



**UNITS 621, 33–38, 41–46 AND 50
Leyton Industrial Village
London E10**

London Borough of Waltham Forest

Evaluation report

June 2012



**Units 621, 33-38, 41-46 & 50
Leyton Industrial Village
Argall Avenue
London
E10 7QP**

Site Code LIV12

Report on a geoarchaeological evaluation

Sign-off History:

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Summary (non-technical)

This report presents the results of an archaeological evaluation carried out by Museum of London Archaeology (MOLA) on the site of Units 621, 33-38, 41-46 & 50 Leyton Industrial Village, Argall Avenue London, E10 7QP. The report was commissioned from MOLA by Workspace Group Plc.

Following the recommendations of the Archaeological Advisor to the London borough of Waltham Forest an evaluation trench was excavated on the site.

The results of the field evaluation have helped to refine the initial assessment of the archaeological potential of the site. The evaluation revealed a field drain dating from the post medieval period, post medieval garden soil, medieval plough soil and a possible Pleistocene channel.

In the light of revised understanding of the archaeological potential of the site the report concludes that the proposed development will have minimal archaeological impact.

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1 Introduction

1.1 Site background

The evaluation took place in the car park fronting units 621, 33-38, 41-46 & 50 Leyton Industrial Village, Argall Avenue E10 7QP, hereafter called 'the site' (Fig 1). The site comprises single storey warehousing and associated car park, and is bounded by railway lines to the south west, Low Hall Sports Ground to the north west and further units of Leyton Industrial Village to the east. The OS National Grid Ref. for centre of site is 535665 187620. Modern ground level immediately adjacent to the site is 6.75m OD. The site code is **LIV12**.

A desk-top deposit model was previously prepared, which covers the whole area of the site (Ruddy 2011). This document should be referred to for information on the natural topography and geology of the site, and the initial interpretation of its archaeological potential.

1.2 Planning and legislative framework

The legislative and planning framework in which the archaeological exercise took place was summarised in the *Written Scheme of Investigation*, which formed the project design for the evaluation (MOLA, 2012).

1.3 Planning background

The work is required as part of an archaeological condition put on the planning consent (Application Number 2008/0790).

1.4 Origin and scope of the report

This report was commissioned by Workspace Group Plc. and produced by Museum of London Archaeology (MOLA). The report has been prepared within the terms of the relevant Standard specified by the Institute for Archaeologists (IFA, 2001).

Field evaluation, and the *Evaluation report* which comments on the results of that exercise, are defined in the most recent English Heritage guidelines (English Heritage, 1998) as intended to provide information about the archaeological resource in order to contribute to the:

- formulation of a strategy for the preservation or management of those remains; and/or
- formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- formulation of a proposal for further archaeological investigations within a programme of research

1.5 Aims and objectives

All research is undertaken within the priorities established in the Museum of London's *A research framework for London Archaeology, 2002*.

The following research aims and objectives were established in the *Written Scheme of Investigation* for the evaluation (Section 2.2; MOLA, 2012):

- What is the nature and level of natural topography?
- Does a buried landsurface exist?
- Are prehistoric features present?
- How does the buried deposit sequence vary across the site?
- Are the mixed gravel deposits recorded in the previous geotechnical boreholes natural, archaeological or modern made ground?

2 Topographical and historical background

The site is situated within the alluvial floodplain of the River Lea (NGR 535676, 187593), in roughly the centre of the valley floor, between Upper Clapton and Leyton. The British Geological Survey (BGS) maps London Clay beneath alluvium in the area with the site itself lying just to the south of an area of made ground (Sheet 256, 1:50 000 series). The modern ground level of the valley floor is fairly consistent at 6.7m OD and the site lies between the Walthamstow Reservoirs, mapped as worked and infilled ground, and the Hackney Marsh recreation grounds. Previous archaeological work carried out in the valley suggests that between extensive areas of Victorian and later ground-working, gravels of the Early Holocene river bed and overlying alluvium survive, which are likely to span the period from the end of the last cold stage to recent historic time.

Within the broad valley of the Lea today runs a complex of historically modified rivers. The process of manipulation, such as diverting, straightening and excavating channels, began on a large scale during the medieval period. Channels to drive mills, feed fish ponds and reservoirs have been created, whilst meanders and stretches of disused channels were infilled (Corcoran et al 2011). Indeed, a canalised channel of the Lea skirts the western boundary of the site.

Furthermore, Ruddy (2011:8) notes that the height of the Pleistocene Gravels on site are of a similar height as the 'Low Terrace' which forms a 'ledge' of higher ground running to the east of the Lea Valley between Temple Mills and Stratford. This area would have been drier until the medieval period and thus has potential for prehistoric and early historic terrestrial archaeology.

3 The evaluation

3.1 Methodology

All archaeological excavation and monitoring during the evaluation was carried out in accordance with the preceding *Written Scheme of Investigation* (MOLA, 2012), and the *Archaeological Site Manual* (MoLAS, 1994).

The slab/ground was broken out and cleared by contractors under MOLA supervision. The trench was excavated using a JCB by the contractors and monitored by a MOLA geoarchaeologist.

The locations of evaluation trenches were recorded by MOLA Geomatics using differential GPS (Trimble 5800 rover receivers with TSCE 5700 data logger and mobile phone GSM data link). Levels were recorded in m OD, and the locations recorded to the six figure Ordnance Grid Reference. A written and drawn record of all archaeological deposits encountered was made in accordance with the principles set out in the MOLA site recording manual (MOLAS, 1994).

The site has produced: 18 context records; 1 section drawing at 1:20; and 58 photographs. No finds were recovered from the site.

The site finds and records can be found under the site code LIV12 in the MoL archive.

3.2 Results of the evaluation

For the trench location see Fig 2.

<i>Evaluation Trench 1</i>	
Location	South East corner of site
Dimensions	20m by 2.5m by 2m depth
Modern ground level/top of slab	6.75m OD
Base of modern fill/slab	6.35m OD in NE 6.55m OD in SW
Depth of deposits of archaeological interest observed.	2.00m deep
Level of base of deposits observed and/or base of trench	4.75 m OD
Natural (floodplain gravel) observed	5.15 m OD at NE , 4.75m OD at SW end

The deposits discussed are shown on the trench section (Fig 3). Contexts (6) and (18) consisted of dense compacted gravels with light grey clayey sands. This would have represented the natural flood plain gravels.

Context (17) was a little gouge, rivulet or rill within the gravel comprised of soft light mid blueish grey clay with heavy iron staining.

Context (16) was stiff olive clay which possibly represents a Pleistocene channel running along the edge of the terrace.

Contexts (13), (14) and [15] are all related to a field drain which was uncovered in the NE end of the trench. The linear cut of the field drain was running broadly north-

south. The lower fill (14) surrounding the ceramic field drain consisted of soft light grey clay with no visible inclusions. The fill above (13) this consisted of light greyish brown to tan coarse sands with occasional flint gravels this contained a large fragments of 17th to 19th century pan tile. The deposit could have been comprised of the loose sands and gravel deposits to aid drainage. The lack of specific dating evidence and the uniform nature of ceramic drainage feature throughout time make assigning a specific date to the feature quite difficult however the stratigraphy and nature of the deposit would seem to suggest a post medieval or industrial date. The top of the cut was quite ephemeral in nature and it was not entirely clear where the feature was cut from this could be in part due to the long term agricultural use of the study area meaning that the soil was being continually broken up, reworked and bioturbated.

Contexts (5) and (12) consisted of firm oxidised brown slightly sandy clay with moderate to frequent gravels which were poorly sorted. The top of the deposit was iron stained and became sandier and less gravelly towards the SW of the trench. These deposits represent a plough soil which is possibly medieval in date. The irregular gravel inclusions are caused by the plough striking the gravels below and transporting them along into the surrounding plough soil. The turning of the soil and accompanying bioturbation would have reworked any Holocene or Pleistocene alluvium or prehistoric cut features in the area.

Contexts (4) and (10) were comprised of light greenish grey silty clay with iron stained vertical rootlets throughout and occasional 10-20mm sized gravels increasing with depth also occasional mollusc shells. This deposit could represent the reworking of what was originally alluvial sediment by post medieval horticulture or market gardening.

Contexts (2) and (9) consisted of very soft dark grey sandy silt with occasional brick fragments and mortar; this represents the pre-development land surface and the top of the garden soil.

Context (8) was a very soft dark greenish grey silt with occasional flinty gravels. Also present was a large vertical root channel and a lense of very light brown possibly calcareous silt situated in the area of the trench which lies above (16). Overall, (8) could represent repeated inundation through over bank flooding.

Contexts (1) and (7) were comprised of brick rubble and mortar fragments with in a matrix of light yellowish brown sandy clay. These contexts represent demolition and levelling deposits related to the nearby post war industrial buildings.

3.3 Assessment of the evaluation

GLAAS guidelines (English Heritage, 1998) require an assessment of the success of the evaluation 'in order to illustrate what level of confidence can be placed on the information which will provide the basis of the mitigation strategy'. In the case of this site the trench was situated quite close to the footprint of the proposed building and so would give a good indication of likely deposit survival in the area. The excavation was taken down to the Low Terrace gravels (Ruddy 2011), which revealed no features of archaeological interest, however the trench gave a good indication of the nature and survival of deposits of archaeological interest overlying the gravels.

4 Archaeological potential

4.1 Realisation of original research aims

- What is the nature and level of natural topography?

Natural deposits on site were represented by sands and gravels of the Low Terrace (Ruddy 2011). The level of the natural terrace gravels appears to dip from 5.15 m OD at the NE end of the trench down to 4.75m OD at the South Western end. This dip is due in part to the actions of the Pleistocene channel.

- Does a buried landsurface exist?

The site preserves both a medieval plough soil and a post medieval garden soil. There was no evidence of any earlier land surfaces.

- Are prehistoric features present?

There was no evidence of any prehistoric features of any sort uncovered during the evaluation, indeed the nature of the later agricultural use of this land suggests that any prehistoric remains in this area may have been truncated by ploughing.

- How does the buried deposit sequence vary across the site?

The buried deposit sequence appears to be fairly uniform across site. Although the SW end appears to have more of a riverine input as evidence by the silts of (10), the putative Pleistocene channel (16) and the fine silt laminations in (12). The NE end of the trench has been affected by post medieval truncation for the drainage pipe. However the general sequence of sands and gravels, overlain by medieval plough soil, overlain by post medieval garden soil covered by demolition / levelling deposits appears to be fairly uniform.

- Are the mixed gravel deposits recorded in the previous geotechnical boreholes natural, archaeological or modern made ground?

These deposits were not encountered during the excavation of the evaluation trench. Further work in the area may shed light on this.

4.2 General discussion of potential

The evaluation has shown that the potential for survival of medieval and post medieval landsurface is high but due to the effect of medieval ploughing the potential for the remains of earlier landsurfaces is low. There is also low potential for prehistoric cut features surviving on the site due to the medieval ploughing and paleoenvironmental data surviving in the Pleistocene channel sediments.

4.3 Significance

The significance of the medieval and post medieval agricultural and horticultural is of low importance. Whilst the archaeological remains are undoubtedly of local significance there is nothing to suggest that they are of regional or national importance.

5 Proposed development impact and recommendations

The proposed redevelopment at Units 621, 33-38, 41-46 & 50 Leyton Industrial Village, Argall Avenue involves the erection of 24 single story units arranged in three building blocks, with ancillary storage mezzanines and associated access, car and cycle parking, loading areas and access. The proposed development will be built on strip foundations. The impact of this on the surviving archaeological deposits will be to truncate the top 1-2m below ground level. The impact on the surviving archaeological remains is felt to be low as the surviving remains are of low potential and low significance and the truncation will be localised. MOLA considers that no further archaeological work should be undertaken in advance of any further ground reduction in this area.

The decision on the appropriate archaeological response to the deposits revealed rests with the Local Planning Authority and the designated archaeological advisor.

6 Acknowledgements

The author would like to thank Jane Corcoran and Graham Spurr and Workspace Plc.

7 Bibliography

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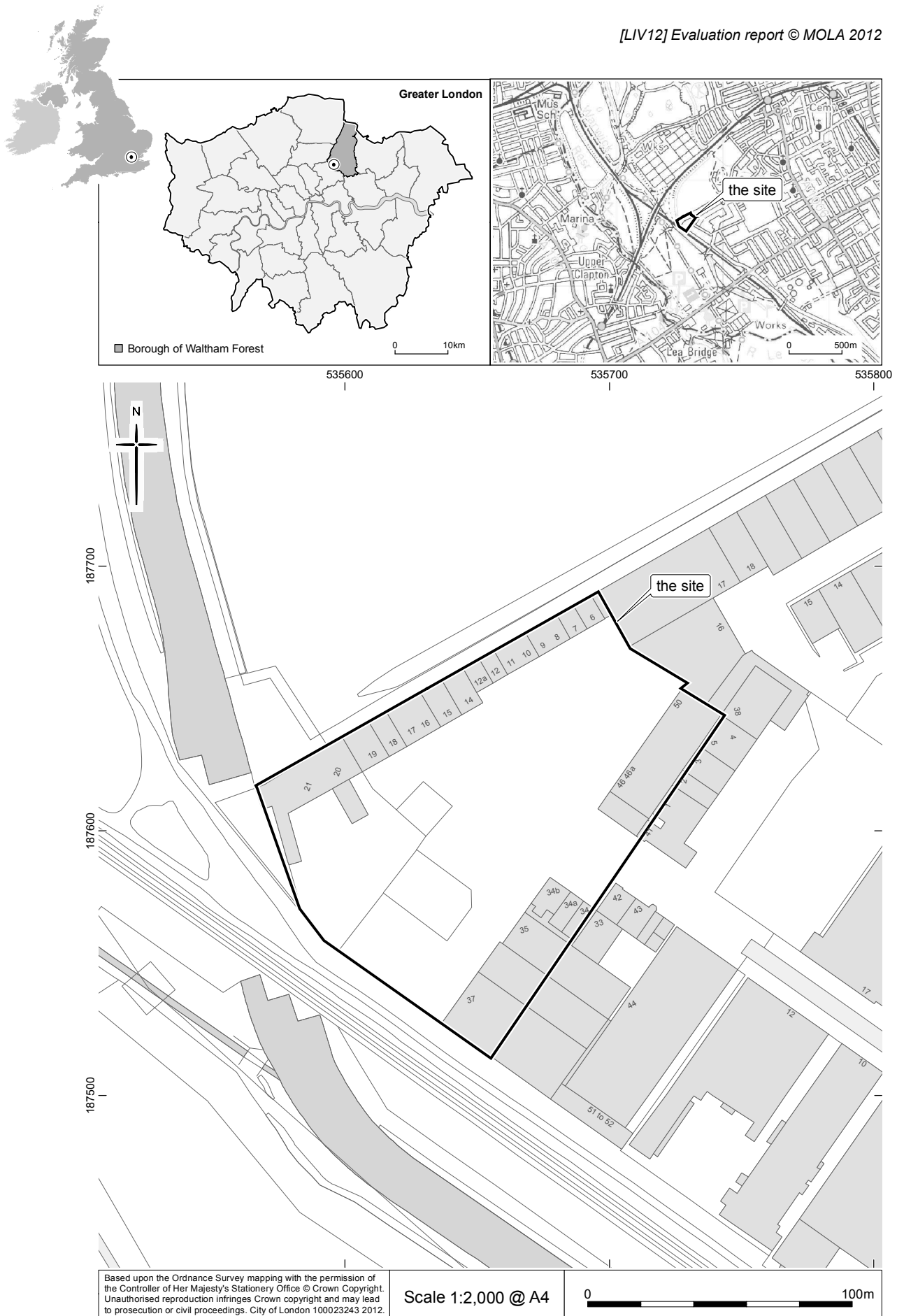


Fig 1 Site location



Fig 2 Trench location

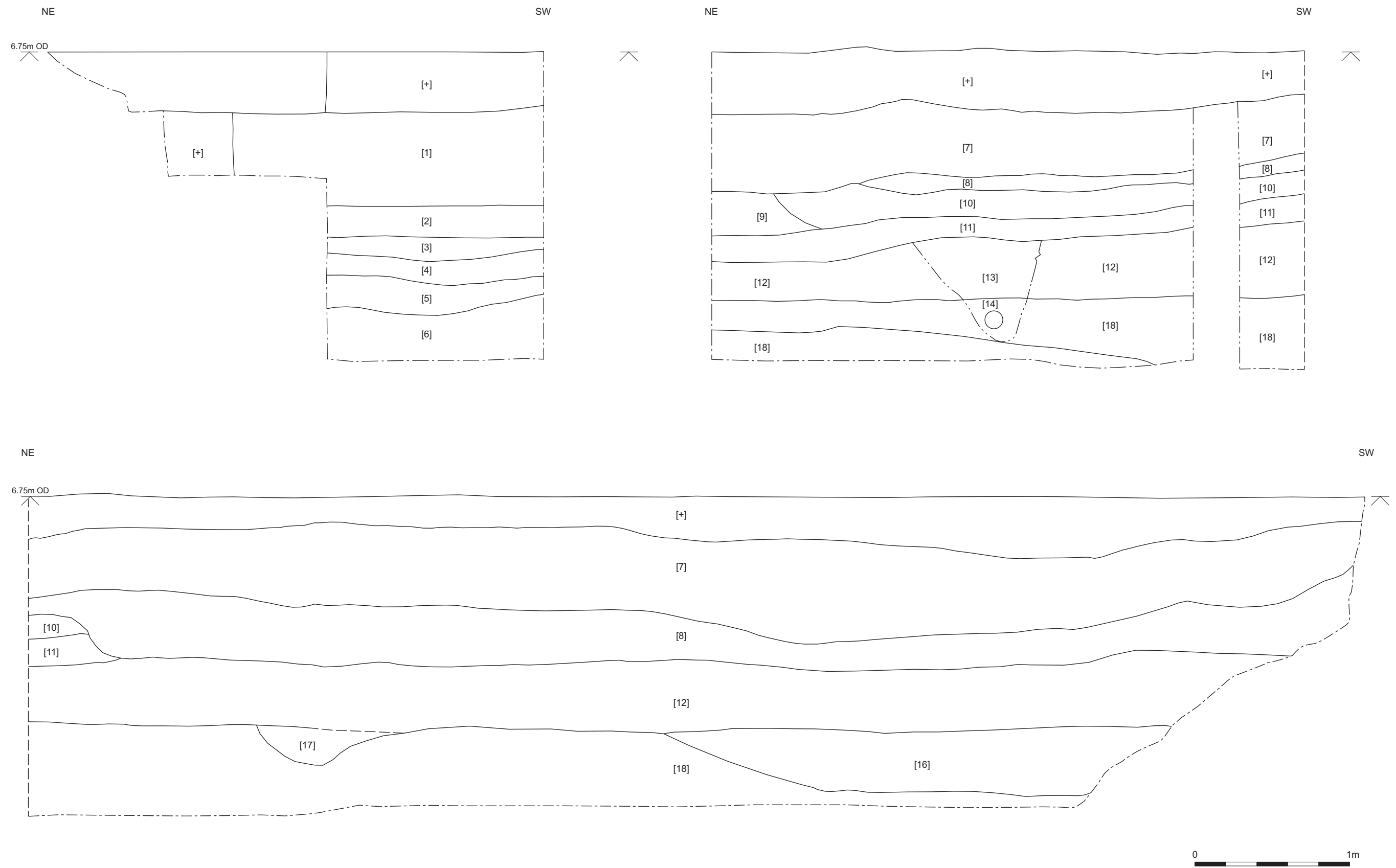


Fig 3 Northwest facing trench section

8 NMR OASIS archaeological report form

8.1 OASIS ID: molas1-128320

Project details

Project name	Leyton Industrial Village
Short description of the project	An evaluation trench was excavated in the footprint of new building at Leyton Industrial Village. A post medieval field drain, post medieval garden soil, medieval plough soil and a possible pleistocene channel were found cut into the gravel of the Low Terrace.
Project dates	Start: 16-05-2012 End: 18-05-2012
Previous/future work	No / Not known
Any associated project reference codes	LIV12 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Industry and Commerce 1 - Industrial
Monument type	DRAINAGE DITCH Post Medieval
Monument type	PALAEOCHANNEL Uncertain
Significant Finds	NONE None
Methods & techniques	"Targeted Trenches"
Development type	Urban commercial (e.g. offices, shops, banks, etc.)
Prompt	Planning condition
Position in the	After full determination (eg. As a condition)

planning process

Project location

Country	England
Site location	GREATER LONDON WALTHAM FOREST LEYTON Leyton Industrial Village
Postcode	E10 7QP
Study area	200.00 Square metres
Site coordinates	TQ 535665 187620 50 0 50 56 50 N 000 11 10 E Point
Height OD / Depth	Min: 5.00m Max: 5.00m

Project creators

Name of Organisation	MoL Archaeology
Project brief originator	not known
Project design originator	MOL Archaeology
Project director/manager	Jane Corcoran
Project supervisor	Jason Stewart
Type of sponsor/funding body	Contractor
Name of sponsor/funding body	Workgroup Plc

Project archives

Physical Archive Exists?	No
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Physical Archive recipient	LAARC
Digital Archive recipient	LAARC
Digital Contents	"other"
Digital Media available	"Images vector", "Spreadsheets", "Text"
Paper Archive recipient	LAARC
Paper Contents	"other"
Paper Media available	"Context sheet", "Drawing", "Matrices", "Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Units 621, 33-38, 41-46 and 50 Leyton Industrial Village, Argall Avenue, London, E10 7DP, Report on archaeological evaluation
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