# Archaeological monitoring and recording at 43 Alan Way, Colchester, Essex, CO3 4LB

May 2017



**by Dr Elliott Hicks** figures by Sarah Carter and Laura Pooley

fieldwork by Alec Wade

## on behalf of Matt and Suzanne Frost

NGR: TL 96913 23732 (centre) Planning reference: 146617 CAT project ref.: 17/02b Colchester Museum accession code COLEM: 2017.10 CHER ref: ECC3947 OASIS reference: colchest3-275073



**Colchester Archaeological Trust** Roman Circus House, Roman Circus Walk, Colchester, Essex, CO2 7GZ

tel.: 01206 501785 email: <u>lp@catuk.org</u>

CAT Report 1099 May 2017

## Contents

1	Summary	1
2	Introduction	1
3	Archaeological background	1
4	Results	2
5	Finds	3
6	Discussion	3
7	Acknowledgements	3
8	References	3
9	Abbreviations and glossary	4
10	Contents of archive	4
11	Archive deposition	4

#### Figures

after p5

Appendix 1 CAT WSI Appendix 2 OASIS Summary

## List of photographs and figures

Cover: general site shot

Photograph 1	Foundation trench, looking W	2
Photograph 2	Foundation trench, looking E	3

Fig 1Site locationFig 2Monitoring resultsFig 3Representative sections

#### 1 Summary

Archaeological monitoring and recording was carried out at 43 Alan Way, Colchester during the construction of a two-storey side extension and single-storey rear extension. Despite being located close to the Heath Farm Dyke Middle, the only archaeological features were two undated pits and a tree-throw.

#### 2 Introduction (Fig 1)

This report presents the results of an archaeological a watching brief at 43 Alan Way, Colchester, Essex which was carried out on 2nd May 2017. The work was commissioned by Kevin Smith, on behalf of Matt and Suzanne Frost, in advance of the construction of a two-storey side extension and single-storey extension, and was undertaken by Colchester Archaeological Trust (CAT).

As the site lies within an area identified by the Colchester Historical Environment Record (CHER) and the Essex Historic Environment Record (EHER) as possessing a high potential for archaeological deposits, following consultation with Colchester Borough Council Planning Services (CBCPS), Colchester Borough Council Archaeological Advisor Jess Tipper advised that in order to establish the archaeological implications of this application, the applicant should be required to commission a scheme of archaeological investigation in accordance with paragraphs 128, 129 and 132 of the National Planning Policy Framework (DCLG 2012).

All archaeological work was carried out in accordance with a *Brief for Continuous Archaeological Monitoring and Recording*, detailing the required archaeological work, written by Jess Tipper (CBCPS 2017), and a Written Scheme of Investigation (WSI) prepared by CAT in response to the brief and agreed with CBCPS (CAT 2017)

In addition to the brief and WSI, all fieldwork and reporting was done in accordance with English Heritage's *Management of Research Projects in the Historic Environment* (*MoRPHE*) (English Heritage 2006), and with *Standards for field archaeology in the East of England* (EAA **14** and **24**). This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological watching briefs* (CIfA 2014a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b).

#### 3 Archaeological background

The following archaeological background draws on the major published sources for Colchester archaeology (listed below), and also on the Colchester Historic Environment Record (CHER) and the Essex Historic Environment Record (EHER).

The development site is located within the Late Iron Age *oppidum* of Camulodunum, which was defined by a system of defensive dykes. One of these, Heath Farm Dyke Middle, extends NE/SW through the garden of the property immediately to the S/SE of the house.

The Heath Farm Dyke (*CAR* **11**, 29-33) is a scheduled monument (NHLE no.1019962) and believed to be the earliest boundary around the late Iron Age oppidum. The following summary is taken from the Historic England list:

The section to the rear of Alan Way is the only segment to survive as a visible earthwork. Although denuded, the bank will contain valuable evidence, no longer available elsewhere, for the date and manner of its construction. Furthermore, the old ground surface, sealed beneath the bank at the time of its construction, may retain evidence of pre-existing settlement activity which would greatly enlarge the picture of the development of the oppidum. The line of the attendant ditch survives well as a partly buried feature. The lower fills of the ditch are unlikely to have been disturbed and will contain valuable archaeological evidence related to the period over which the dyke was maintained. The silts may also contain environmental evidence illustrating the appearance of the landscape in which the dyke was set.

Together with its continuations to the north and south (which are the subject of separate schedulings), this section of Heath Farm Dyke forms part of a system of some 12 dykes constructed to define and defend the territorial oppidum of Camulodunum and the later Roman colony. It therefore forms part of the archaeological evidence for the development of one of the earliest `proto-urban' settlements in Britain and for its reorganisation in the years following the Roman Conquest.

#### 4 Results (Figs 2-3)

All groundworks were carried out by the contractor under archaeological supervision. The foundation trench for the new extension totalled approximately 22m long by 0.5m wide and 0.8m deep.

Three layers were recorded. Modern topsoil (L1, c 0.2-0.3m thick, medium-dark slightly sandy-silt with occasional modern CBM fragments) sealed a layer of subsoil (L2, c 0.25-0.45m thick, mottled medium brown/grey slightly sandy silty-clay), which sealed natural sands and gravels (L3, encountered at a depth of c 0.7m below current ground level).

Two undated pits (F1 and F2) were recorded in the southwest corner of the foundation trench. An irregular feature (F3) to the east was probably a tree-throw. A number of trees had been cleared from this area of the site by a previous occupant (owner, pers comm) and various irregularities in the profile of the natural throughout the trench probably resulted from this clearance.



Photograph 1 Foundation trench, looking W



Photograph 2 Foundation trench, looking E

#### 5 Finds

Flecks of badly degraded reddish-brown pottery were observed in the upper part of F3 but were too soft to recover.

#### 6 Discussion

Monitoring at 43 Alan Way revealed two undated pits and a tree-throw. Despite being located 20m to the northwest of Heath Farm Dyke Middle, there were no significant archaeological remains.

### 7 Acknowledgements

CAT thanks Kevin Smith and Matt and Suzanne Frost for commissioning and funding the work. The project was managed by C Lister and carried out by A Wade. Figures were prepared by S Carter and L Pooley. The project was monitored for the CBCPS by Jess Tipper.

#### 8 References

Note: all CAT reports, except for DBAs, are available online in PDF format at <u>http://cat.essex.ac.uk</u>

Brown, D	2007	Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation
CAR <b>11</b>	1995	Colchester Archaeological Report <b>11</b> : Camulodunum 2, by C F C Hawkes & P Crummy
CAT	2014	Health & Safety Policy
CBCPS	2015	Brief for continuous archaeological monitoring and recording (watching brief) at 43 Alan Way, Colchester, CO3 4LB
ClfA	2014a	Standard and Guidance for an archaeological watching brief
CIfA	2014b	Standard and guidance for the collection, documentation, conservation and research of archaeological materials
Crummy, P	2001	City of Victory: the story of Colchester - Britain's first Roman town
DCLG English Heritage	2012 2006	National Planning Policy Framework Management of Research Projects in the Historic

		Environment (MoRPHE)
Gurney, D	2003	Standards for field archaeology in the East of England. East
		Anglian Archaeology Occasional Papers 14 (EAA 14).
Medlycott, M	2011	Research and archaeology revisited: A revised framework for
		the East of England. East Anglian Archaeology Occasional
		Papers 24 (EAA <b>24</b> )

## 9 Abbreviations and glossary

CAT	Colchester Archaeological Trust
CBCPS	Colchester Borough Council Planning Services
ClfA	Chartered Institute for Archaeologists
CM	Colchester Museum
context	specific location of finds on an archaeological site
feature (F)	an identifiable thing like a pit, a wall, a drain: can contain 'contexts'
layer (L)	distinct or distinguishable deposit (layer) of material
modern	period from c AD 1800 to the present
natural	geological deposit undisturbed by human activity
WSI	Written Scheme of Investigation

## 10 Contents of archive

Finds: n/a

Paper and digital record One A4 document wallet containing: The report (CAT Report 1099) CBCPS evaluation brief, CAT written scheme of investigation Original site record (feature and layer sheets, finds record, plans) Site digital photos and log, architectural plans, attendance register, risk assessment

### 11 Archive deposition

The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex, CO2 7GZ, but will be permanently deposited with Colchester Museum under accession code: COLEM 2017.10.

© Colchester Archaeological Trust 2017

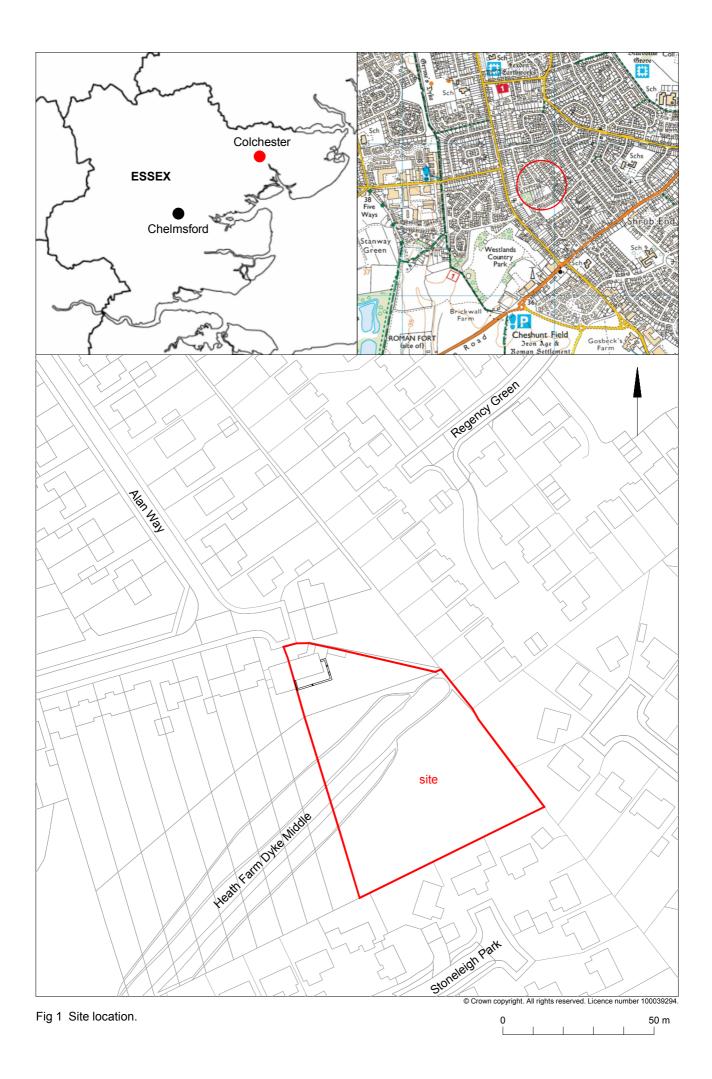
**Distribution list** Kevin Smith Matt and Suzanne Frost Jess Tipper, Colchester Borough Council Planning Services Essex Historic Environment Record

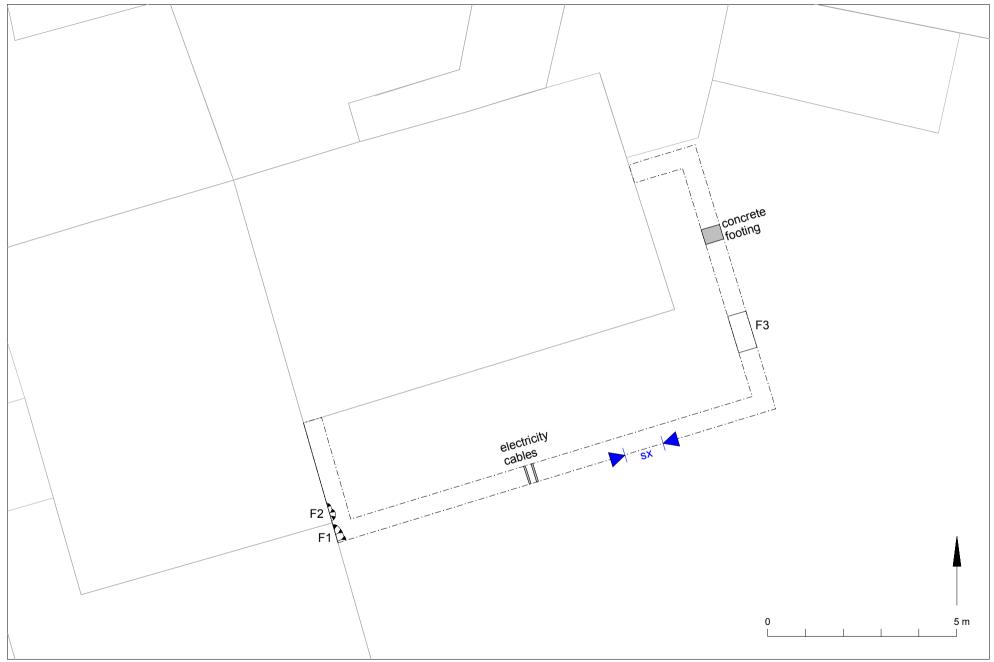


**Colchester Archaeological Trust** Roman Circus House, Roman Circus Walk, Colchester, Essex, CO2 7GZ

tel.: 01206 501785 email: <u>lp@catuk.org</u>

*Checked by:* Philip Crummy Date: 23.5.2017





© Crown copyright. All rights reserved. Licence number 100039294.

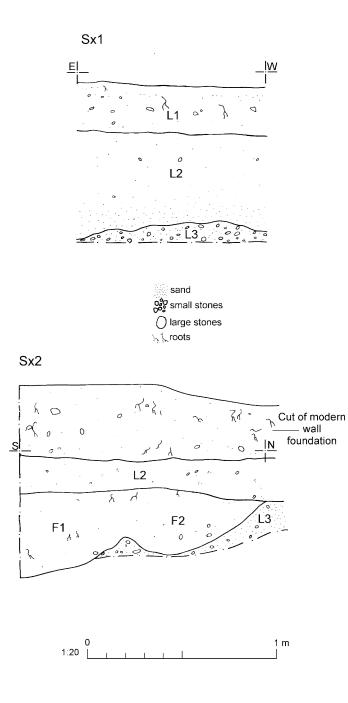


Fig 3 Representative sections

## Essex Historic Environment Record/ Essex Archaeology and History

## Summary sheet

Address: 43 Alan Way, Colchester, Essex, CO3 4LB			
Parish: Colchester	District: Colchester		
<b>NGR:</b> TL 96913 23732 (centre)	Site code:		
	CAT project ref.: 17/02b		
	CHER ref: ECC3947		
	OASIS ref: colchest3-275073		
Type of work:	Site director/group:		
Monitoring and recording	Colchester Archaeological Trust		
Date of work:	Size of area investigated:		
2nd May 2017	0.4ha		
Location of curating museum:	Funding source:		
Colchester museum	Developer		
accession code COLEM: 2017.10			
Further seasons anticipated?	Related CHER/SMR number:		
no			
Final report: CAT Report 1099			
Periods represented: -			
Summary of fieldwork results:			
	was carried out at 43 Alan Way, Colchester		
during the construction of a two-storey side extension and single-storey rear			
extension. Despite being located close to the Heath Farm Dyke Middle, the only			
archaeological features were two undated pits and a tree-throw.			
	archaeological leatures were two undated pits and a tree-throw.		
Previous summaries/reports: None			
CBC monitor: Jess Tipper			
Keywords: -	Significance: none		
Author of summary:	Date of summary:		
Dr Elliott Hicks	May 2017		
Di Linda i nono	1 may =0 11		

# Written Scheme of Investigation (WSI) for continuous archaeological recording at 43 Alan Way, Colchester, Essex, CO3 4LB

NGR: TL 96913 23732 (centre)

Planning references: 146617

Commissioned by: Kevin Smith

On behalf of: Matt & Suzanne Frost

Curating museum: Colchester

Museum accession code: tbc CHER event number: ECC3947 CAT project code: 16/02b OASIS project number: colchest3-275073

Site manager: Chris Lister

**CBC monitor:** Jess Tipper

This WSI written: 02.02.2017



COLCHESTER ARCHAEOLOGICAL TRUST, Roman Circus House, Roman Circus Walk, Colchester, Essex, CO2 7GZ

*tel:* 01206 501785 *email:* <u>lp@catuk.org</u>

#### Site location and description

The proposed development site lies 3.3km SW of Colchester town centre at 43 Alan Way, Colchester, Essex (Fig 1). Site centre is NGR TL 96913 23732.

#### **Proposed work**

The development comprises the erection of a two-storey side extension and single-storey rear extension (following demolition of garage).

#### Archaeological background

The following archaeological background draws on the major published sources for Colchester archaeology (listed below), and also on the Colchester Historic Environment Record (CHER) and the Essex Historic Environment Record (EHER).

The development site is located within the Late Iron Age *oppidum* of Camulodunum, which was defined by a system of defensive dykes. One of these, Heath Farm Dyke Middle, extends NE/SW through the garden of the property immediately to the S/SE of the house.

The Heath Farm Dyke (*CAR* **11**, 29-33) is a scheduled monument (NHLE no.1019962) and believed to be the earliest boundary around the late Iron Age oppidum. The following summary is taken from the Historic England list:

The section to the rear of Alan Way is the only segment to survive as a visible earthwork. Although denuded, the bank will contain valuable evidence, no longer available elsewhere, for the date and manner of its construction. Furthermore, the old ground surface, sealed beneath the bank at the time of its construction, may retain evidence of pre-existing settlement activity which would greatly enlarge the picture of the development of the oppidum. The line of the attendant ditch survives well as a partly buried feature. The lower fills of the ditch are unlikely to have been disturbed and will contain valuable archaeological evidence related to the period over which the dyke was maintained. The silts may also contain environmental evidence illustrating the appearance of the landscape in which the dvke was set.

Together with its continuations to the north and south (which are the subject of separate schedulings), this section of Heath Farm Dyke forms part of a system of some 12 dykes constructed to define and defend the territorial oppidum of Camulodunum and the later Roman colony. It therefore forms part of the archaeological evidence for the development of one of the earliest `proto-urban' settlements in Britain and for its reorganisation in the years following the Roman Conquest.

The development at 43 Alan Way should not impact directly on Heath Farm Dyke but there is high potential for encountering remains associated with the dyke and with early occupation of the area.

#### Planning background

A planning application was made to Colchester Borough Council in December 2014 (application No.146617) proposing the erection of a two-storey side extension and single-storey rear extension (following demolition of garage).

As the site lies within an area highlighted by the CHER/EHER as having a high potential for archaeological deposits, an archaeological condition was recommended by the Colchester Borough Council Archaeological Advisor (CBCAA). The recommended archaeological condition is based on the guidance given in the *National Planning Policy Framework* (DCLG 2012).

### **Requirement for work**

The required archaeological work is for continuous archaeological monitoring and recording of all groundworks. Details are given in a Project Brief written by CBCAA (CBC 2017).

Specifically:

The monitoring and recording is being undertaken to identify and record any surviving archaeological deposits that may exist on site.

If unexpected remains are encountered the CBCAA will be informed immediately and the CBCAA will decide if amendments to the brief are required to ensure adequate provision for archaeological recording.

#### General methodology

All work carried out by CAT will be in accordance with:

- professional standards of the Chartered Institute for Archaeologists, including its *Code of Conduct* (ClfA 2014a, b)
- Standards and Frameworks published by East Anglian Archaeology (Gurney 2003, Medlycott 2011)
- relevant Health & Safety guidelines and requirements (CAT 2014)
- the Project Brief issued by the CBCAA (CBC 2017).

Professional CAT field archaeologists will undertake all specified archaeological work, for which they will be suitably experienced and qualified.

Notification of the supervisor/project manager's name and the start date for the project will be provided to CBCAA one week before start of work.

Unless it is the responsibility of other site contractors, CAT will study mains service locations and avoid damage to these.

At the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/ will be initiated and key fields completed on Details, Location and Creators forms. At the end of the project all parts of the OASIS online form will be completed for submission to EHER. This will include an uploaded .PDF version of the entire report.

A project or site code will be sought from the curating museum. This code will be used to identify the project archive when it is deposited at the curating museum.

#### Staffing

The number of field staff for this project is estimated as follows: One CAT officer for the duration of the groundworks.

#### Monitoring methodology

There will be sufficient on-site attendance by CAT staff to maintain a watch on all contractors' ground works to record, excavate or sample (as necessary) any archaeological features or deposits.

All topsoil removal and ground reduction will be done with a toothless bucket.

If archaeological features or deposits are uncovered, time will be allowed for these to be planned and recorded.

If any features or deposits uncovered are to be destroyed by the proposed development, time will be allowed for these features to be excavated by hand. This includes a 50% sample of discrete features (pits, etc) and 10% of linear features (ditches, etc).

Fast hand-excavation techniques involving (for instance) picks, forks and mattocks will not be used on complex stratigraphy.

A metal detector will be used to examine spoil heaps, and the finds recovered.

Individual records of excavated contexts, layers, features or deposits will be entered on proforma record sheets. Registers will be compiled of finds, small finds and soil samples.

All features and layers or other significant deposits will be planned, and their profiles or sections recorded. The normal scale will be site plans at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be appropriate.

#### Site surveying

Normal scale for archaeological site plans and sections is 1:20 and 1:10 respectively, unless circumstances indicate that other scales would be more appropriate.

The site grid will be tied into the National Grid. Corners of excavation areas and trenches will be located by NGR coordinates.

#### **Environmental sampling policy**

CAT has an arrangement with Val Fryer/Lisa Gray whereby any potentially rich environmental layers or features will be appropriately sampled as a matter of course, but only if they are datable. Any processing and reporting will be done by VF/LG. If any complex or outstanding deposits are encountered, VF/LG will be asked onto site to advise. EH Regional Adviser is available for further advice.

#### Human remains

CAT follows the policy of leaving human remains *in situ* unless there is a clear indication that the remains are in danger of being compromised as a result of their exposure. If circumstances indicated it were prudent or necessary to remove remains from the site during the monitoring, the following criteria would be applied; if it is clear from their position, context, depth, or other factors that the remains are ancient, then normal procedure is to apply to the Department of Justice for a licence to remove them. In that case, conditions laid down by the license will be followed. If it seems that the remains are not ancient, then the coroner, the client, and CBCAA will be informed, and any advice and/or instruction from the coroner will be followed.

#### Photographic record

Will include both general and feature-specific photographs, the latter with scale and north arrow. A photo register giving context number, details, and direction of shot will be prepared on site, and included in site archive.

#### Finds

All significant finds will be retained.

All finds, where appropriate, will be washed and marked with site code and context number.

Stephen Benfield (CAT) normally writes our finds reports. Some categories of finds are automatically referred to other CAT specialists:

<u>small finds, metalwork, coins</u>, etc: Pip Parmenter <u>animal bones</u> (small groups): Pip Parmenter <u>flints</u>: Adam Wightman

or to outside specialists:

<u>animal bones (large groups) and human remains</u>: Julie Curl (*Sylvanus*) <u>environmental</u> processing and reporting: Val Fryer (Loddon) <u>conservation</u> of finds: staff at Colchester Museum Other specialists whose opinion can be sought on large or complex groups include: <u>Roman brick/tile</u>: Ernest Black <u>Roman glass</u>: Hilary Cool <u>Prehistoric pottery</u>: Paul Sealey <u>Other</u>: EH Regional Adviser in Archaeological Science (East of England).

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.

Requirements for conservation and storage of finds will be agreed with the appropriate museum prior to the start of work, and confirmed to CBCAA.

### Results

Notification will be given to CBCAA when the fieldwork has been completed.

An appropriate archive will be prepared to minimum acceptable standards outlined in *Management of Research Projects in the Historic Environment* (English Heritage 2006).

The report will be submitted within 6 months of the end of fieldwork, with a copy supplied to CBCAA as a PDF.

The report will contain:

- Location plan of the groundworks in relation to the proposed development. At least two corners of the site will be given 10 figure grid references.
- Section/s drawings showing depth of deposits from present ground level with Ordnance Datum, vertical and horizontal scale.
- Archaeological methodology and detailed results including a suitable conclusion and discussion and results referring to Regional Research Frameworks (Medlycott 2011).
- All specialist reports or assessments
- A concise non-technical summary of the project results.

An EHER summary sheet will also be completed within four weeks and supplied to CBCAA.

Results will be published, to at least a summary level (i.e. round-up in *Essex Archaeology & History*) in the year following the archaeological field work. An allowance will be made in the project costs for the report to be published in an adequately peer reviewed journal or monograph series

#### Archive deposition

It is a policy of Colchester Borough Council that the integrity of the site archive be maintained (i.e. all finds and records should be properly curated by a single organisation), with the archive available for public consultation. To achieve this desired aim it is assumed that the full archive will be deposited in Colchester Museums *unless otherwise agreed in advance*. (A full *copy* of the archive shall in any case be deposited).

# By accepting this WSI, the client agrees to deposit the archive, including all artefacts, at Colchester & Ipswich Museum.

The requirements for archive storage will be agreed with the curating museum.

If the finds are to remain with the landowner, a full copy of the archive will be housed with the curating museum.

The archive will be deposited with Colchester & Ipswich Museum within 3 months of the completion of the final publication report, with a summary of the contents of the archive supplied to CBCAA.

#### Monitoring

CBCAA will be responsible for monitoring progress and standards throughout the project, and will be kept regularly informed during fieldwork, post-excavation and publication stages.

Notification of the start of work will be given to CBCAA one week in advance of its commencement.

Any variations in this WSI will be agreed with CBCAA prior to them being carried out.

CBCAA will be notified when the fieldwork is complete.

The involvement of CBCAA shall be acknowledged in any report or publication generated by this project.

#### References

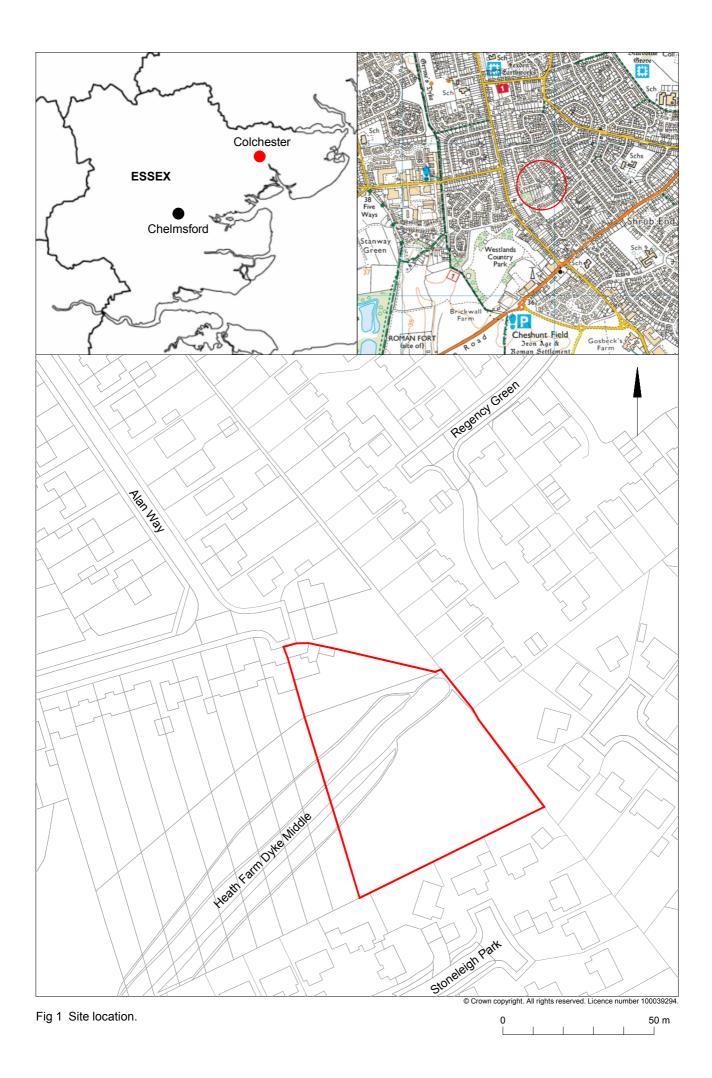
Brown, D	2007	Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation
CAR <b>11</b>	1995	Colchester Archaeological Report 11: Camulodunum 2, by C F C Hawkes & P Crummy
CAT	2014	Health & Safety Policy
CBCPS	2015	Brief for continuous archaeological monitoring and recording (watching brief) at 43 Alan Way, Colchester, CO3 4LB
ClfA	2014a	Standard and Guidance for an archaeological watching brief
ClfA	2014b	Standard and guidance for the collection, documentation, conservation and research of archaeological materials
Crummy, P	2001	City of Victory: the story of Colchester - Britain's first Roman town
DCLG	2012	National Planning Policy Framework
English Heritage	2006	Management of Research Projects in the Historic Environment (MoRPHE)
Gurney, D	2003	<i>Standards for field archaeology in the East of England.</i> East Anglian Archaeology Occasional Papers 14 (EAA <b>14</b> ).
Medlycott, M	2011	Research and archaeology revisited: A revised framework for the East of England. East Anglian Archaeology Occasional Papers 24 (EAA 24)

L Pooley



Colchester Archaeological Trust Roman Circus House, Roman Circus Walk, Colchester, Essex, CO2 2GZ

tel: 01206 501785 email: <u>lp@catuk.org</u>



# **OASIS DATA COLLECTION FORM: England**

List of Projects L | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

#### Printable version

#### OASIS ID: colchest3-275073

#### Project details

Archaeological monitoring and recording at 43 Alan Way, Colchester, Essex, CO3 4LB Project name Short description of the project Archaeological monitoring and recording was carried out at 43 Alan Way, Colchester during the construction of a two-storey side extension and single-storey rear extension. Despite being located close to the Heath Farm Dyke Middle, the only archaeological features were two undated of the project pits and a tree-throw. Start: 02-05-2017 End: 02-05-2017 Project dates Previous/future No / Not known work Any associated 146617 - Planning Application No. project reference codes Any associated ECC3947 - HER event no. project reference codes Any associated 17/02b - Contracting Unit No. project reference codes Any associated COLEM: 2017.10 - Museum accession ID project reference codes Type of project Recording project Site status None Current Land use Residential 1 - General Residential Monument type PITS Uncertain Significant Finds N/A None Investigation type "Watching Brief"

#### **Project location**

Prompt

Country	England
Site location	ESSEX COLCHESTER COLCHESTER 43 Alan Way
Postcode	CO3 4LB
Study area	0.4 Hectares
Site coordinates	TL 96913 23732 51.876813745281 0.86105730288 51 52 36 N 000 51 39 E Point

#### Project creators

Name of Organisation	Colchester Archaeological Trust
Project brief originator	CBC Archaeological Officer
Project design originator	Laura Pooley
Project director/manager	Chris Lister
Project supervisor	Alec Wade
Type of sponsor/funding body	Owner

Planning condition

#### **Project archives**

No
Colchester Museum
COLEM: 2017.10
"Stratigraphic", "Survey"
"Images raster / digital photography","Survey"
Colchester Museum
COLEM: 2017.10
"Stratigraphic", "Survey"

Paper Media available

#### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological monitoring and recording at 43 Alan Way, Colchester, Essex, CO3 4LB: May 2017
Author(s)/Editor(s)	Hicks, E.
Other bibliographic details	CAT Report 1099
Date	2017
Issuer or publisher	Colchester Archaeological Trust
Place of issue or publication	Colchester
Description	A4 ringbound loose leaf
URL	http://cat.essex.ac.uk/all-reports.html
Entered by	Laura Pooley (Ip@catuk.org)
Entered on	23 May 2017



Please e-mail Historic England for OASIS help and advice © ADS 1996-2012 Created by Jo Gilham and Jen Mitcham, email Last modified Wednesday 9 May 2012 Cite only: http://www.oasis.ac.uk/form/print.cfm?id=285748 for this page