the Kempton Park gravel, was identified in Trench 2 at a level of 11.97m OD. It is likely that a comparative layer of alluvial silty clay was originally present in Trench 1 however, during development of the site in the late 20th Century this layer was removed.

9.2 Archaeological deposits

- 9.2.1 A single shallow gully, aligned east/west was encountered in Trench 1. No dating evidence was retrieved from the fill of this feature.
- 9.2.2 Development of the site in the late 20th century had caused the truncation of ground horizons down to a depth of 11.54m OD roughly the level of the Kempton Park gravel removing any archaeological deposits that may have existed at a higher level.
- 9.2.3 No archaeological deposits were encountered in Trench 2.
- 9.2.4 In Trench 2 modern truncation was seen to have impacted down to a level of 12.03mOD leaving only a thin layer of alluvial silty clay remaining.
- 9.2.5 There was no evidence for the 19th century factory buildings on the site. The 20th century interventions had removed all trace of these buildings.

PCA Report Number: R12778

10 ACKNOWLEDGEMENTS 10.1 Pre-Construct Archaeology would like to thank CgMs for commissioning the archaeological investigation on behalf of Mr Plant Hire. 10.2 Pre-Construct Archaeology would like to thank Sandy Kidd of Historic England, Archaeological Advisor to the London Borough of Enfield for monitoring the work.

- The author would like to thank Neil Hawkins for his work on site, and Wayne Richards and John Joyce for their logistical support.
- Special thanks are given to Helen Hawkins for her management of the project and editing of this report.

10

11 BIBLIOGRAPHY

11.1 Printed Sources:

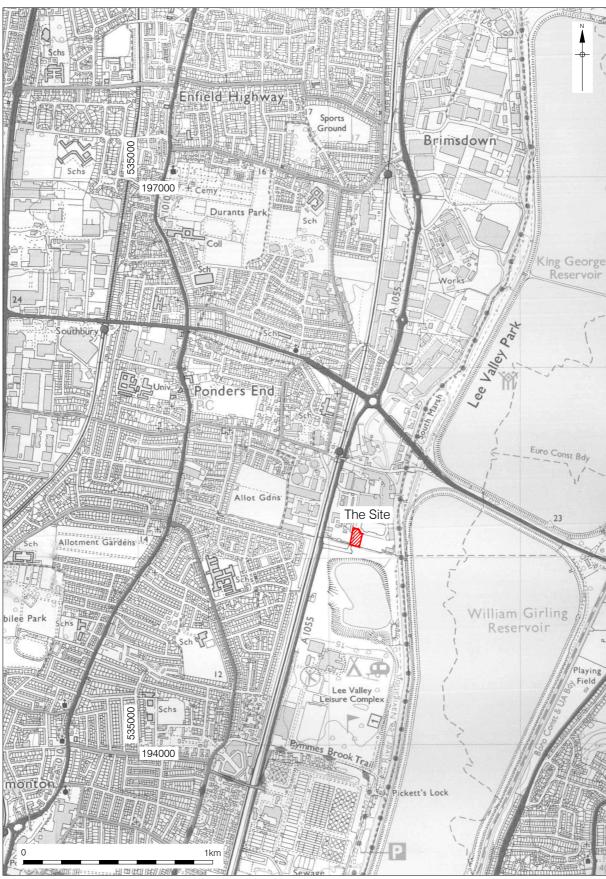
Hawkins, H. 2016. Land at Morson Road, Ponders End, London Borough of Enfield, EN3 4NQ: Method Statement For Archaeological Evaluation. Unpublished Report

Smalley, R. 2016. Written Scheme of Investigation for Archaeological Works: Land at Morson Road, Ponders End, Enfield. Unpublished Client Report

Taylor, J with Brown, G. 2009. Field Induction Manual: Operations Manual 1. Pre-Construction Archaeology Limited

11.2 Online Sources:

BGS (2012a). The BGS Lexicon of Named Rock Units-British Geological Survey. (http://maps.bgs.ac.uk/geologyviewergoogle/googleviewer.html)



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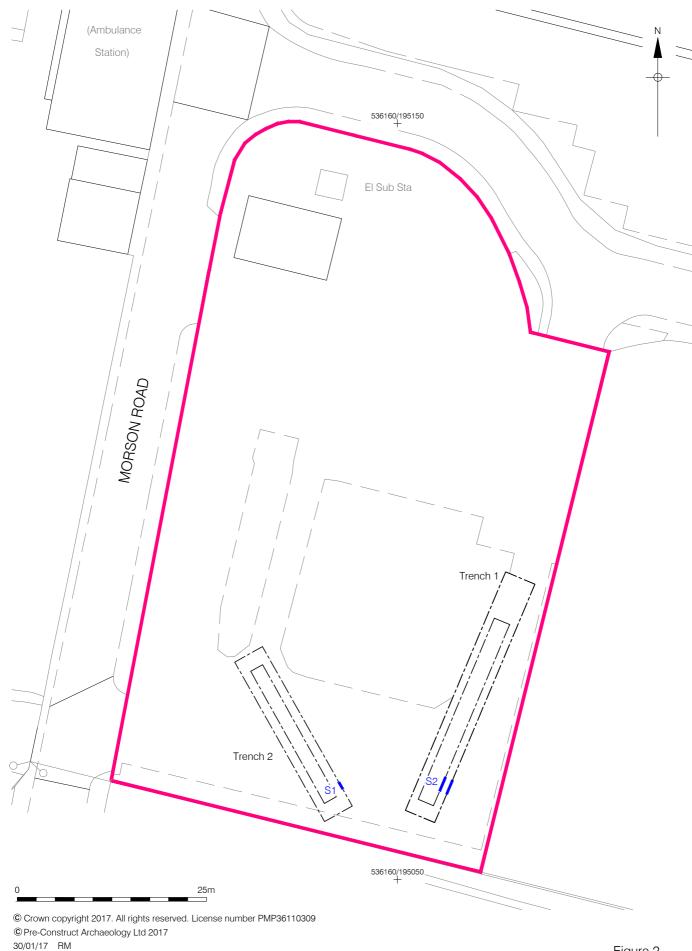
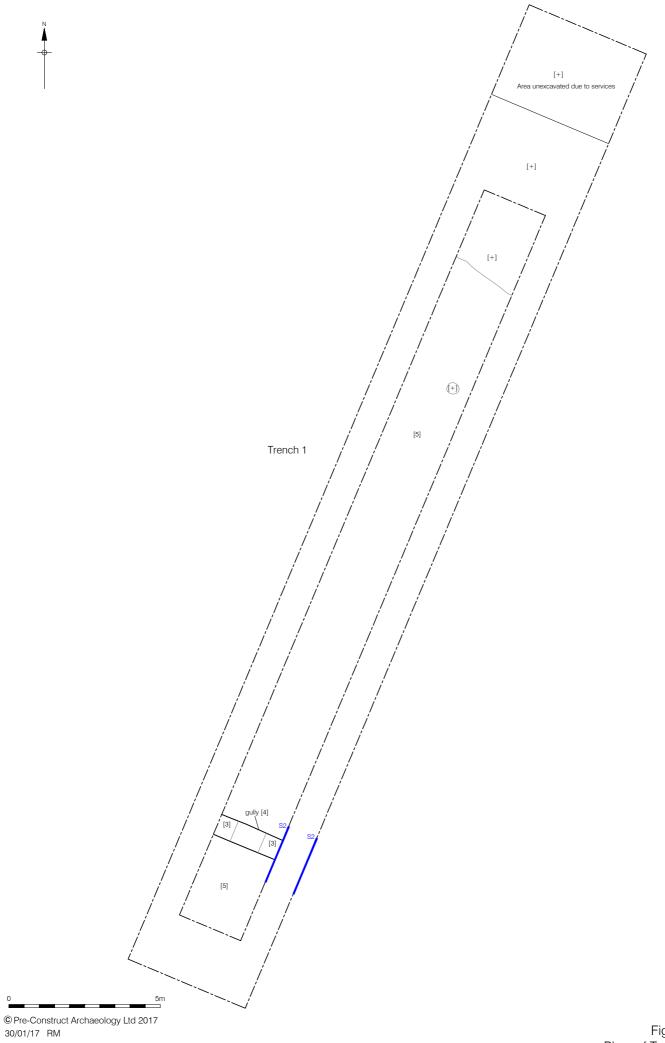
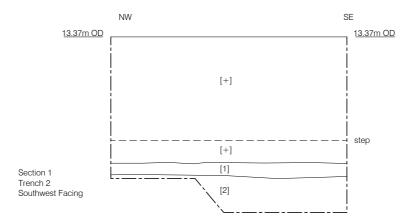
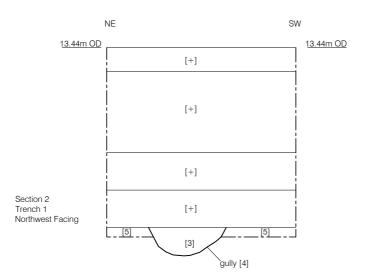


Figure 2 Trench Location 1:500 at A4









APPENDIX 1: CONTEXT INDEX

CONTEXT	TRENCH	TYPE	OD HEIGHT	DESCRIPTION
1	TR 2	LAYER	12.03	Alluvial silty clay
2	TR 2	LAYER	11.91	Natural gravel
3	TR 1	FILL	11.57	Silty clay backfill
4	TR 1	CUT	11.54	Cut of gully
5	TR 1	LAYER	11.55	Natural gravel

APPENDIX 2: PHOTOGRAPHS

Plate 1: South facing photograph of Trench 1



Plate 2: North facing photograph of gully [4]

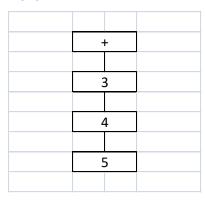


Plate 3: North-west facing photograph of Trench 2



APPENDIX 3: STRATIGRAPHIC MATRICES

Trench 1



Trench 2

-	+	
-	1	
14	2	

20

APPENDIX 4: OASIS REPORT FORM

OASIS ID: preconst1-274298

Project details

Project name Morson Road

Short description of the project

Two evaluation trenches were excavated to a depth of c.2m on land at Morson Road, Ponders End, London Borough of Enfield EN3 4NQ. A sequence of Kempton Park gravel sealed by alluvial clay capped with modern made ground was observed. A small undated gully, oriented

east/west was recorded in one of the trenches.

Project dates Start: 16-01-2017 End: 20-01-2017

Previous/future

work

No / No

Type of project Field evaluation

Site status Local Authority Designated Archaeological Area

Current Land use Industry and Commerce 4 - Storage and warehousing

Monument type GULLY Uncertain

Significant Finds NONE None

Significant Finds NONE None

Methods & "Targeted Trenches"

techniques

Development type Car park (flat)

An Archaeological Evaluation at Morson Road, Enfield Pre-Construct Archaeology Ltd January 2017

Prompt National Planning Policy Framework - NPPF

Position in the

After full determination (eg. As a condition)

planning process

Project location

Country England

Site location GREATER LONDON ENFIELD ENFIELD Morson Road

Postcode EN3 4NQ

Study area 4048 Square metres

Site coordinates TQ 3617 9509 51.637624426339 -0.032045416327 51 38 15 N 000 01 55

W Point

Height OD / Depth Min: 11.39m Max: 11.97m

Project creators

Name of Pre-Construct Archaeology Limited

Organisation

Project brief CgMs Consultants Ltd

originator

Project design Pre-Construct Archaeology Limited

originator

Project Helen Hawkins

director/manager

Project supervisor Joe Brooks

Type of Private Developer

sponsor/funding

body

An Archaeological Evaluation at Morson Road, Enfield Pre-Construct Archaeology Ltd January 2017

Name of Mr Plant Hire sponsor/funding body **Project archives Physical Archive** No Exists? Digital Archive No Exists? Paper Archive LAARC recipient "none" **Paper Contents** "Context sheet","Drawing","Photograph","Plan","Section","Unpublished Paper Media available Text" Project bibliography 1 Grey literature (unpublished document/manuscript) Publication type Title Written Scheme of Investigation for archaeological works: Land at Morson Road, Ponders End, Enfield Author(s)/Editor(s) Smalley, R Date 2016

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