

**An archaeological evaluation at
the old pumping station,
Orchard Road, Welwyn, Herts.**

January 2001

**commissioned by
J R Trodd Builders Ltd
on behalf of the
Stort Valley Housing Association**



Colchester Archaeological Trust
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Summary

Four exploratory trenches were dug at this riverside site in advance of the construction of three bungalows. No archaeologically significant features or finds were revealed. The site was found to have been subject to large-scale ground disturbance associated with its former use as a pumping station.

Introduction

This report describes the results of a field evaluation carried out to investigate the archaeological implications of a residential development at the old pumping station site in Orchard Road, Welwyn, Hertfordshire. The fieldwork was commissioned by J R Trodd Builders Ltd on behalf of the Stort Valley Housing Association, and took place on the 11th and 12th January 2001.

The evaluation was prompted by the proposed construction of three bungalows. A desk-based assessment (CAT Report 115) had demonstrated that the property lies in an area rich in archaeological remains: Roman cemeteries and a Roman grain-processing site lie nearby, and Roman pottery and tile have been found within 50m of the development spot. The Dicket Mead Roman villa lies beyond the bypass to the south-east. The site also lies on the eastern fringe of the medieval village of Welwyn, and building materials from a medieval house have been found just to the north of the application area.

The work was carried out in accordance with a Written Scheme of Investigation prepared in November 2000 in response to a design brief issued by the Hertfordshire County Council Archaeology Office on 1st November 2000.

Site

This 510 sq m site lies at the end of a lane and is bounded by the River Mimram to the south and allotments to the north (Fig 1). It was formerly occupied by a pumping station. At the time of the evaluation only the pump-house remained standing. The area for the proposed bungalows had been stripped of approximately 100mm of surface concrete in readiness for the exploratory trenches.

The excavation

Four trenches, numbered Trenches 1-4 (T1-T4), were machine-excavated at the locations shown in Figure 2. In addition, a trial trench previously dug by the contractor was recorded (T5). Some variation in trench locations was necessary due to the presence of substantial concrete features, and, in particular, a large rendered brick pool (F1 in Fig 2) in the eastern part of the site. Recording of the lower levels was hampered by ground-water, which rose gradually to the levels indicated in the section illustrations.

Trench 1 (section: Fig 3)

The entire east side of the trench was cut by a concrete foundation that ran the full length and depth of the trench and projected 60cm into the trenched area.

The stratigraphy was as follows:

- L101 Mixed material, mainly a dark greyish brown sandy loam with lenses of reddish brown coarse stony sand. Modern levelling.
- L102 Mixed, greyish brown sandy loam. Modern.
- L103 Reddish brown coarse sand (similar to the lenses within Layer or L101). Modern.
- L104 Brown to dark brown sandy loam with occasional pale brown mottles. Probably a topsoil, predating the construction of the pumping station.
- L105 Same as L104.
- L106 Very dark grey to black sandy silt loam.
- L107 Similar to L106.
- L108 Pale brown sandy silt loam with lenses of dark greyish brown sandy silt loam.

L106 to L108 were sandy silt subsoils varying in colour from very black to pale brown. In the northern and central parts of the trench, L106 and L107 were heavily discoloured by a black oily substance.

Trench 2 (section: Fig 4)

The stratigraphy was as follows:

- L201 Reddish brown sandy loam with medium content of small stones. Modern make-up.
- L202 Reddish brown sand. Modern deposit.
- L203 Mainly yellowish brown fine loamy sand. Modern.
- L204 Reddish brown to greyish brown sandy silt loam.
- L205 Dark greyish brown sandy silt loam.
- L206 Pale grey sandy silt loam with fine particles of grit.
- L207 Mainly dark grey sandy silt loam.

- F201 Concrete foundation. Continuation of F1 (Fig 2).
- F202 Trench fill, mainly brown sandy loam.
- F203 Reddish brown coarse sand with high content of small stones.

Overall, the stratigraphy here seems to comprise modern deposits and intrusions in the form of L201, L202, the concrete foundation (F201), and associated trench (F202), also a cut at the southern end filled with clean sandy gravel (F203). Below these lay a series of variously-tinged silt subsoils (L204, L205, L206, L207).

Trench 3 (section: Fig 5)

The western side of T3 was cut by a deep concrete channel which flanked the pool F1.

The stratigraphy was as follows:

- L301 Tarmac above coarse stony sand. Modern surfacing.
- L302 Dark brown sandy loam with occasional small stones. Earlier topsoil.
- L303 Yellowish brown sandy silt loam with scatter of small stones.
- L304 Reddish brown sandy silt loam.
- L305 Greyish brown sandy silt loam with low content of angular small stones. Similar to and merges with L304, L306 and L307.
- L306 Greyish brown sandy silt loam.
- L307 Similar to L306.

In this trench, the modern tarmac (L301) sealed a topsoil (L302), beneath which were silt subsoils L304, L305, L306 and L307, and possibly L303.

Trench 4 (section: Fig 6)

Situated close to the river bank, this trench was free from modern ground disturbance.

The stratigraphy was as follows:

- L401 Dark greyish brown sandy loam with a low content of small stones. Modern topsoil.
- L402 Yellowish brown fine sandy loam/loamy sand with rare grit and small stones. Lower horizon merges into:
 - L403 Mixed, mainly reddish brown coarse sand with grey silt loam mottles. Lower horizon merges into:
 - L404 Mainly greyish brown sandy silt loam. Lower horizon merges into:
 - L405 Mid greyish brown sandy silt loam.

Layers L403, L404 and L405 were silt subsoils. L402 appeared to be an earlier topsoil, but with a low humic content.

Trench 5

This trench, at the eastern extremity of the site, was dug previously by the contractor.

The stratigraphy was as follows:

- L500 0-100mm. Dark greyish brown sandy loam topsoil (removed as part of the general surface stripping of the site).
- L501 100-750mm. Mid brown sandy loam with occasional small stones and common tree roots.
- L502 750-900mm. Loamy sand dominated by small angular pebbles and grit.
- L503 900mm-1.1m. Mid brown sandy silt loam, becoming greyer with increasing depth.

The remainder of the trench stratigraphy was submerged.

The stony layer (L502) thinned out towards the western end of the trench and was not present further west in T4.

Finds

One find was retained temporarily: a suspected tile fragment from L107 which was contaminated by the black oily substance in T1. This was discarded when subsequent cleaning revealed it to be Portland cement.

Discussion

No archaeologically significant features or finds were revealed in the sampled areas of the site. The ground within the footprint of the proposed bungalows has in the past been subject to severe disturbance from the construction of the pumping station, in particular from the installation of buried channels and at least one large pool.

The observed site stratigraphy may be divided into three categories:

1. 19th- to 20th-century features and deposits associated with the pumping station.
These include the following contexts: L101-L103, L201-L203, L301, F1, F201-F203.
2. Topsoil, predating the construction of the pumping station.
Contexts: L104, L105, L302, L402.
3. Sandy silt subsoils.
Contexts: L106-L108, L204-L207, L304-L307, L403-L405.

In the absence of datable inclusions it was not possible to establish date ranges for any but the latest layers associated with the pumping station.

Archive

The site record and related material will be deposited with Welwyn Hatfield Museum Service, Mill Green Museum, Mill Green, Hatfield, Hertfordshire, under cover of archive code ORW2001.

Acknowledgements

The Trust is indebted to the following for their co-operation at various stages in the investigation of the site: J R Trodd Builders Ltd (James Monk, Wayne Bragg and Scott Beadle), and Hertfordshire County Council (Jonathan Smith, Alison Tinniswood and Stewart Bryant).

Carl Crossan, January 2001

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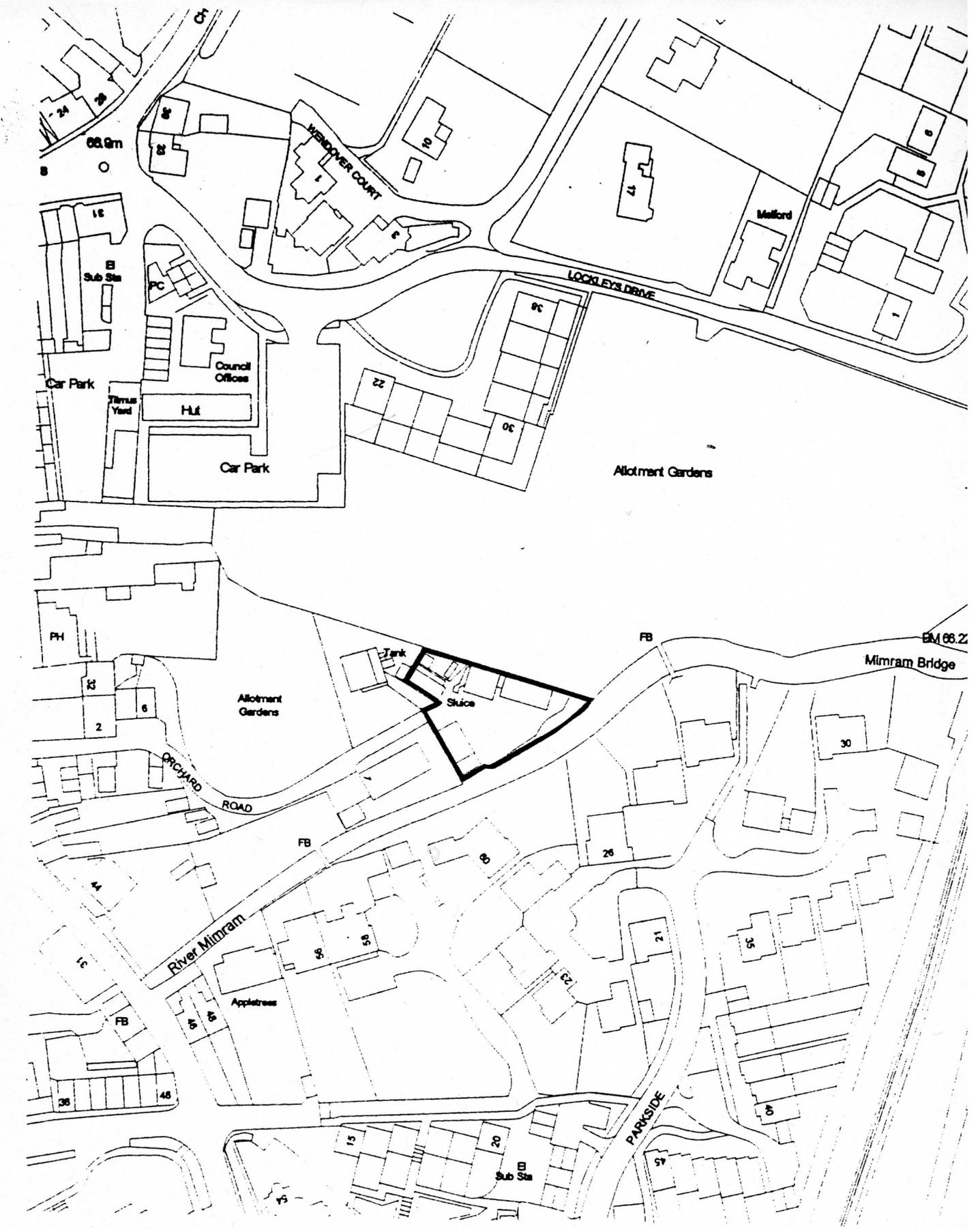
tel.: (01206) 541051

email: archaeologists@colchester-arch-trust.co.uk

checked by: Howard Brooks

date: 29.01.01

atholon c:/reports/welwyn/rep120.doc



50 metres



Figure 1: site location

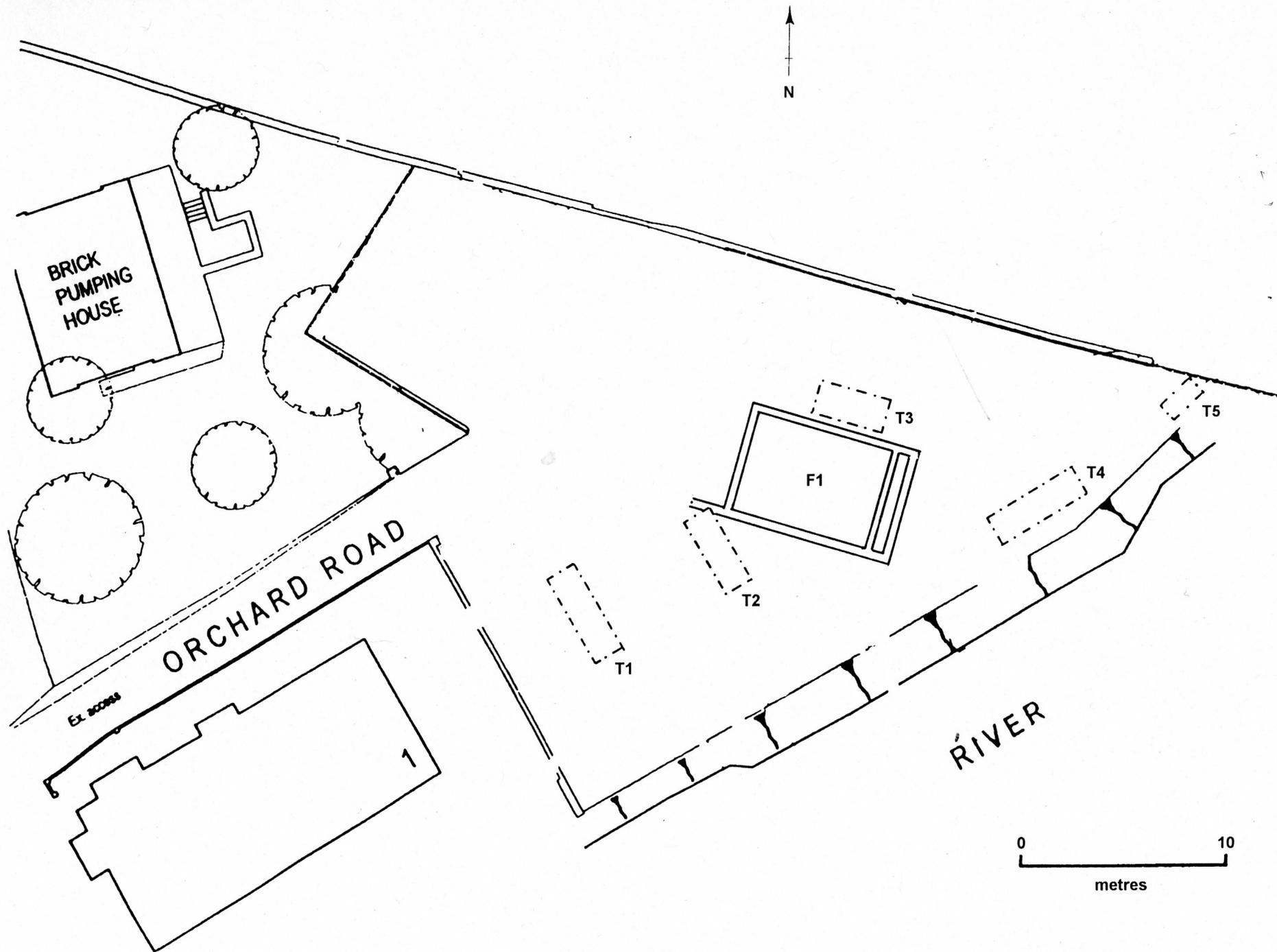


Fig 2 Site plan and trench locations.

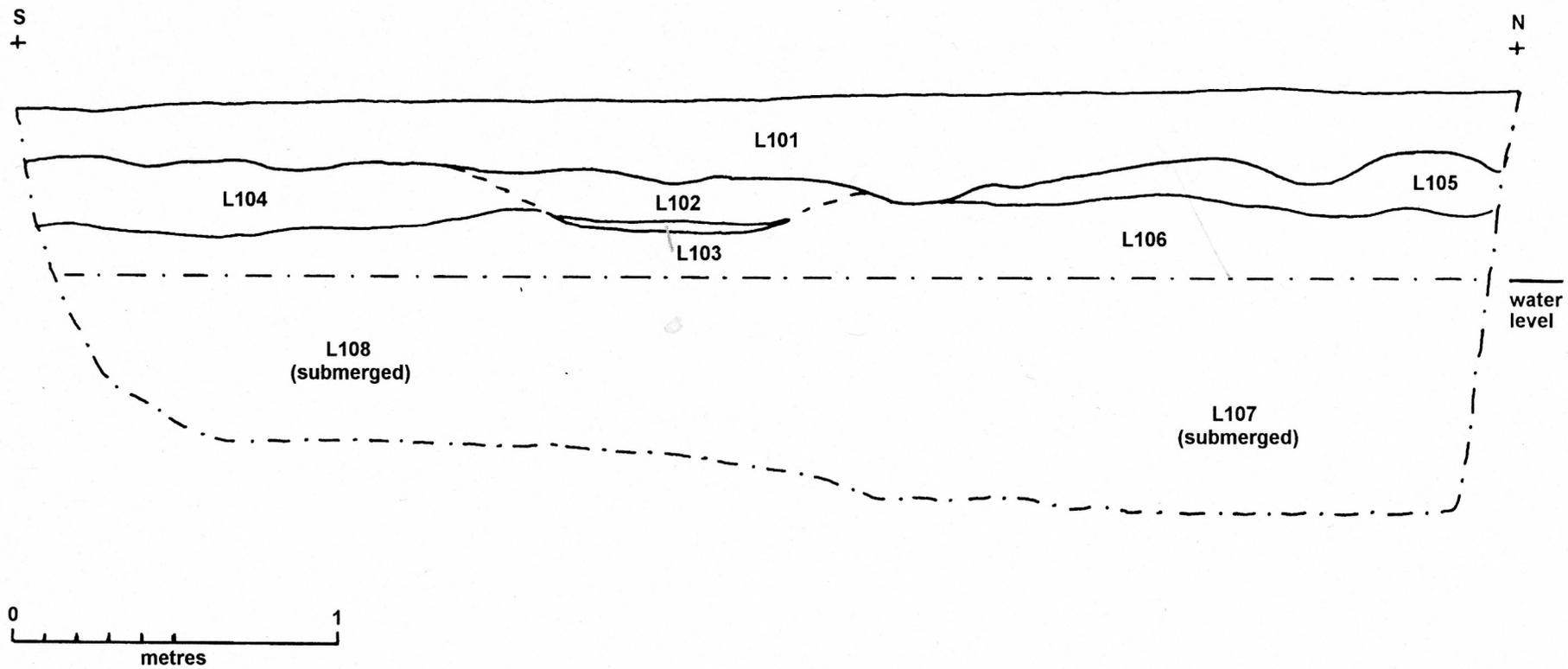


Fig 3 T1 section.

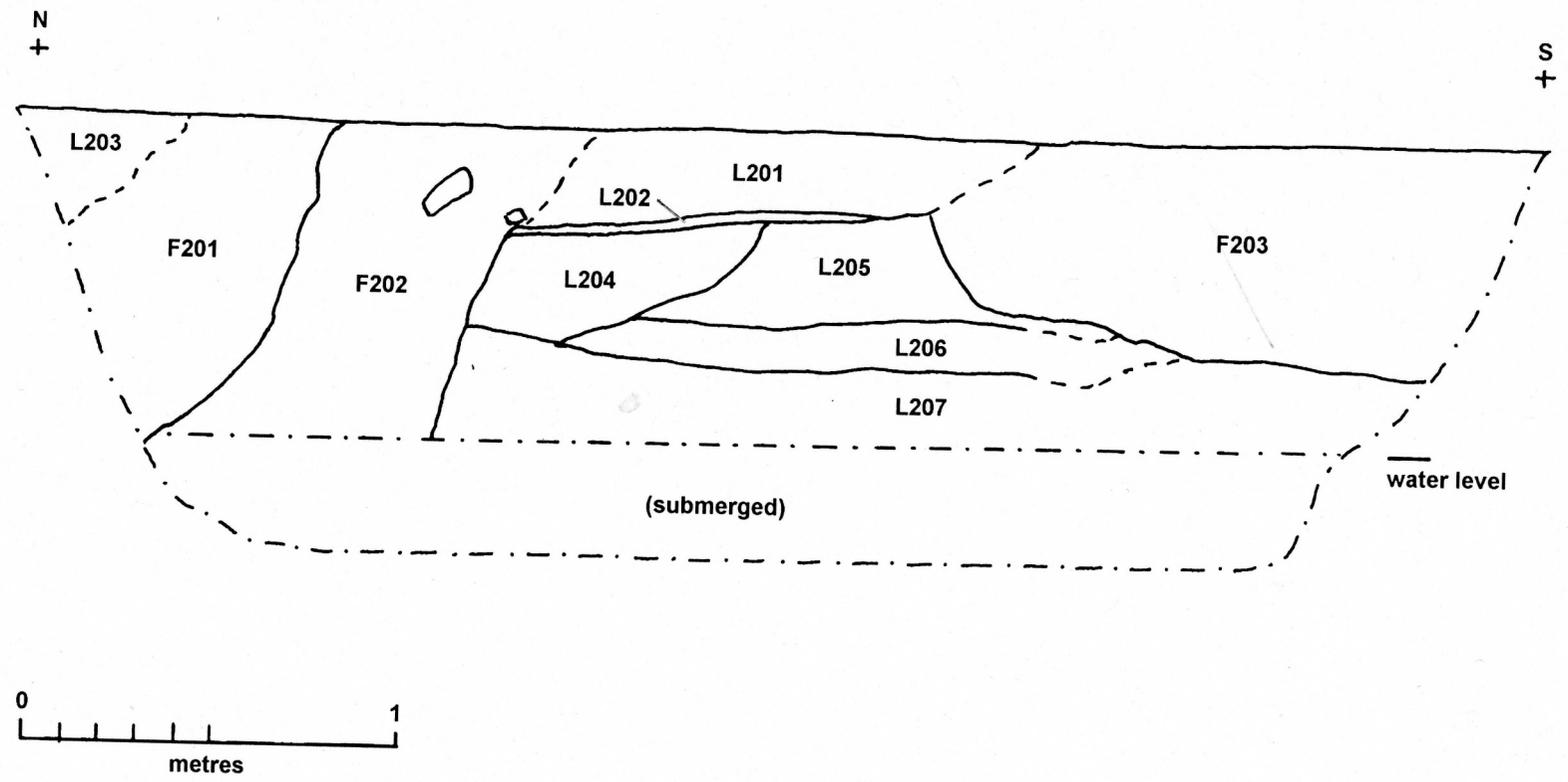


Fig 4 T2 section.

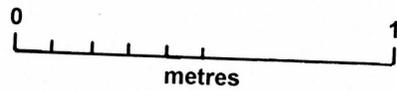
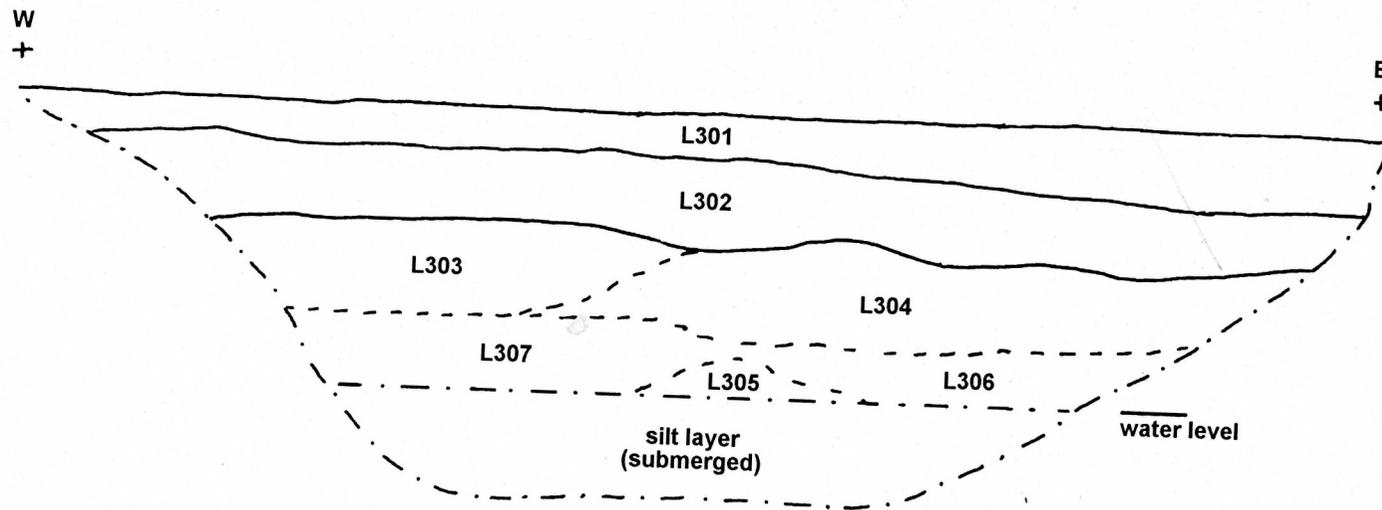


Fig 5 T3 section.

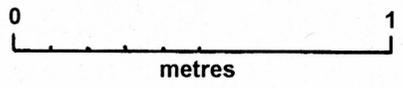
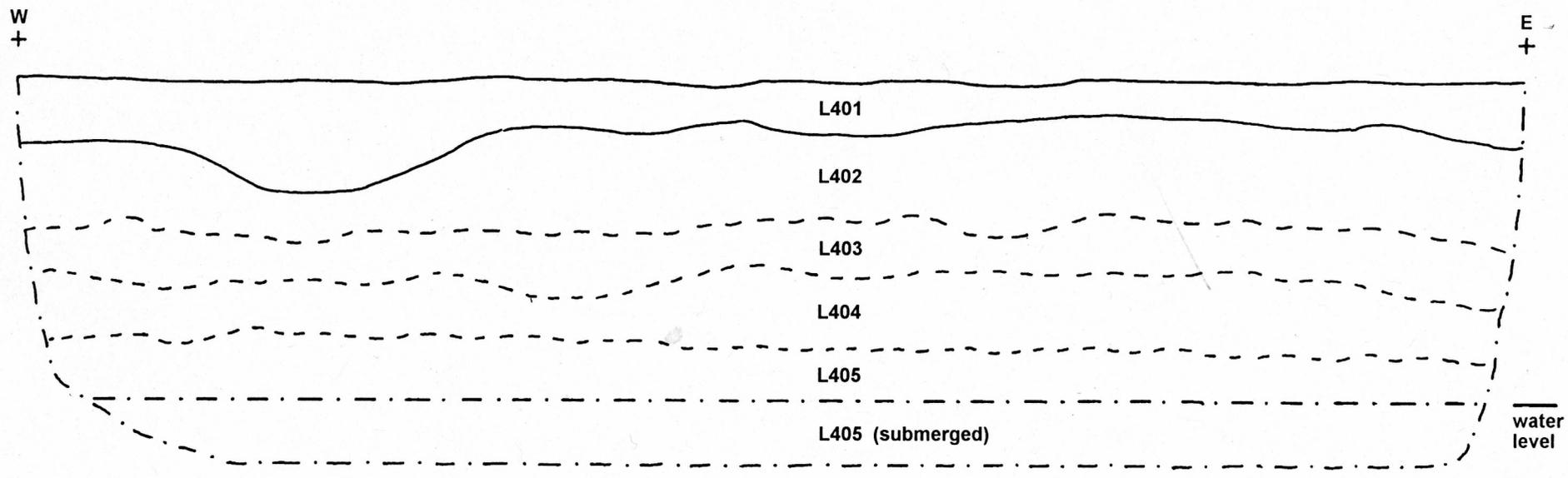


Fig 6 T4 section.

1

DESIGN BRIEF FOR ARCHAEOLOGICAL EVALUATION**County Archaeology Office
Hertfordshire County Council**

Site: Orchard Road, Welwyn

Developer: Stort Valley Housing Association

Builder: J R Trodd Builders Ltd, Broomfields, Coggeshall, Coggeshall Road, Earls Colne,
Colchester CO6 2JX

Development: Erection of three bungalows

This design brief is valid only for six months. After this period the County Archaeologist should be contacted. Any specification produced in response to this design brief will be considered valid only for a similar period.

1. PLANNING BACKGROUND

- 1.1 In response to an application for residential development on the above site, the County Archaeology Office (CAO) has recommended that the application site should be subject of a programme of archaeological investigation, comprising an archaeological evaluation together with any mitigation measures deemed necessary. The aim of the evaluation is to assess the impact of the development upon the archaeological resource.
- 1.2 This brief has been produced by the CAO, therefore, in order to enable a professional archaeological contractor draw a Written Scheme of Investigation for the **evaluation phase** of the investigation. This brief has been produced by the CAO, therefore, in order to enable a professional archaeological contractor draw a Written Scheme of Investigation for this project.

2. SITE & DEVELOPMENT DESCRIPTION

- 2.1 The site is abuts the north bank of the river Mimram. It was formally a local council depot, and brick buildings - including a brick pump house - and sheds occupy approximately 50% of the site. All of the buildings, apart from the pump house are due to be demolished. *The archaeological contractor should contact the developer or the builder for further details about the proposed development.*

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 The application site lies within the historic settlement of Welwyn which is of national importance in terms of its known Late Iron Age, Roman and medieval archaeology. In particular, Roman remains and evidence of a medieval building have been discovered in the allotments immediately to the north of the application (Herts SMR: 1792,4964). In addition, the proximity of the site to the river Mimram means that there is potential for waterlogged archaeological remains and palaeoenvironmental evidence.

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4. OBJECTIVES

- 4.1 The evaluation should aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by development of the site and in accordance with the sampling strategy outlined in section 5 below.
- 4.2 The evaluation should include a comprehensive assessment of the regional context within which the archaeological evidence rests and should aim to highlight any research priorities relevant to any further investigation of the site.

5. SPECIFIC ARCHAEOLOGICAL REQUIREMENTS

- 5.1 The evaluation strategy should comprise the following stages:
1. A rapid desk-based assessment of the site in order to collate, verify and assess any relevant archaeological, documentary, cartographic and geotechnical information.
 2. The trial investigation of the site through the use of trenches and/or test-pits in the areas of the new dwelling and any other deep intrusions. It is suggested that the trial trenching should amount to at least 25 square metres in total.

6. GENERAL ARCHAEOLOGICAL REQUIREMENTS

- 6.1 In accordance with the standards and guidance produced by the IFA (see below), this design brief should not be considered sufficient to enable the total execution of the project. A **Written Scheme of Investigation (WSI)** or specification is required, therefore, in order to provide 'the basis for a measurable standard'.
- 6.2 The WSI or project specification should be prepared by a professional archaeological contractor in response to this design brief. This document should conform to the format contained in Appendix 2 of English Heritage's MAP 2 publication. In particular, the WSI should include the following:
1. **Research Design:** This should demonstrate a clear understanding of the project's academic aims and objectives;
 2. **Archaeological Method Statement** detailing the techniques, recording systems and sampling procedures to be employed. These should conform with the guidelines set down in **Methods Statement No.1 - Standards and Practices for Archaeological Excavation of Exploratory Trial Trenches** (copies available from the CAO). In particular the Method Statement should include:
 - provide details of the strategy for sampling the deposits on the site and for the specialist assessment of their environmental potential (including soil micromorphology);
 - a provisional programme outlining post-excavation analysis, the completion of the project archive and the production of an evaluation report;
 - show what provision has been made for conservation and long-term deposition of the project archive;
 3. The WSI should indicate the experience of the staff undertaking the project and provide details of all specialist sub-contractors - the on-site supervisor must have fieldwork experience equivalent to at least that required for Associate membership of IFA;

3

4. The WSI should clearly demonstrate that the proposed work can be undertaken in accordance with all relevant health and safety legislation (including CIDM) - copies of Risk Assessments should be included;
5. The WSI should be approved by the Local Planning Authority before implementation.
- 6.3 Non-archaeological constraints on the proposed trench layout should be defined and accounted for in the WSI. These may include: live services, access routes and rights of way, the presence of listed buildings, tree preservation orders, ecological sites or designation and historic surfaces.
- 6.4 The project should be conducted by an archaeological organisation working in accordance with the By-laws of the Institute of Field Archaeologists. Archaeologists working on the project should not attempt tasks outside of their areas of competence.
- 6.5 The County Archaeological Officer will monitor progress on behalf of the Local Planning Authority. To facilitate this the CAO should be informed of the projected timetable of works and be advised promptly of any proposed changes to this timetable:
- 6.6 The project archive shall be compiled in accordance with the guidelines contained in *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (UKIC, 1990), and *Standards in the Museum Care of Archaeological Collections* (Museum and Galleries Commission, 1992)
- 6.7 The IFA's *Standard and Guidance for Archaeological Field Evaluations* should be used for additional guidance in the design of the WSI or project specification, the contents of the report and for the general execution of the project.

7. PRESENTATION OF RESULTS

- 7.1 Upon completion of stage 1 of the evaluation (the desk-based assessment) a report should be submitted for consideration by the CAO.
- 7.2 Upon completion of the field evaluation (stages 1 and 2), a report on the results obtained should be prepared within four weeks of the completion of the fieldwork. This should include:
 1. the aims and methods adopted in the course of the evaluation
 2. the nature, location, extent, date, significance and quality of any archaeological and environmental material uncovered
 3. the anticipated degree of survival of archaeological deposits and structures across the site, as deduced from its present state and recent past
 4. the nature and location of the sub-soil deposits encountered
 5. appropriate illustrative material such as maps, plans, sections, drawings and photographs and including site location plan at 1:2500; site plan at 1:1250 and, where appropriate, large-scale trench-specific plans
 6. specialist report (e.g. finds and environmental assessments)
 7. summary

4

8. a description of the archive contents and details of its location for long-term storage
 9. a concise non-technical summary.
- 7.3. In addition to the copies of the evaluation report supplied to the client, the contractor should produce **four** copies for the County Archaeology Office for inclusion in the SMR. The contractor should also submit copies of the project report to the National Monuments Record in Swindon and to the CBA for inclusion in the British Archaeological Bibliography.
- 7.4. A report of the project's findings should be submitted, accompanied by appropriate resources, for publication in *Hertfordshire Archaeology* within 6 months of the completion of the fieldwork.

If you wish to comment on the contents of this brief or require additional information, then please contact the Planning Archaeologist at the address below:

County Archaeology Office
Environment Department
Hertfordshire County Council, County Hall, Hertford SG13 8DN
Tel. (01992) 555241 - Fax (01992) 555251
e-mail: stewart.bryant@hertscc.gov.uk

**County Archaeology Office
Hertfordshire County Council**

**Archaeological Contractors based in Hertfordshire
(in alphabetical order)**

Archaeological Services & Consultancy Ltd

22 Priory Gardens
Berkhamsted
Herts.
HP4 2DS

Tel. 01442 864088
Contact: Dr Jonathan Hunn

Letchworth House
Chesney Wold
Bleak Hall
Milton Keynes
MK6 1NE

Tel. 01908 608989
Contact: Robert Zeeprat

Hertfordshire Archaeological Trust

The Seed Warehouse
Maidenhead Yard
The Wash
Hertford
Herts. SG14 1PX

Tel. 01992 558170 Contact: Claire Halpin

The Heritage Network

12 Royston Road
Baldock
Herts. SG7 6NT

Tel. 01462 893288 Contact: David Hillelson

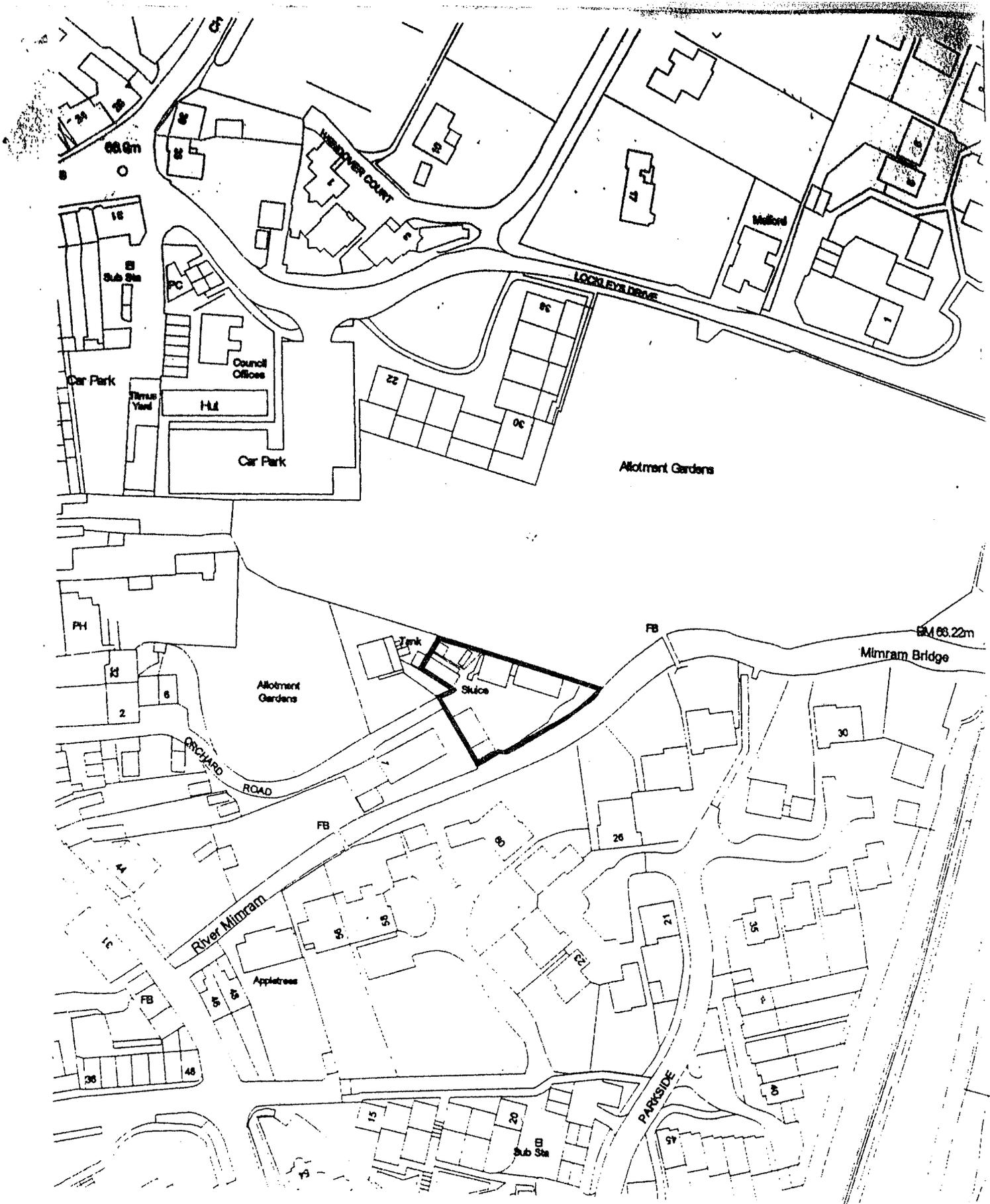
Inclusion on this list does not imply any form of approval or recommendation. Hertfordshire County Council, its servants or agents accept no responsibility in any form whatsoever, whether direct or indirect, for any loss or damage however caused in using the services of any of the contractors listed. Information on archaeological contractors and consultants based outside the county can be provided on request.

Written Scheme of Investigation
for an
archaeological evaluation at
Orchard Road, Welwyn, Hertfordshire, Herts

November 2000



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COLCHESTER,
ESSEX CO3 3NF
tel/fax: (01206) 541051
email: archaeologists@colchester-arch-trust.co.uk



50 metres



Figure 1: site location

● = BOREHOLE
 ■ = TEST PIT
 figure is the apparent depth of natural ground

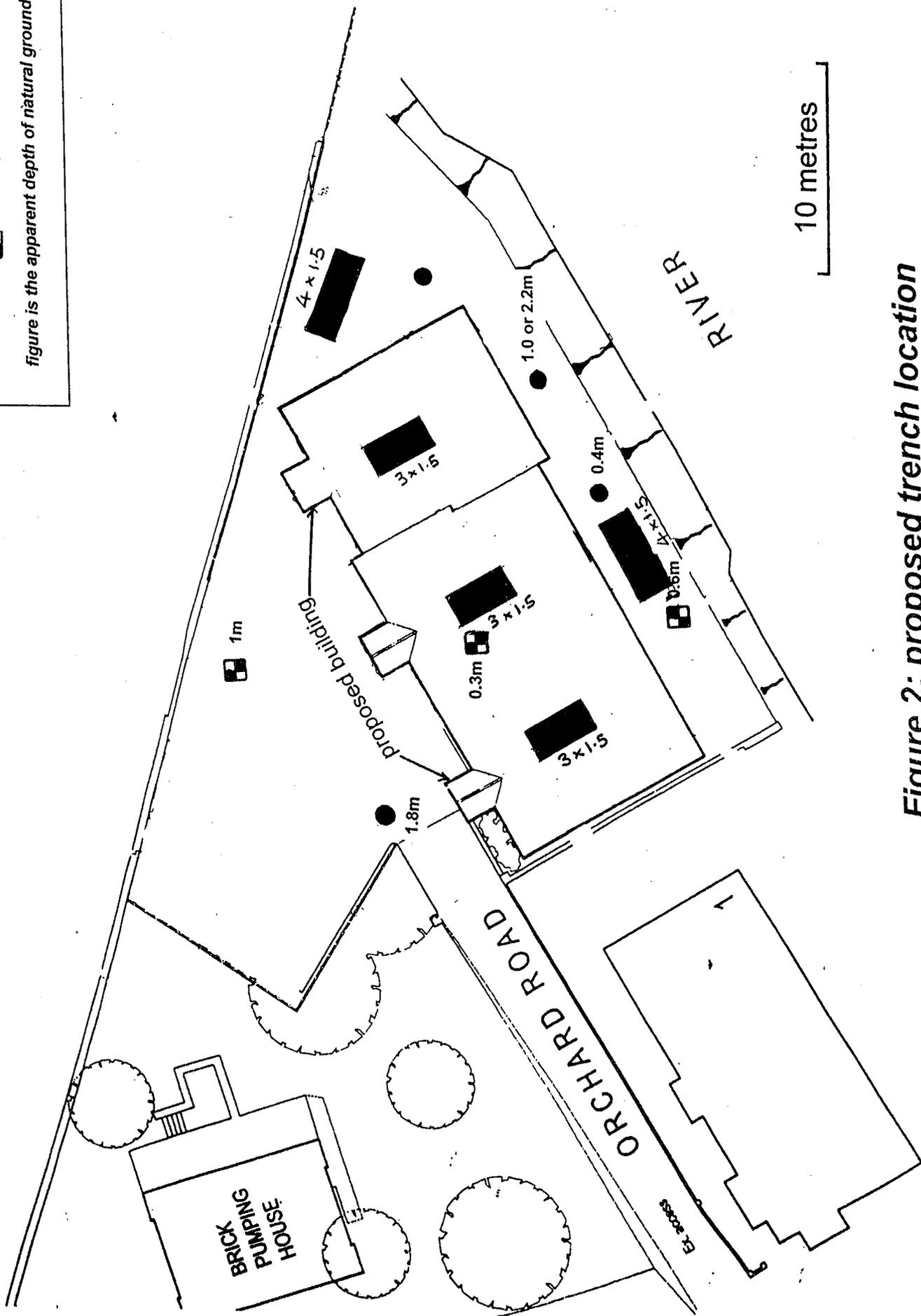


Figure 2: proposed trench location

Written Scheme of Investigation for an archaeological evaluation at Orchard Road, Welwyn, Hertfordshire.

1 Introduction

- 1.1 This is a Written Scheme of Investigation for an archaeological evaluation by trial trenching at Orchard Road, Welwyn, Hertfordshire (NGR TL 2315 1615).
- 1.2 This WSI has been written by Colchester Archaeological Trust in response to a design brief written by the Hertfordshire County Archaeology Office (CAO) .
- 1.3 Proposed work is the construction of three bungalows.
- 1.4 This WSI sets out proposals for the conduct of an evaluation, leading to post-excavation work and the production of an archive report and (if necessary) publication text.
- 1.5 Any variations in this WSI will be agreed beforehand with CAO.

2 Site Description

- 2.1 The site lies on the north bank of the river Mimram. It was formerly a local council depot. Brick buildings occupying the site are being demolished at the time of writing. The Pump House is to be left standing.

3 Archaeological background

- 3.1 The application area lies within the historic settlement of Welwyn, whose Late Iron Age, Roman and medieval remains are of national importance.
- 3.2 A rapid desk-based assessment of the site has shown that the area is rich in archaeological remains. Roman cemeteries, and a Roman grain processing site lie close to the application area, and Roman pottery and tile have been found within 50metres. The Dicket Mead Roman villa lies beyond the bypass, to the south east of the site. The site also lies on the eastern fringe of the medieval village of Welwyn, and building materials from a medieval house have been found just to the north of the application area.
- 3.3 The proximity of the site to the river means that there is a potential for waterlogging.

4 Aim

- 4.1 The aim of the archaeological work is to determine the location, character, extent, date, significance and quality of any surviving archaeological remains. Using this information, an informed decision can be made on any future necessary archaeological work.
- 4.2 Specific aims of the excavation will be to assess the evidence for:
 - late Iron Age and Roman occupation.
 - Roman burials
 - the medieval development of the area.
 - Surviving structural elements and their state of preservation.
 - The range of objects that were in use, their status, presence of imports, etc.

5 General methodology

- 5.1 All works will be undertaken by a team of professional archaeologists. The proposed team structure is given in the appendix (end of document).
- 5.2 Mains services will be studied to avoid disturbing them.
- 5.3 All the latest Health and Safety guidelines will be followed on site. CAT has a standard safety policy, which will be adhered to. A risk assessment is attached here.
- 5.4 A site code will be obtained through CAO. For purposes of deposition of the archive, a museum accession code will be obtained through Welwyn Hatfield Museum. All codes will be quoted in any reports arising from the work.
- 5.5 The *Code of Conduct* and the relevant *Standards and Guidance* note of the Institute of Field Archaeologists (IFA) will be followed.

6 Excavation methodology

- 6.1 Three trial trenches measuring 1.5 x 7m will be excavated on the footprint of the proposed new bungalows on the river side of the site. The trench plan, which avoids an area of hardstanding, is shown on figure 2. There may need to be some minor adjustment of trench position if unexpected foundations or drain runs are encountered. No major variations will be made without CAO consent.
- 6.2 Topsoil/ploughsoil or other overburden will be removed by mechanical digger with a flat-edged ditching bucket under archaeological supervision.
- 6.3 Topsoil stripping by machine will only proceed as deep as the first significant archaeological level, at which level archaeological features or deposits will be cleaned and excavated by hand.
- 6.4 All exposed sub-soil features or archaeological deposits or négative features will be planned at an appropriate scale. The normal scale will be site plans at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be appropriate.
- 6.5 Archaeological deposits or features will be excavated by hand. Fast excavation techniques involving (for instance) picks, forks, or mattocks will not be used on complex stratigraphy. Features will normally be half sectioned, and linear features sampled by 10% excavation. However, structural details (post holes, beam slots) and burials will be fully excavated.
- 6.6 Masonry walls will be carefully cleaned and planned, and will be left *in situ* if possible.
- 6.7 A metal detector will be used to check spoil heaps and any suitable strata, and the finds recovered.
- 6.8 Individual records of excavated contexts, layers, features or deposits will be entered on pro-forma record sheets. Registers will be compiled of finds and samples.
- 6.9 The photographic record will consist of general site shots, and shots of all archaeological features and deposits. Standard "record" shots of contexts will be taken on a digital camera. Colour transparencies will still be used for overall site shots and *all* important contexts.

7 Finds

- 7.1 If any human remains are exposed, the coroner will be informed at once, and CAO and the client will be notified. All human remains will be left and recorded *in situ*. A Home Office license to remove the remains will be sought if this is the appropriate course of action. Due attention will be paid to Health and Safety.
- 7.2 All finds will be retained from each archaeological context excavated. Policies for later disposal of any finds will be agreed with CAO and Welwyn Hatfield Museum.
- 7.3 All finds, where appropriate, will be washed.
- 7.4 A policy of marking for pottery and other finds will be agreed with Welwyn Hatfield Museum. Marking will include the site code and context number.
- 7.5 The site archive will be presented to Welwyn Hatfield Museums in accordance with their requirements
- 7.6 All finds of potential treasure will be removed to a safe place, and the coroner informed immediately, in accordance with the rules of the Treasure Act 1996. The definition of treasure is given in pages 3-5 of the Code of Practice of the above act. This refers primarily to gold or silver objects.
- 7.7 Finds work will be to accepted professional standards and adhere to the Institute of Archaeologists' published booklet *Guidelines for Finds Work*.
- 7.8 A list of specialist available for consultation is given at the end of this WSI. If any of the excavated material is outside the experience of the listed specialists, then local knowledge will be sought through specialists nominated by CAO.

8 Results

- 8.1 Notification will be given to CAO when the fieldwork has been completed.
- 8.2 The full report, including site matrices, specialist assessments and full reports on artefacts and environmental samples, will be submitted within a length of time not exceeding 12 months from the end of fieldwork, with two copies supplied to CAO, and Welwyn Hatfield Museum.
- 8.3 This report will include:
- The aims and methods adopted in the course of the evaluation
 - Location plan of the trenches, with 10 figure grid references at two points on the trenches
 - A section/s drawing/s showing depth of deposits including present ground level with Ordnance Datum, and vertical and horizontal scale.
 - Evaluation methodology & detailed results with a suitable conclusion & discussion.
 - All specialist reports and assessments.
 - A concise non-technical summary of the project results.
- 8.4 A full archive will be prepared to minimum acceptable standards outlined in *Management of Archaeological Projects: 2*.
- 8.5 Within four weeks of the end of fieldwork, CAO will be supplied with a post-excavation programme, and a summary of the project suitable for inclusion in the Sites and Monuments Record (SMR), including a location plan, and other plans where appropriate. A summary will be supplied even if the project has a negative result.
- 8.6 The results will be submitted for publication, at least at a summary level, in a local archaeological journal nominated by CAO.

9 Archive deposition

- 9.1 The full archive will be deposited at Welwyn Hatfield Museum within 2 months of completion of final publication report on the project, and confirmed to CAO. All requirements for archive storage as required by Welwyn Hatfield Museum.
- 9.2 Finds (and other retained materials) will be bagged and boxed in the manner recommended by Welwyn Hatfield Museum.
- 9.3 Plans will be presented on hanging strips to fit Welwyn Hatfield Museum storage systems.
- 9.4 Photographic archive is to be presented as follows: colour slides in hanging strips or in folders of archival quality, original digital data on discs, hard copies of digital photos on high quality paper, or as otherwise requested by Welwyn Hatfield Museum.
- 9.5 Copy disks of material held on computers will be presented to Welwyn Hatfield Museums, along with bound copies of printouts.
- 9.6 A summary of the contents of the archive shall be supplied to CAO at the time of deposition at the museum.

10 Monitoring

- 10.1 CAO will be responsible for monitoring progress and standards throughout the project, and will be kept regularly informed during fieldwork, post-excavation and publication stages.
- 10.2 Notification of the start of work will be give preferably in writing to CAO one week in advance of its commencement.
- 10.3 Any variations of the WSI shall be agreed with CAO in writing prior to them being carried out.
- 10.4 CAO will be notified preferably in writing when the fieldwork is complete.
- 10.5 The involvement of CAO shall be acknowledged in any report or publication generated by this project.

24/11/2000

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Appendix

TEAM STRUCTURE

LIST OF TEAM MEMBERS

Project Management

Howard Brooks

Site supervisors

Stephen Benfield, Colin Austin, Kate Orr

Site assistants:

Nigel Rayner, B Hurrell, P Lomas, K Weller, AN Others

Finds consultants

Stephen Benfield (CAT) LIA/Roman pottery
Peter Berridge (Colchester Museum) Lithics
Joanna Bird (Guildford) Samian ware
Ernest Black (Colchester) Roman brick/tile
Howard Brooks (CAT) Medieval & post-medieval pottery
Nigel Brown (ECC) Prehistoric Pottery
Dr Hilary Cool (Nottingham) Roman glass
Nina Crummy (Colchester): Small finds
John Davis (Norwich Museum) Roman coins
Jacqueline McKinley (Warminster) Human osteoarchaeology
Val Fryer (UEA/Loddon) Environmental
Sue Tyler (ECC) Saxon Pottery
Alec Wade (Colchester) Animal and Human bone
Helen Walker (ECC) Saxon, Medieval & post-medieval pottery

Graphics

S Benfield, J Walker

Report writing

H Brooks/S Benfield/C Austin

APPENDIX

DETAILS OF TEAM MEMBERS

SENIOR SITE STAFF

Howard Brooks BA (Hons) MIFA (CAT)

Howard's involvement in Essex archaeology goes back to 1970 when he dug at Sheepen, Colchester with Ros Dunnett. He studied archaeology at the University of Wales, and graduated in 1975. He worked for Colchester Archaeological Trust between 1976 and 1981, and again in 1985, where he was involved at various levels of responsibility in the excavation of Roman Colchester and suburbs (*Colchester Archaeological Report 3* [1984]). Between 1985 and 1992 he worked for Essex County Archaeology Section, first in directing the fieldwalking and excavation project at Stansted Airport (forthcoming *East Anglian Archaeology*), and then in Development Control. Howard then left ECC to set up and run HBAS, the county's smallest contracting team, in which capacity he carried out over twenty field projects. He rejoined CAT in 1997. He regularly contributes to *Essex Archaeology & History*, and teaches WEA and University of Essex evening classes on archaeology.

Stephen Benfield BA, Cert Archaeol (Oxon) (CAT)

After working in farming Banking, Estate Agency, and in a Jobcentre, Stephen discovered archaeology. His first involvement with Colchester archaeology was in 1985, working on a Manpower Services Commission sponsored project to assist in processing the enormous collection of Roman pottery from excavations in the town. After that he studied for his post-graduate Certificate in Archaeology at Oxford. Returning to CAT, he has since worked on many CAT projects at various supervisory and directorial positions, including the major projects at Stanway Iron Age burial site and Gosbecks Roman temple/theatre complex. Stephen has also, through much hands-on experience, built up a considerable working knowledge of LIA and Roman ceramics. He now completes ceramic assessments and full reports for CAT, drawing on the unrivalled catalogues provided by the standard Colchester works *Camulodunum* (Hawkes & Hull 1947), *Roman Colchester* (Hull 1958) and now *CAR 10*, and by examining the fabric series held at CAT headquarters.

Katherine Orr MA AIFA

Kate joined CAT in 2000 after a five year stint as North Kesteven Heritage Officer. She is yet another graduate of Cardiff University, gaining a 2.1 in 1992. She read for her MA at York, with a dissertation topic on the presentation of prehistoric monuments. Her publications include *The North Kesteven Medieval Trail* (rewritten from an earlier trail guide), and *Sleaford Teachers Pack: Archaeology and History*. She now conducts small evaluations and watching briefs and compiles Desk-based assessments for CAT.

Colin Austin BSc Dip Arch

Colin graduated in Environmental Sciences in 1980, but since then he has completed a Diploma course in Scientific Methods in Archaeology at Bradford. He has over eight years total excavation experience, up to site supervisor level. His principal projects have been St Martin's Palace Plain, Norwich (Saxon/medieval) for Brian Ayers; a BA barrow for John Wymer, a Shetland broch; a year at Elms Farm, Heybridge (Mark Atkinson); and several months at Gosbecks Colchester (IA/RB settlement), Co-operative Stores, Abbotstone Quarry, Head Street, and other sites for Colchester Archaeological Trust. When not digging, he is to be found supervising environmental projects for various environmental bodies.

FINDS SPECIALISTS

Peter Berridge (Colchester Museum) Lithics

Another graduate of the University of Wales, Peter is now Curator of Colchester Museum. He has over the years, built up a working knowledge of flints, and his published works include contributions to *Proceedings of the Prehistoric Society*.

Joanna Bird FSA (Guildford) Samian

Joanna is one of the country's top samian specialists. Among her large corpus of work is a contribution to the blockbuster *Colchester Archaeological Report 10: Roman pottery from excavations in Colchester 1971-86*.

Ernest Black (Colchester) Roman brick/tile

Ernie is a Colchester schoolteacher with a wide interest in archaeology and the classical world. In this sense, he is following in the footsteps of A.F. Hall, and Mike Corbishley who were also local schoolmasters. He has developed his specialism by large scale hands-on experience with Roman brick and tile, and has contributed to the *Arch J*, *CAR 6: Excavations at Culver Street, the Gilbert School, and other sites in Colchester 1971-85*.

Nigel Brown BA MIFA FSA FSA (Scot): (Essex CC) Prehistoric Pottery.

Nigel is the county's leading prehistoric pottery specialist, and is building a reputation farther afield. He has worked for the County Archaeology Section since 1980, contributes regularly to *Essex Archaeology & History*, and has directed several major excavations in Essex, principally the Bronze Age Farmstead at Loff's Farm (*Proc Prehist Soc* 54 [1988]), and North Shoebury project (*East Anglian Archaeology* 75). He also contributed to *Colchester Archaeological Report 6: Excavations at Culver Street, the Gilbert School, and other sites in Colchester 1971-85*.

Dr Hilary Cool FSA MIFA (Nottingham) Roman glass

Yet another graduate of the University of Wales, Hilary is now a freelance glass and finds specialist, and has written many reports on glass from Colchester sites, including contributions to *Colchester Archaeological Report 6: Excavations at Culver Street, the Gilbert School, and other sites in Colchester 1971-85*, and *Colchester Archaeological Report 9: Excavations on Roman and later cemeteries, churches and monastic sites in Colchester 1971-88* (1993). Among her major works is the internationally selling *Colchester Archaeological Report 8: Roman vessel glass from excavations in Colchester 1971-85*.

Nina Crummy (Colchester) Small finds

Nina first worked in the early 1970s as finds assistant on the major urban excavations in Colchester for the Colchester Excavation Committee (later the Trust). Over the next twenty years she built up an unrivalled working knowledge of small finds of all types. She has collaborated in most of the *Colchester Archaeological Reports*, and was principal author of the best-selling *Colchester Archaeological Reports 2* (Roman small finds), **4** (*The coins from excavations in Colchester 1971-9*) and **5** (*The post-Roman small finds from excavations in Colchester 1971-85*). She recently worked for the Museum of London, and was instrumental in the recent transfer of and the massive improvement in accessibility to archaeological archives in London. She now works freelance on small finds reports for CAT, HBAS, and other bodies including Winchester Excavation Committee.

Dr John A Davies (Norwich Museum) Roman coins

John has, for some years, written reports on Roman coins from Colchester excavations. He specialises in barbarous radiates, and has contributed to *British Numismatic Journal* on that topic. Among his other publications is a contribution to *Colchester Archaeological Report 4: The coins from excavations in Colchester 1971-9*, and *CAR 9: Excavations on Roman and later cemeteries, churches and monastic sites in Colchester 1971-88* (1993).

Jacqueline McKinley B Tech MIFA (Warminster) Human remains

Jacqueline has worked in archaeology since the mid-1980s, and has experience of fieldwork, post-excavation and osteoarchaeology. To date, she has completed over sixty reports on cremation, inhumation and mixed cemeteries on assemblages from England Scotland and Wales, comprising over 4,000 cremation and 500 inhumation burials. Major cemetery assemblages on which she has worked include Baldock, St Stephen's, Spong Hill, and Sancton.

Peter Murphy BSc M Phil (UEA) Environmental

Peter's first contact with Essex Archaeology was as a graduate at Southampton University where he processed and reported on environmental samples from the urban excavations in Colchester the mid 1970s. He joined the Centre for East Anglian Studies (Univ of East Anglia) in Norwich in 1977, and from that base has established himself as the father figure of East Anglian environmental studies. He has been involved in virtually every major project in the east of England over the past twenty years where environmental studies are concerned, and has written and lectured widely. He covers East Anglia in general (Norfolk, Suffolk, Essex, Lincolnshire, Cambridgeshire, Hertfordshire) but has a specific role for English Heritage in co-ordinating environmental matters in Midland Region (most of S England).

Patricia Ryan (Chelmsford) Medieval and later brick and tile

Pat has for many years been examining excavated collections of brick and tile from Essex sites, and contributing reports which are usually consigned to the gloomier parts of archive reports, or as footnotes in published texts. Her regular contributions to *Essex Archaeology & History*, therefore, under-represent the devoted study which Pat has put in over the years. Nobody knows more about local brick and tile, except for David Andrews, with whom she collaborated on significant sections of *Cressing Temple: A Templar and Hospitaller Manor in Essex* (1993).

Dr Paul Sealey (Colchester Museums) Amphoras

Paul has worked at Colchester Museum since the late 1970s. His PhD specialism was Roman amphoras, a topic on which he writes specialist reports. His main areas of interest are prehistory and the Roman period, and he has developed a familiarity with those periods and their ceramics. He has published widely. His major works include *Amphoras from the 1970 excavations at Colchester Sheepen* (BAR 142, 1985), contributions to Ros Niblett's *Sheepen: an early Roman industrial site at Camulodunum* (CBA Res Rep 57, 1985). He regularly contributes to *Essex Archaeology & History*.

Sue Tyler (ECC) Saxon Pottery

Sue is the County authority on Saxon material, especially pottery. She has had several spells working with Essex County Archaeology Section, interrupted by a late-1980s spell in Hertfordshire. She has written reports on Saxon material for many Essex Projects, and contributes regularly to *Essex Archaeology & History*, including the Anglo-Saxon cemetery at Prittlewell (*Essex Archaeol Hist* 19 (1988)).

Alec Wade (Colchester) Animal and Human Bone

Alec worked for Essex County Council Field Archaeology Group for a number of years, assessing and writing up small to medium sized collections of faunal remains. He studied with Dr Tony Legge at the Institute of Archaeology, where he had the use of Dr Legge's large bone database. Alec left the County team in 1996, since when he has completed many assessments and reports principally for ECC and CAT. He has been involved on-site with several CAT projects, where he makes use of his considerable graphic skills.

Helen Walker BSc (ECC) Medieval and post-medieval pottery.

Helen is Essex County Council Field Archaeology Group's medieval and post-medieval pottery specialist. Before joining ECC in 1985, she worked on finds in Carmarthen, and for Hampshire CC on projects in Winchester. Since 1985, she has contributed reports on ceramics to many other projects in the county. A regular contributor to *Essex Archaeology & History*, her principal publications include reports on the Rayleigh kiln dump, and George Street and Church Street, Harwich (*Essex Archaeology & History*, 21 [1990]), and North Shoebury (*EAA* 75).

Colchester Archaeological Trust, 12, Lex 1 Road, Colchester

plan no(s)	stratigraphical relationships	layer no
_____/____	_____ _____ _____ _____	100 _____
_____/____	_____ _____ _____ _____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix

notes	location	T 1
	profile / section nos	
	sketch-book page no	

plan no(s)	stratigraphical relationships	layer no
_____/____	_____ _____ _____ _____	_____
_____/____	_____ _____ _____ _____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix |

notes	location	
	profile / section nos	
	sketch-book page no	

plan no(s)	stratigraphical relationships	layer no
_____/____	<u>20.1</u> _____	<u>20.1</u>
_____/____	_____	
_____/____	_____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____		_____	

description of matrix
 browney orange top layer. Loose with small stones
 200MM thick. Cut by F202 + F203

notes	location
	T2
	profile/section nos
	sketch-book page no
	①

plan no(s)	stratigraphical relationships	layer no
_____/____	<u>20.1</u> _____	<u>20.2</u>
_____/____	<u>20.2</u> _____	
_____/____	_____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____		_____	

description of matrix |
 yellow band 200MM thick

notes	location
	T2
	profile/section nos
	sketch-book page no
	①

Colchester Archaeological Trust, 12, Lex Road, Colchester

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plan no(s)	stratigraphical relationships	layer no
_____/____	_____ _____ _____ _____	203
_____/____	_____ _____ _____ _____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix Light brown sand cut by concrete (FES201)
 Top Layer

notes	location
	profile/section nos
	sketch-book page no
	TB2
	1

plan no(s)	stratigraphical relationships	layer no
_____/____	202 _____ _____ _____	204
_____/____	204 _____ _____ _____	
_____/____	207 206 _____ _____ _____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix | red brown soil

notes	location
	profile/section nos
	sketch-book page no
	T2
	1

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plan no(s)	stratigraphical relationships	layer no
_____ / _____	<u>202</u> _____	<u>205</u>
_____ / _____	<u>205</u> _____	
_____ / _____	<u>206</u> _____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix
Blackish band

notes	location T2
	profile / section nos
	sketch-book page no ①

plan no(s)	stratigraphical relationships	layer no
_____ / _____	<u>205</u> _____	<u>206</u>
_____ / _____	<u>206</u> _____	
_____ / _____	<u>207</u> _____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix |
Light grey clay

notes	location T2
	profile / section nos
	sketch-book page no ①

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plan no(s)	stratigraphical relationships	layer no
<u> </u> / <u> </u>	<u>20.6</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>20.7</u>
<u> </u> / <u> </u>	<u>20.7</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix
Blackish clay

notes	location
	<i>T2</i>
	profile/section nos
	sketch-book page no
	<i>1</i>

plan no(s)	stratigraphical relationships	layer no
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u> </u>
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix |

notes	location
	profile/section nos
	sketch-book page no

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plan no(s)	stratigraphical relationships	layer no
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>30.1</u>
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation modern surface

provisional phase code	qual	revised phase code	qual
<u> </u>	<u> </u>	<u> </u>	<u> </u>

description of matrix
Tarmac + Hoaggin layer 10cm thick

notes	location <u>T3</u>
	profile/section nos
	sketch-book page no

plan no(s)	stratigraphical relationships	layer no
<u> </u> / <u> </u>	<u>30.1</u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>30.2</u>
<u> </u> / <u> </u>	<u>30.2</u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation

provisional phase code	qual	revised phase code	qual
<u> </u>	<u> </u>	<u> </u>	<u> </u>

description of matrix |
Dark brown silty[?] layer with medium-sized stones
20-25 cm thick

notes	location <u>T3</u>
	profile/section nos
	sketch-book page no

Colchester Archaeological Trust, 12, Lexc Road, Colchester

plan no(s)	stratigraphical relationships	layer no
<u> </u> / <u> </u>	<u>30.2</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>30.3</u>
<u> </u> / <u> </u>	<u>30.3</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	
<u> </u> / <u> </u>	<u>30.7</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix
yellowy brown silty with frequent small stones
22cm thick

notes	location
	<u>T3</u>
	profile/section nos
	sketch-book page no

plan no(s)	stratigraphical relationships	layer no
<u> </u> / <u> </u>	<u>30.2</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>30.4</u>
<u> </u> / <u> </u>	<u>30.4</u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	
<u> </u> / <u> </u>	<u>30.6</u> <u>30.5</u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix |
Orangey brown sil.

notes	location
	<u>T3</u>
	profile/section nos
	sketch-book page no

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plan no(s)	stratigraphical relationships	layer no
____/____	<u>304</u> _____	<u>305</u>
____/____	<u>305</u> _____	
____/____	_____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix
 Irregular shaped layer of ^{dark} ~~silty~~ sandy loam merging with 304, 306 + 307 with low content of small stones

notes	location
	T3
	profile/section nos
	sketch-book page no

plan no(s)	stratigraphical relationships	layer no
____/____	<u>304</u> _____	<u>306</u>
____/____	<u>306</u> _____	
____/____	_____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of matrix |
 Greyish brown silty loam layer sandy ~~loam~~ above the water line, merging with L305

notes	location
	T3
	profile/section nos
	sketch-book page no

Colchester Archaeological Trust, 12, Lexd Road, Colchester

plan no(s)	stratigraphical relationships	feature no
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<i>201</i>
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation *modern*

provisional phase code	qual	revised phase code	qual
<u> </u>	<u> </u>	<u> </u>	<u> </u>

description of fill or matrix

concrete cuts F202

notes	location
	<i>T2</i>
	profile/section nos
	sketch-book page no
	<i>1</i>

plan no(s)	stratigraphical relationships	feature no
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<i>202</i>
<u> </u> / <u> </u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	

summary interpretation

provisional phase code	qual	revised phase code	qual
<u> </u>	<u> </u>	<u> </u>	<u> </u>

description of fill or matrix

CA + light brown loose fill

notes	location
	<i>T2</i>
	profile/section nos
	sketch-book page no
	<i>1</i>

SITE

RECORDER KO

DATE 11/1/01

PAGE F

Colchester Archaeological Trust, 12, Lexd Road, Colchester

plan no(s)	stratigraphical relationships	feature no
____/____	____	203
____/____	____	

summary interpretation

provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of fill or matrix

CA + red brwn loose sandy fill

notes	location
	T2
	profile/section nos
	sketch-book page no
	(1)

plan no(s)	stratigraphical relationships	feature no
____/____	____	204
____/____	____	

summary interpretation

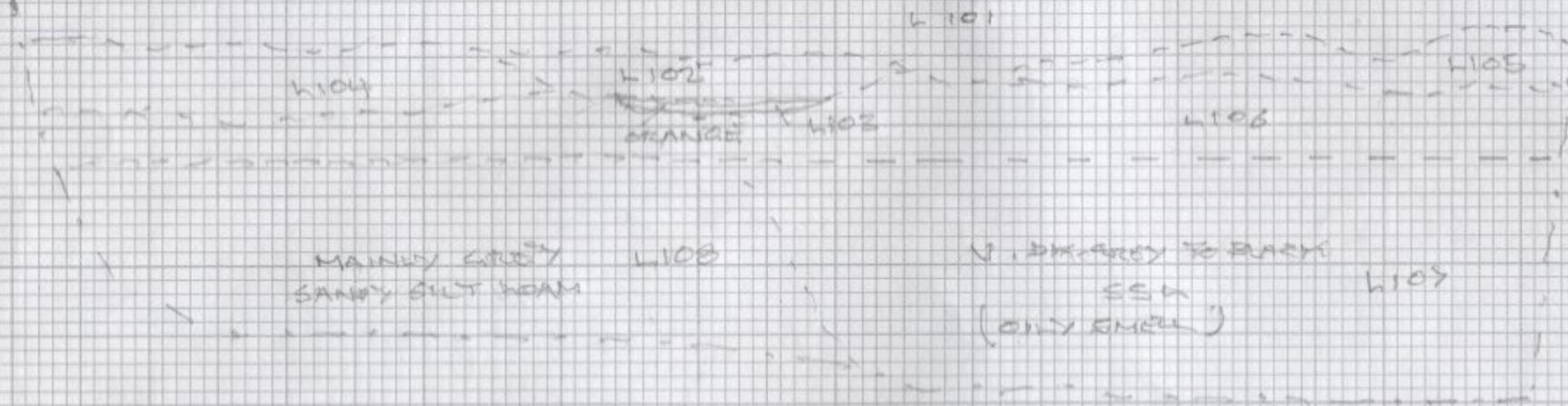
provisional phase code	qual	revised phase code	qual
_____	_____	_____	_____

description of fill or matrix

notes	location
	T2
	profile/section nos
	sketch-book page no
	(1)

TRENCH 1 1:20

0
S 1 1 2 3 4 5



L104

L101

L102

L105

ORANGE

L103

L106

WATER LEVEL

MAINLY GREY SANDY SILT CLAY

L108

V. DR. GREY TO BLACK SILT (ONLY SMALL)

L107

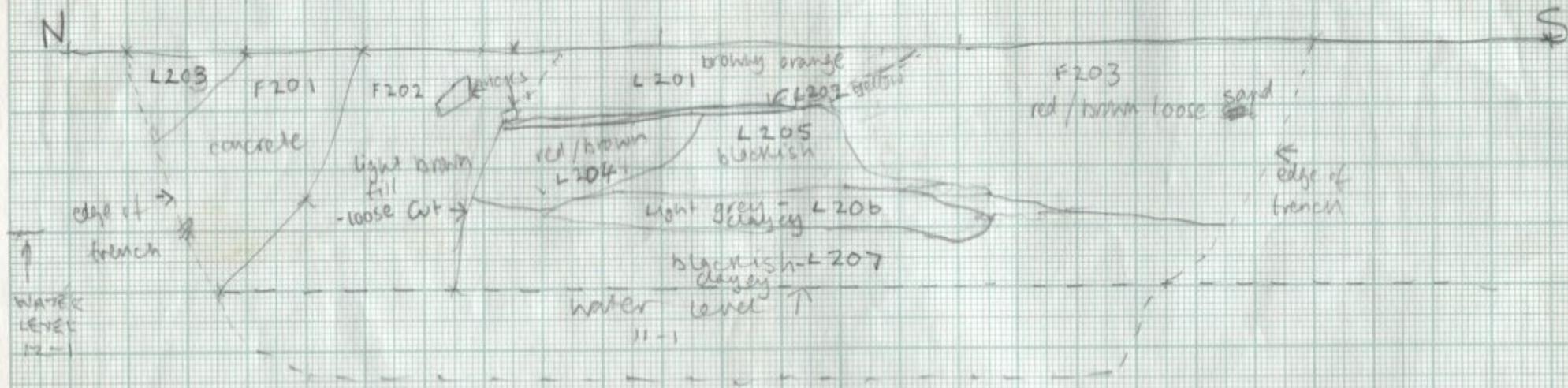
12-1-01

11/1/01

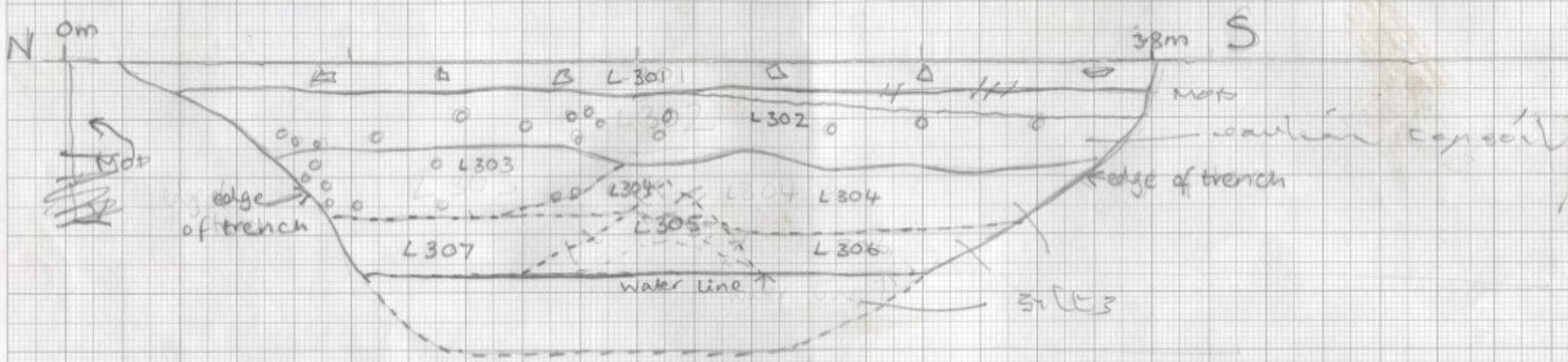
Page ①

T2

1:20



12/1/01 SECTION OF T3 1:20



TY WELWYN

408

4

3

2

1

0

TS DK & B Sandy loam

401

yellow brown
silt c/s

earthen c/s

402

reddish brown with grey (L 404)

403

grey silt

404

dark grey silt

405

(405)

WATER
12-1-01

grey
poss same as mat at bottom
of T6