ARCHAEOLOGICAL WATCHING BRIEF

DURING CONSTRUCTION

OF

THE SHORT FALL SITE:

PART II OF PHASE II

OF

OLIVER CLOSE.

Site Code LE-OC 97
TQ 3761/8671
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Project Manager
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1. INTRODUCTION.

1.1 The Planning Committee of the London Borough of Waltham Forest has granted permission to the Waltham forest Housing Action Trust (WFHAT) toremove the high rise towers which formed the Oliver Close Estate, Oliver Close, Leyton, and to re-place them with low rise housing. Phase 1 of this work has been completed and construction of houses as part of Phase II has begun. The "Short Fall Site" is Part II of this the Phase II work.

1.2 The Oliver Close Development is bounded by the Dagenham Brook in the SW, by Osier Way in the SE, Oliver Road in the NE and Ive Farm Close to the NW.(fig 1)

1.3 The "Short Fall" development comprises two terraces of houses positioned north and south of each other and both are aligned east/west. These terraces will be built across Oliver Close near its junction with Oliver Road. (fig 2).

1.4 There have been two phases of building development at Oliver Close over the last four years which have respectively entailed four stages and two stages of archaeological investigation.

2 INTERIM RESULTS OF PREVIOUS FIELDWORK.

2.1 Fieldwork methodology

2.1.1 The site investigation was divided into two phases completed over four years. Phase 1 comprised four stages and Phase 2 comprised two stages.

2.1.2 Phase 1, Stage I: Watching brief (21/9/92 to 23/9/92)

Twenty four soil investigation test pits were excavated by Wimpey Geotech Services for Alan Baxter's Associates. A watching brief was undertaken on this work. Bronze age activity was detected in Area A on the gravels and further archaeological activity was detected in Area B on the alluvium.

2.1.3 Phase 1, Stage II: Excavation (5/7/93 to 19/7/93)

This work consisted of the excavation of Trench 1 in Area A. It's location was based upon the findings of the watching brief. Its dimensions were 4m x 10m with a total depth of 1.6m. Evidence for surviving Bronze Age to post-medieval occupation was identified in this trench.

2.1.4 Phase 1, Stage III: Watching brief (2/8/93) and Resistivity Survey (10/8/93 to 11/8/93).

This stage of work consisted of a watching brief on two soil investigation pits, dug by machine for Alan Baxter's Associates by Wimpey Geotech Ltd., recorded as Trenches 5 and 6 in Area A. Trench 5 was excavated to a depth of 3m. Only 20th Century dump layers were revealed. Trench 6 was also excavated to a depth of 3m. Modern deposits to a depth of 2.8m were revealed. These lay upon organic alluvial silts, possibly a river channel.

A further phase of field work was undertaken, involving a geophysical survey using Geoscan RM15 Basic equipment with twin array, processed through Geoplot Version 2 software. This was conducted in an area of playing fields, referred to as Area B. The survey identified areas of potential pitting.

2.1.5 Phase 1, Stage IV: Rescue excavation. (13/9/93 to 20/10/93)

This stage consisted of the rescue excavation of Trenches 2, 3 and 4. Trench 2 was located in Area A, based upon the findings in Trench 1 and was 21.5m x 17.5m x 1.35m deep. Trenches 3 and 4 were located in Area B, based upon the findings in the Resistivity Survey. Trench 3 was 9.8m x 4m x 1.33m deep and Trench 4 was 10.15m x 5.65m x 3.26m deep. Environmental column samples were taken in Trench 4.

Trenches 2 and 3 encountered archaeological deposits and are considered in the Site Narrative below. Trench 4 encountered no cultural material, but extensive alluvial deposits were recorded and sampled by the Museum of London Environmental Service, using monolith column sample tins.

2.1.6 Phase 2, Stage I: Watching Brief (14/3/95 to 21/4/95)

This stage involved a watching brief on the excavation by machine of 25 test pits. A 3D subsurface contour map was generated using a Golden Software Surfer mapping programme, from the recorded test logs.

2.1.7 Phase 2, Stage II: Excavation (10/6/96 to 21/6/96)

This stage involved the excavation of a further two trenches in the NW of the site. Phase 2, Trench 1 was excavated within the foot print of a proposed building. An area of 4m x 10m at a stepped in depth of 3m was investigated. Phase 2, Trench 2 investigated an area of 2m x 10m at a stepped in depth of 3m, also located in the footprint of a proposed building.

2.2 Site narrative/summary.

2.2.1 The drift geology of the site comprises the Taplow gravel, which drops away in the west of the site as a result of the formation of the terrace associated with the east bank of the River Lea. Sterile alluvial silts accumulated over this, to a great depth, in the area of the playing fields in the west of the estate (Area B), and to a lesser extent, where the ground was higher, in the east of the estate. This process, pre-dated human activity on the site, though it is possible that the later natural layers in Area B were deposited by alluvial action while the drier, higher areas in the east of the site were occupied, and that no evidence of human activity in the form of finds found their way into the alluvium.

2.2.2 A plough soil, with artefacts ranging in date from late Bronze Age to post medieval, was investigated between the made up top soil and the substrate. It is not possible conclusively to date this soil, as plough disturbance could have been on-going for more than three millennia. The location of finds within this layer may be indicative of the possible position of *in situ* features either within or beneath this plough disturbed soil.

2.2.3 A group of eight potential structures or features, related spatially or stratigraphically, are associated with this plough soil. These structures are dated to the late Bronze Age. They comprise groups of pits and post holes. These represent evenly spaced configurations of posts, such as fence lines, possible 5m diameter post built round houses and rectangular structures, pits containing burnt flint and other domestic debris, structured depositions and a truncated 5m in diameter semi-circular gully. This possibly represents a ploughed out barrow where only the surrounding ring ditch remains. A pit, containing burnt bone, a possible un-urned cremation, to the north east of this gully may be associated with this group.

2.2.4 There is no evidence of any activity between the Late Bronze Age and the Roman period. There are no finds later than the Late Bronze Age and earlier than the Roman period in later deposits.

2.2.5 Two possible phases of ephemeral Roman activity were detected. The first, late third century at earliest, consisted of a number of pits in the north west of Trench 2 and a solitary pit to its south-east. The second phase constituted three possible pits in Trenches 1 and 2. The Roman finds are small and highly abraided, suggesting that Oliver Close may have been on the edge of a possible settlement activity area rather than the focus of one. This activity may be associated with the evidence from Grange Park Rd or Church Lane to the North East. A period of flooding occurred on the site in the later Roman period. This either resulted from climatic change or from improvements in river management techniques. This process extended into the medieval period, though to what extent is uncertain.

2.2.6 On the gravel terrace, early as well as later medieval activity was detected. Nineteen early Saxon sherds (date range 400-800 AD) were retrieved from the plough soil and a number of stratified deposits. Apparently random pit and post hole activity may represent evidence of settlement and possible structures. Two parallel alignments of evenly spaced posts in the NW of Trench 2 may be associated with this settlement. A later medieval (date range 1200-1400 AD) square post built structure was identified. Finds were also retrieved from the intervening period. After the demolition of this structure, though probably still during the medieval period, the area of Trench 2 was turned over to agriculture.

2.2.7 Two or three phases of post-medieval agricultural activity ensued between which there is evidence of a field/enclosure system, random pitting and the digging of post holes of uncertain purpose. Two phases of 19th-20th century agricultural activity cut the alluvium, with evidence of land improvements during the intervening period. Elsewhere on the site a series of rubbish pits, Victorian drains with an inspection hole and concrete surfaces were found, associated with the 19th century development along Oliver Road. Air-raid shelters, post World War II gravel extraction and evidence of two demolished 20th century structures were found, as well as pits, post holes and drains of 20th century date. Across the site there was a large quantity of dumped material associated with the landscaping involved in the construction of the present Oliver Close Estate, built in the 1960s. Turf and tarmac formed the topsoil.

3. THE CURRENT DEVELOPMENT.

3.1 It would be useful to have information on the below ground conditions to be found in the vicinity of the new development. As none of the excavations described in section 3 above lie very close to it, reliance for this information must be based upon the geological test pits excavated in 1995 which were observed by NMS archaeologists. Closest to the current development are test pits numbered 10, 21, 27 and 28.

a. Test Pit 10: A possible agricultural soil was found at a depth of 2.70 below the surface at an AOD of 9.88m

b. Test Pit 21: At 1.65m below the ground surface at 11.51m AOD a possible agricultural soil was found together with very rare flecks of mortar and chalk and crumbling flecks of burnt clay. Below this at a depth of 2.90m below the ground surface at AOD 10.26m was la layer of very dark grey river smelling sandy silt with organic flecks.

c. Test Pit 27: The concrete and made ground together were a layer 1.50m deep. Beneath this was a layer of yellowish brown gravel 6.90m deep which began at an AOD depth of 11.30m and ended at an AOD depth of 4.40m.

d. Test Pit 28: A possible agricultural soil comprising mid orangey brown sandy clayey silt with frequent gravel was found at a depth of 1.80m below the surface or 11.31m AOD.

3.2 As none of the test pits clearly show evidence of human occupation Lawrence Pontin, Planning Adviser at English Heritage, has decided that there should be a watching brief on this part of the development during the excavation of the house foundations and drains.

3.3 The watching brief will be conducted according to the principles set out in the English Heritage (EH) Archaeological Guidance (AGP) 3: "Standards and Practices in Archaeological Fieldwork" and AGP 4: "Archaeological Watching Briefs (Guidelines)".

4. FIELDWORK.

4.1 As described above, this part of the Phase II development comprises two terraces of houses, one to the east of the other and both aligned roughly north/south. The western most terrace is approximately 24m long and 9m wide whilst the eastern terrace will be approximately 24m long and 9m wide and the terraces are approximately 20m apart at their northern ends. The terraces will be built across Oliver Close which will, therefore, be superseded by an alternative road system.

4.2 The current ground level is 13.00m AOD. This ground surface is contaminated so 90cm will be removed prior to construction reducing the level to 12.10m AOD. Into this surface 30cm piles will be driven. The piles will have centre to centres 3.5m. The piles will be joined by ground beams which will be caste into slots 30cm wide and 30cm deep. The base of the ground beams will be, therefore, at a depth of 11.80m AOD. A concrete raft will be built upon these ground beams. The slots for the ground beams and drain cuts will be dug by a mechanical excavator with a toothless bucket. The ground works are expected to last between 10 and 15 working days.

4.3 The purpose of the watching brief is to ensure that any archaeological remains of the pre-historic or Roman periods are not destroyed by the cuts for the ground beams and drains.

4.4 An archaeologist will therefore be on site for this period of time. The day rate for this work will be £169.

4.5 The archaeologist will report to the site manager each day to ensure that the total watching brief time will be recorded both by the contractor and NMS timesheets.

4.6 The developer will accept that the designated archaeologist conducting the watching brief has the power to stop site work if substantial and significant archaeological features are found.

4.7 On each occasion that the archaeologist believes that significant archaeological features have been found he/she will have 1 day to investigate the nature and extent of the possible archaeology.

4.8 If significant archaeology if found the archaeologist will have 24 hours to assemble a team of up to four further archaeologists for a period of up to 7 working days to record and excavate the features to the inverse level of the beam slots or drain trenches. The archaeologist conducting the watching brief will be allowed two such periods of seven day stoppages.

4.9 When the site archaeologist conducting the watching brief believes that significant archaeology has been found he/she will contact the Planning Adviser for NE London who will be asked to decide if it is acceptable for the developer to continue to cut beam slots or drain trenches through the archaeology, thus creating "keyholes", or the clause in 4.8 above should be invoked for the complete excavation of the features.

4.10 This work will be paid at the daily rate of £169.

4.11 If necessary a sampling procedure will be developed with the Environmental Section of the Museum of London Archaeological Service. These visits will be at a day rate of £169 which cost will be additional to the watching brief costs. The cost of the assessment of the environmental samples will also be additional to these costs if this work is deemed necessary.

4.12 The Site Finds Policy will be based upon AGP 3: Standards and Practices in Archaeological Fieldwork and with the Conservation Department of the NMS.

4.13 The site will be monitored for the London Borough of Waltham Forest by Mr. Ian Gregg, Plannin Adviser of the Greater London Archaeological Service (G.L.A.S) of English Heritage according to the principles set out in AGP 6: Monitoring Archaeological Excavations (Model Specification).

4.14 All works will be carried out according to the Health and Safety recommendations of the Health and Safety Officers of the Archaeology Section of the NMS. A Risk Assessment has been completed and a copy is attached to this document. (Appendix 1)

4.15 Site costs will be reduced if the archaeologist could use the developers site facilities and if necessary the mechanical excavator.

4.16 It may be necessary to charge additional costs for an illustrator and a pre-historic and Roman pottery specialist to produce illustrations and spot dates for the watching brief report. Any environmental assessment report will be added to the watching brief report.

5. POST-EXCAVATION.

5.1 Upon the completion of all fieldwork the site supervisor will produce an archive report. This report will follow the principles set out in AGP 2: Model Brief for an Archaeological Evaluation and AGP 5: Archaeological Assessments and Evaluation Reports (Guidelines).

5.2 The purpose of the report is to fulfill the requirements of the planning conditions imposed by the Planning Committee of the London Borough of Waltham Forest.

5.3 The archive report will take up to double the amount of time the Site Supervisor spent upon the site. This work will be costed at the daily rate of £169.

5.4 Upon its completion copies will be sent to the Developer, English Heritage, and the Planning Committee of the London Borough of Waltham Forest.

5.5 The findings of the watching brief will be published together with those of all the investigations which have been undertaken during Phases 1 and 2 of the Oliver Close Re-development.

6. ACKNOWLEDGEMENTS.

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8. Appendicies

Appendix 1 Health and Safety “Risk Assessment Form”