

PLANNING STATEMENT
Outline Residential Development
102 East Road
West Mersea

Appendix VI
Written Scheme of Investigation
for an Archaeological Evaluation

Written Scheme of Investigation (WSI) for an archaeological evaluation on land at 102 East Road, West Mersea, Colchester, Essex, CO5 8SA

NGR: TM 0253 1343 (centre)
District: Colchester

Planning references: 201467

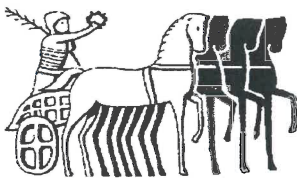
Commissioned by: Peter Johnson
(The Johnson Dennehy Planning Partnership)
On behalf of: BlueSquare Homes (New Build Developments)

Curating museum: Colchester
CHER number: [tbc](#)

CAT project code: 2020/11g
OASIS project number: colchest3-411627

Site manager: Chris Lister
CBC monitor: Dr Richard Hoggett

This WSI written: 04/01/2021



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Site location and description

The proposed development site lies at the eastern end of the town of West Mersea, immediately to the south of 102 East Road, CO5 8RS (Fig 1). The site is centred on National Grid Reference (NGR) TM 0253 1343.

Proposed work

The development comprises the construction of 56 dwellings, including landscaping, and the construction of access from East Road after the demolition of the existing dwelling.

Archaeological background

The following archaeological background draws on the Colchester Archaeological Trust report archive and the Colchester Historic Environment Record (CHER, ECC/MCC numbers) accessed via the Colchester Heritage Explorer (www.colchesterheritage.co.uk).

The site is located within an area of fields containing cropmarks recorded through aerial photography. The majority of these cropmarks have been interpreted as linear features which likely represent historic agricultural boundaries. Fields immediately to the east of the site, at West Barn Farm, contain multiple such cropmarks (MCC5595). Immediately to the north of West Barn Farm are further cropmarks, including a possible ring-ditch (MCC8721). To the north of the site at Barrow Hill, cropmarks interpreted as trackways and linear features are present, as well as a large amount of geological deposits which may be masking evidence of further archaeology (MCC4746). Other cropmarks to the north of the site appear to show evidence of a building of an unknown date (MCC8930).

The site is located approximately 986m to the south-east of Mersea Barrow (MCC6928, Scheduled Ancient Monument No: SM 32425; NHLE no. 1019019). The barrow was excavated in 1912 (Warren 1913). The excavation consisted of a trench dug from the eastern side of the barrow into its centre, where a large central shaft was excavated. A Roman cremation burial was located near the centre of the barrow. It lay within a chamber constructed of Roman roof tiles (*tegulae*) set in mortar. The chamber contained a lead casket, within which was a glass urn containing the cremated human remains. In 1912 the barrow survived to a size of approximately 33.5 m in diameter and 6.9 m high. No trace was discovered in 1912 of a ditch around the barrow. The 1912 excavation trench was subsequently roofed over and concreted to form a tunnel to allow visitors access to the burial chamber from the eastern side of the barrow.

The burial was dated in the original site report to the late 1st century (Warren 1913, 138). The date of the burial and barrow was subsequently reassessed by Hull to AD 100-120 (VCHE 3, 160). More recently, it has been suggested that a mid-2nd century date for the construction of the barrow is more likely (Benfield and Black 2014, 67 & 72).

The cremated human remains were re-examined in 2012-3 by Jacqueline McKinley of Wessex Archaeology (McKinley 2014). The bone came from a male aged between 35 and 45. There is evidence of spinal lesions and excessive bony growths, indicating that he suffered from diffuse idiopathic skeletal hyperostosis (DISH). This is a disease of the joints that today is found mainly in men over 50. The presence of exotic items, including pine resin and frankincense, was also detected (Brettell et al 2013). These were probably added to the bone after cremation, and suggest an elaborate funerary ritual.

CAT carried out watching briefs at Mersea Barrow in 2014 and 2016 during works to improve visitor access and amenities. No significant archaeological deposits were uncovered, although a small quantity of Roman roof tile fragments was recovered from the modern topsoil on the eastern side of the barrow (CAT Report 992).

There is an unconfirmed report that two Roman rings and fragments of a tessellated pavement were found fairly close to the Mersea Barrow in nearby Bower Hall Lane (unpublished letter to D.T-D Clarke dated 28.8.1980 from Mrs J W M Read; Howlett 2012, 66 & 76).

A programme of fieldwalking, metal-detecting and geophysical survey, along with a trial-trenched evaluation, was carried out on farmland 480m to the north-west of the site in 2019 in advance of a residential development (CAT Report 1499). The trial-trenching exposed five post-medieval/modern field boundary ditches and six drainage gullies, along with a medieval/post-medieval pit, a possible Roman pit, a possible prehistoric ditch and 15 undated features (seven tree-throws, four pits, two gullies and two ditches).

Another programme of fieldwalking, metal-detecting, geophysical survey and trial-trenching was carried out at Brierley Paddocks, 330m to the south-west of the site in 2019 and 2020 (ECC 4325, Archaeological Solutions Ltd 2020). The evaluation uncovered 127 archaeological features, including ditches, pits and hollows. Many of the features contained dating evidence, with the prehistoric, Roman, and post-medieval periods all being represented. Several trampled/metalled surfaces were uncovered during the evaluation, as well as a Roman kiln/oven.

Project background

A planning application was made to Colchester Borough Council in November 2020 (application No. 201467) for a *residential development of 56 dwellings including landscaping and access from East Road following demolition of existing dwelling*.

As the site lies within an area highlighted by the CHER 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* (MHCLG 2019).

Requirement for work (Fig 1)

The required archaeological work is for a geophysical survey followed by an archaeological trial-trenching evaluation. Details are given in a Project Brief written by CBCAA (CBC 2020).

The geophysical survey (Magnitude Surveys 2020; attached to this WSI) detected little of archaeological interest, and defined no clear archaeological features. As a result, the proposed trench plan for the evaluation (see below) is not targeted onto any specific geophysical anomalies, and is laid in a grid pattern across the site.

The brief requires the excavation of 11 linear trial-trenches measuring 30m in length and 1.8m in width, positioned across the site (Fig 1).

The evaluation is required to enable the archaeological resource, both in quality and extent, to be accurately quantified. It is also required to:

- Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.
- Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- Establish the potential for the survival, condition and significance of environmental evidence.
- Establish an archaeological deposit model for below-ground archaeological remains across the site.
- Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

Further archaeological investigation could be required if unusual deposits or other archaeological finds of significance are recovered, this decision will be made by the CBCAA and will be the subject of an additional brief and WSI.

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* (CIfA 2014a, b)
- Standards and Frameworks published by East Anglian Archaeology (Gurney 2003, Medlycott 2011)
- relevant Health & Safety guidelines and requirements (CAT 2019)
- the Project Brief issued by the CBCAA (CBC 2020).

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 CHER. This will include an uploaded .PDF version of the entire report.

A unique HER event number will be obtained from the CBCAA prior to the commencement of fieldwork. The curating museum will be notified of the details of the project and the event code, which will be used to identify the project archive when depositing at the end of the project.

Staffing

The number of field staff for this project is estimated as follows: One supervisor plus four archaeologists for four days.

In charge of day-to-day site work: Nigel Rayner

Evaluation methodology

Where appropriate, modern overburden and any topsoil stripping/levelling will be performed using a mechanical excavator equipped with a toothless ditching bucket under the supervision and to the satisfaction of a professional archaeologist. If no archaeologically significant deposits are exposed, machine excavation will continue until natural subsoil is reached.

Where necessary, areas will be cleaned by hand to ensure the visibility of archaeological deposits.

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

All features or deposits will be excavated by hand. This includes a 50% sample of discrete features (pits, etc), 10% of linear features (ditches, etc) in 1m wide sections, and 100% of complex structures/features. Complex archaeological structures such as walls, kilns, ovens or burials will be carefully cleaned, planned and fully recorded, but where possible left *in situ*. Only if it can be demonstrated that the complex structure/feature is likely to be destroyed by groundworks will it be removed, or on the rare occasion where full excavation (or exhumation in the case of burials) is necessary to achieve the objectives of the evaluation.

Burials, if encountered, will be left *in situ* at this evaluation stage with an on site human bone specialist available to record as much information as possible (see human remains section below).

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

A sondage will be excavated in each trench to test the stratigraphy of the site. This will occur in every trench unless it can be demonstrated that a feature excavated within a particular trench has clearly penetrated into natural.

A representative section will be drawn of each trench, to include ground level, the depth of machining within the trench and the depth of any sondages.

A metal detector will be used to examine the trench, contexts and 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.

Site surveying

The evaluation trench and any features will be surveyed by Total Station or GPS, unless the particulars of the features indicate that manual planning techniques should be employed.

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 evaluation trenches will be located by NGR coordinates.

Environmental sampling policy

The number and range of samples collected will be adequate to determine the potential of the site, with particular focus on palaeoenvironmental remains including both biological remains (e.g. plants, small vertebrates) and small sized artefacts (e.g. smithing debris), and to provide information for sampling strategies on any future excavation. Samples will be collected for potential micromorphical and other pedological sedimentological analysis. Environmental bulk samples will be 40 litres in size (assuming context is large enough).

Sampling strategies will address questions of:

- the range of preservation types (charred, mineral-replaced, waterlogged), and their quality
- concentrations of macro-remains
- and differences in remains from undated and dated features
- variation between different feature types and areas of site

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. Trained CAT staff will process the samples and the flots will be sent to Val Fryer or Lisa Gray for analysis and reporting.

Should any complex, or otherwise outstanding deposits be encountered, VF or LG will be asked onto site to advise. Waterlogged 'organic' features will always be sampled. In all cases, the advice of VF/LG and/or the Historic England Regional Advisor in Archaeological Science (East of England) on sampling strategies for complex or waterlogged deposits will be followed, including the taking of monolith samples.

A contingency will be made in the budget for scientific assessment/analysis if suitable deposits are identified. This can include soil micromorphological and geochemical analysis of floors and dark earth deposits and/or absolute dating (such as archaeomagnetic and radiocarbon). The Historic England Regional Science Advisor will be consulted for advice.

Human remains

CBCAA will be notified immediately if any human remains are encountered during the evaluation.

Burials, if encountered, will be left *in situ* at this evaluation stage. Following HE guidance (HE 2018) if the human remains are not to be lifted, the project osteologist will be available to record the human remains *in situ* (i.e. a site visit).

If circumstances indicated it were prudent or necessary to remove remains from the site, 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. Conditions laid down by the DoJ license will be followed. If it seems that the remains are not ancient, then the coroner, the client, and the CBCAA will be informed, and any advice and/or instruction from the coroner will be followed.

Human remains removed from site for analysis may be sent for radiocarbon dating.

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. Digital site photographs will be taken and archived as per Historic England guidelines (HE 2015a).

Finds

All significant finds will be retained.

All finds, where appropriate, will be washed and marked with site code and context number. CAT may use local volunteers to assist the CAT Finds Officer with this task.

Most of our finds reports are written internally by CAT Staff under the supervision and direction of Philip Crummy (Director) and Howard Brooks (Deputy Director). This includes specialist subjects such as:

ceramic finds (pottery and ceramic building material): Matthew Loughton

animal bones: Alec Wade (or Adam Wightman, small groups only)

small finds, metalwork, coins, etc: Laura Pooley

non-ceramic bulk finds: Laura Pooley

flints: Adam Wightman

environmental processing: Bronagh Quinn

project osteologist (human remains): Meghan Seehra

or to outside specialists:

animal and human bone: Julie Curl (*Sylvanus*)

environmental assessment and analysis: Val Fryer / Lisa Gray

radiocarbon dating: SUERC Radiocarbon Dating Laboratory, Glasgow

conservation/x-ray: Laura Ratcliffe (LR Conservation) / Norfolk Museums Service, Conservation and Design Services

Other specialists whose opinion can be sought on large or complex groups include:

flint: Hazel Martingell

prehistoric pottery: Stephen Benfield / Nigel Brown / Paul Sealey

Roman pottery: Stephen Benfield / Paul Sealey / Jo Mills / Val Rigby / Gwladys Monteil

Roman brick/tile: Ernest Black / Ian Betts (MOLA)

Roman glass: Hilary Cool
small finds: Nina Crummy
other: 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.

A contingency will be made in the budget for scientific assessment/analysis if suitable deposits are identified. This can include soil micromorphological and geochemical analysis of floors and dark earth deposits and/or absolute dating (such as archaeomagnetic and radiocarbon). The Historic England Regional Science Advisor will be consulted for advice.

Results

Notification will be given to the 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* (HE 2015b).

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

The report will contain:

- Location plan of the evaluation trenches. At least two corners of which 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 the 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 or an alternate repository (approved by COLEM and the CBCAA) within 3 months of the completion of the final publication report, with a summary of the contents of the archive supplied to the CBCAA. Digital archives will be curated with the Archaeology Data Service, or similar accredited digital archive repository, that safeguard the long-term curation of digital records. Prior to deposition CAT's data management plan (based on the official guidelines from the Digital Curation Centre [DCC 2013]) will ensure the integrity of the digital archive.

The CBCAA will be notified of the archiving timetable throughout the project and once deposition has occurred.

A digital / vector drawing of the site be given to the CBCAA for integration into the HER.

Monitoring

The 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 the CBCAA one week in advance of its commencement.

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

The CBCAA will be notified when the fieldwork is complete.

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

References

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

Archaeological Solutions Ltd	2020	<i>Brierley Paddocks, West Mersea, Essex: An Archaeological Evaluation</i>
Benfield, S & Black, E	2013	'The West Mersea Roman Barrow (Mersea Mount)', in <i>Essex Archaeology and History 4</i> (2013), 59-73
Brettell, R C, Stern, B & Heron, C P	2013	'Mersea Island Barrow: molecular evidence for frankincense', in <i>Essex Archaeology and History 4</i> (2013), 81-7
Brown, D	2011	<i>Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation</i> . 2nd Edition
CAT	2019	<i>Health & Safety Policy</i>
CAT Report 1499	2019	<i>Archaeological fieldwalking, metal-detecting and geophysical surveys plus a trial-trenching evaluation on land to the west of Dawes Lane, West Mersea, Essex, CO5 8GJ: October-November 2019</i> By L Pooley
CAT Report 992	2016	<i>Archaeological watching briefs at Mersea Barrow, Barrow Hill Farm, East Mersea Road, West Mersea, Essex, CO5 8SL July & September 2014 & July 2016</i> by D Shimmin
CBCAA	2020	<i>Brief for Archaeological Evaluation at Land at 102 East Road, West Mersea, Colchester, CO5 8SA</i> By R Hoggett
CIfA	2014a	<i>Standard and Guidance for archaeological evaluation</i>
CIfA	2014b	<i>Standard and guidance for the collection, documentation, conservation and research of archaeological materials</i>
Digital Curation Centre (DCC)	2013	Checklist for Data Management Plan v. 4.0
Gurney, D	2003	<i>Standards for field archaeology in the East of England</i> . East Anglian Archaeology Occasional Papers 14 (EAA 14).
Historic England (HE)	2015a	<i>Digital Image capture and File Storage: Guidelines for best practice</i> .

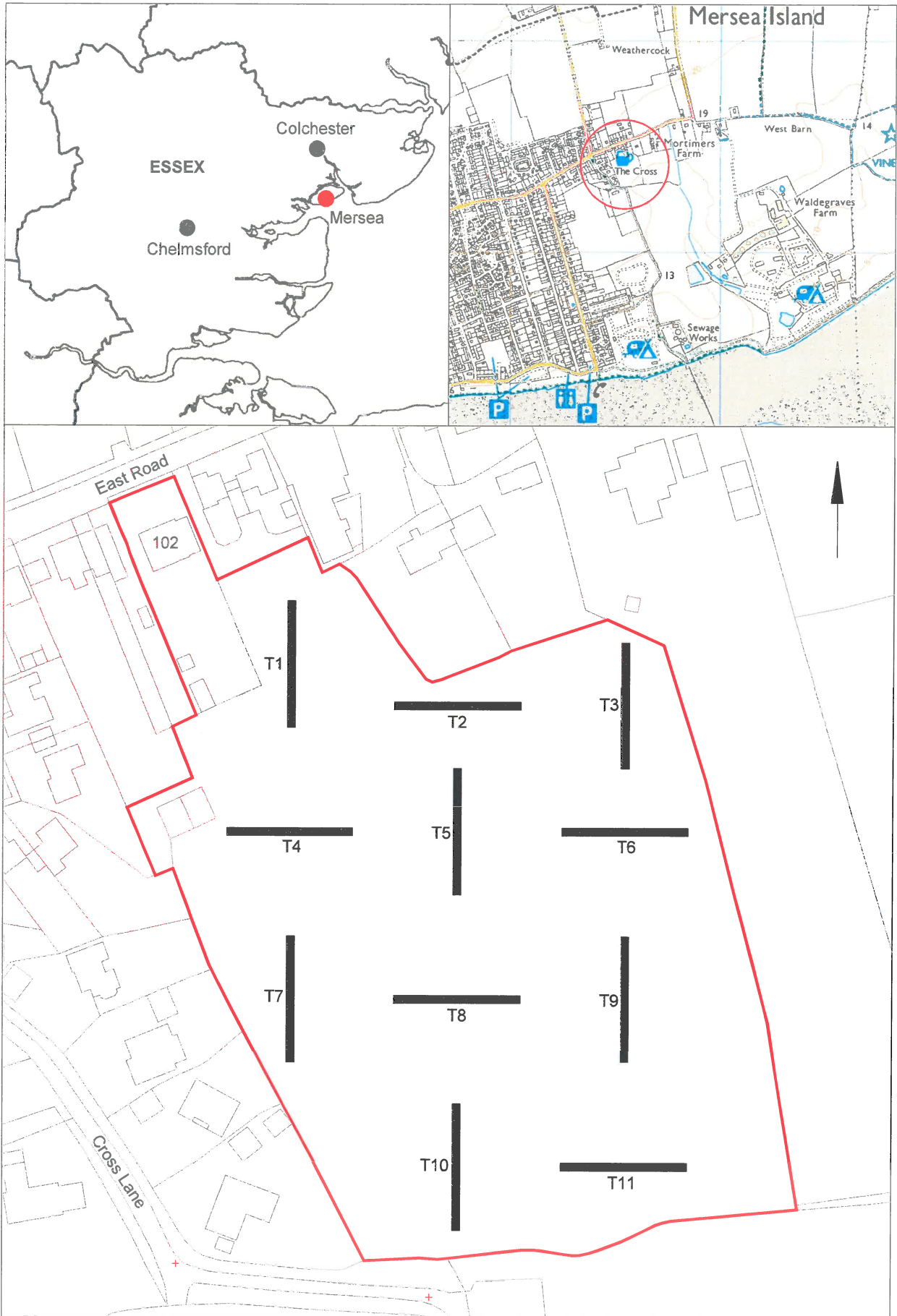
		By S Cole & P Backhouse
Historic England (HE)	2015b	<i>Management of Research Projects in the Historic Environment (MoRPHE)</i>
Historic England (HE)	2018	<i>The Role of the Human Osteologist in an Archaeological Fieldwork Project.</i> By S Mays, M Brickley and J Sidell
Howlett, S	2012	<i>The Secrets of the Mound: Mersea Barrow, 1912-2012</i>
Magnitude Surveys	2020	<i>Geophysical Survey Report of Land at 102 East Road, West Mersea, Essex</i>
McKinley, J I	2013	'Mersea Island Barrow: the cremated bone and aspects of the mortuary rite', in <i>Essex Archaeology and History</i> 4, 74-80
Medlycott, M	2011	<i>Research and archaeology revisited: A revised framework for the East of England.</i> East Anglian Archaeology Occasional Papers 24 (EAA 24)
MHCLG	2019	<i>National Planning Policy Framework.</i> Ministry of Housing, Communities and Local Government.
VCHE 3	1963	<i>A history of the County of Essex, 3: Roman Essex</i> , ed. WR Powell, <i>The Victoria History of the Counties of England</i>
Warren, S H	1913	'The Opening of the Romano-British Barrow on Mersea Island, Essex' in <i>Transactions of the Essex Archaeological Society</i> 13, 116-40

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Fig 1 Site location, showing proposed trench locations.

