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Hough Mill Quarry  
First Stage Archaeological Assessment at  
Lea Forge Farm,  

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Wynbunbury, Cheshire

GAT Project No. G1042

Report No. 27(1)

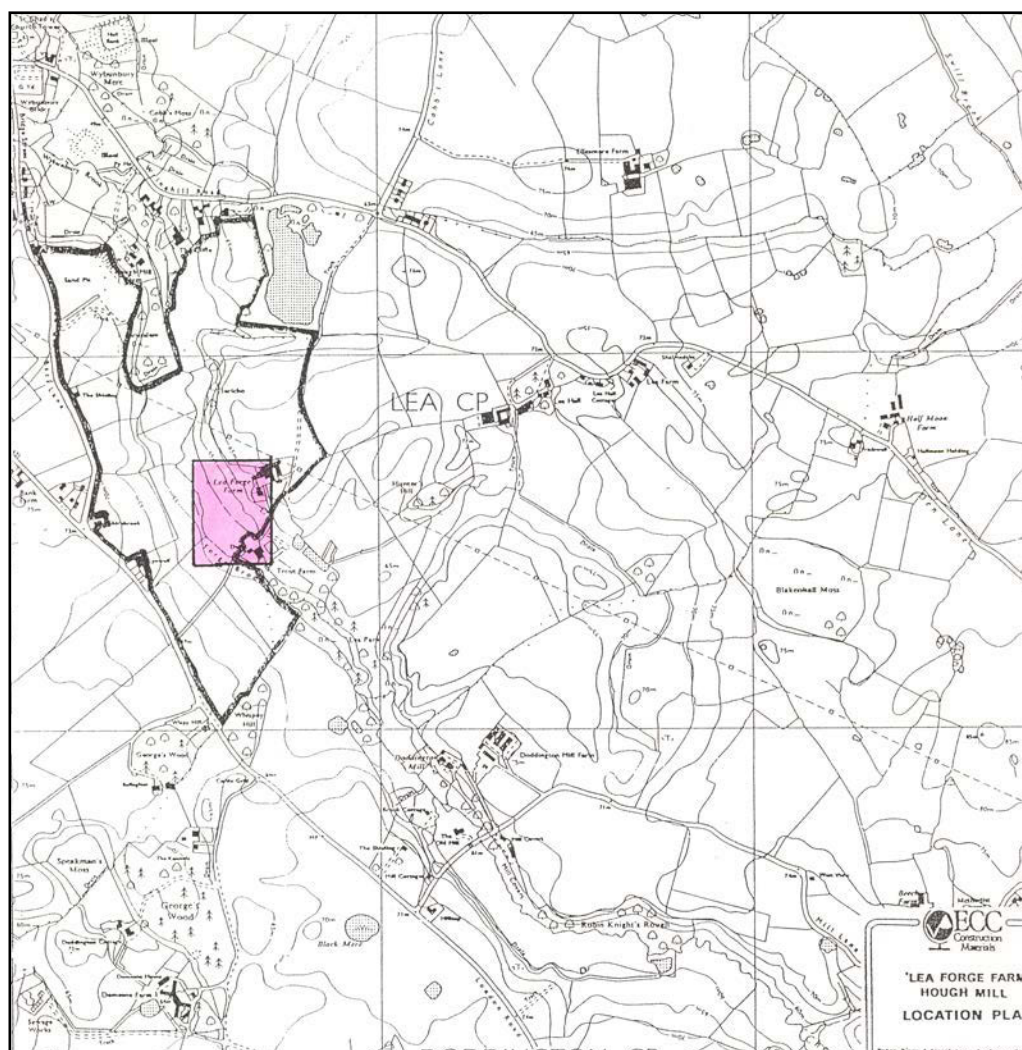
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# REPORT ON A FIRST STAGE ARCHAEOLOGICAL ASSESSMENT AT LEA FORGE FARM, WYBUNBURY, CHESHIRE, FOR ECC QUARRIES CROFT, LEICESTERSHIRE

## INTRODUCTION

The Gwynedd Archaeological Trust was contracted to do an archaeological assessment by ECC Quarries Ltd, Croft Leicestershire, at Lea Forge Farm, Wybunbury, Cheshire (NGR SJ 706 486) as part of the company's process of preparing a planning application to extend sand and gravel extraction at their Hough Mill Quarry site near Wybunbury.

The application area contains the presumed site of Lea Forge, a post-medieval ironworks on the Checkley (Forge) Brook, known from documentary sources to have been in operation from c. 1650 to 1820.



## BRIEF

The brief for the work prepared by Cheshire County Council was to undertake an archaeological assessment within the planning application area to determine the extent and survival of the remains of the ironworks, and to produce a report evaluating the archaeological implications of planning permission being granted.

The scope of the assessment was as follows::

(a) an appraisal of existing data relating to the site: SMR

records, aerial photographs, published and archive sources, placename and fieldname evidence etc.

(b) field survey of the application area by surface inspection, fieldwalking and geophysical (or other remote sensing)

means.

(c) trial-trenching by hand or a combination of hand and machine, of selected areas within the application area, dependent on the results of (a) and (b) , to determine the depth, survival and extent of archaeological deposits.

## **PROCEDURES AND METHODS**

### **A. GROUND SURVEY AND APPRAISAL**

(i) An initial site inspection and preliminary search of archive sources (Wybunbury Parish, Lea Township Tithe, ref. EDT 240/1) in the Cheshire County Record Office on 21:iii:91 confirmed that the most likely area within the planning application to contain the remains of the forge was the field known as Ha(m)mer Meadow, lying between Lea Forge Farm at NGR SJ 707 486 and Forge or Checkley Brook between NCR SJ 7061 4847 and 7050 4882.

(ii) A second, more detailed site inspection was undertaken on 18:iv:91. Fieldwalking identified an extensive system of leats or drains, and other possible earthworks which might have been associated with the forge, concentrated in the area west of the old mill race flowing through Hammer Meadow between NGR SJ 7066 4851 and 7051 4883. No evidence was found of the iron stone and slag reported along the adjacent 600m stretch of Forge Brook centered on NGR SJ 7045 4869, or of the “most likely site of building” noted near Lea Forge Farm at NGR SJ 7065 4850 (Cheshire County Council, SMR Record No. 198 / 1).

(iii) on the same day, following steps (i) and (ii), a topographical ground survey of all the visible surface features in Hammer Meadow, west of the old mill race, was undertaken with an EDM Geodimeter, using Digital Ground Modelling software enhanced by EasyCad 2 for plotting.

(iv) Simultaneously with, and covering the same area as (iii), a geophysical survey was undertaken on a contract basis by Geophysical Surveys of 12 Reservoir View, Thornton, Bradford, using a Geoscan FM36 Magnetometer with ST1 automatic trigger, linked to a Compaq SLT/286 PC and portable Hewlett Packard Inkjet printer for field plots. Geophysical survey of the area east of the old mill race was not feasible owing to the presence of metal cattle feeding racks and fencing.

## **Results**

### **(a) Topographical Survey**

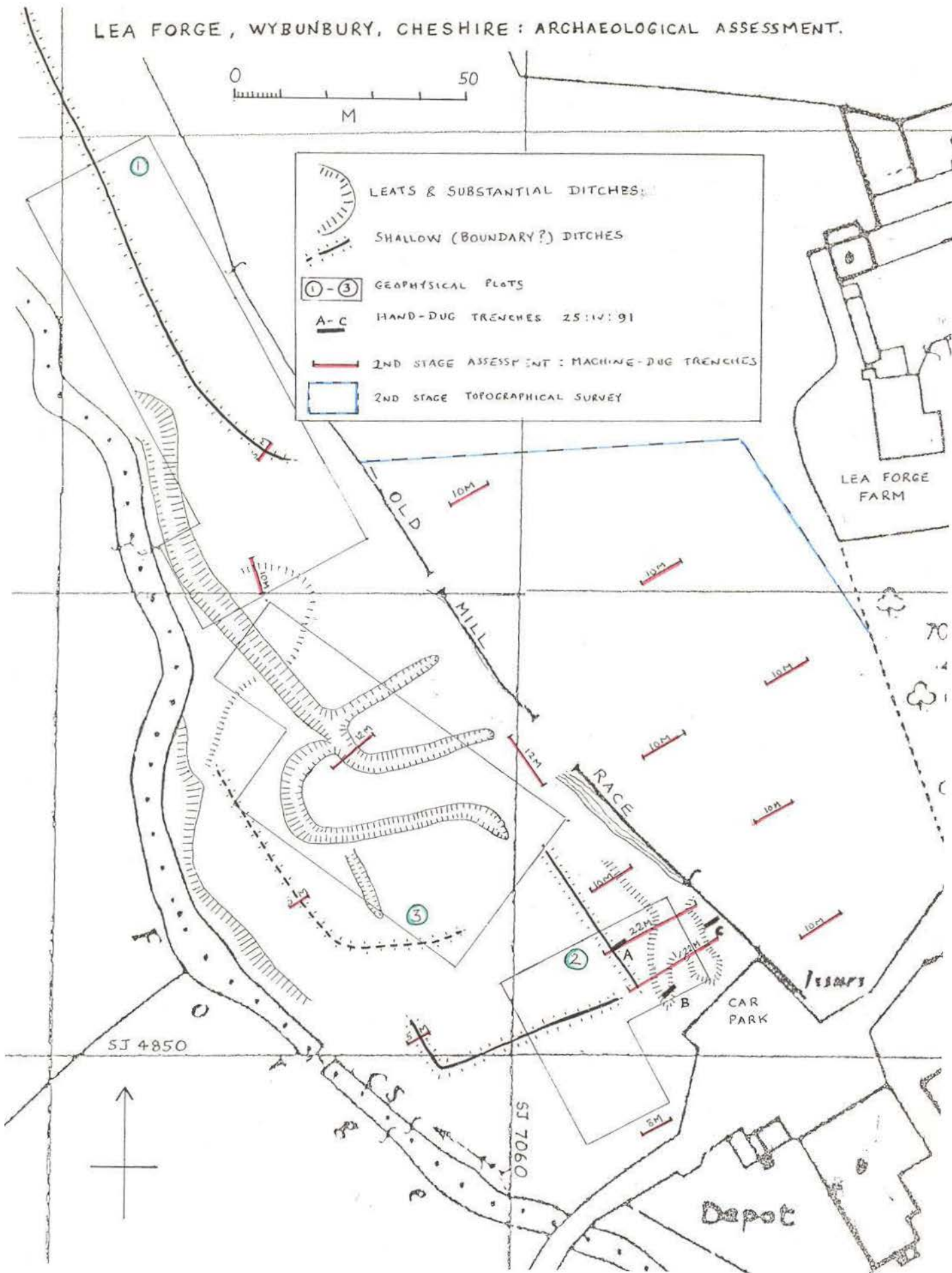
The leat or drain system runs SE to NW across Hammer Meadow into Forge (Checkley) Brook. The results of the EDM survey have been incorporated into the plan of the assessment area (fig.). Although dried out now, the system appears to be of fairly recent age and could have been associated with the forge.

At least four, possibly related, but much shallower ditches, perhaps ploughed-out field boundaries, divide the areas NW and SE of the leat system. one ditch encloses a disturbed area of ground containing possible earthworks on the bank of the mill race, next to the car park at the corner of the field. This area also featured as an anomaly in the geophysical survey.

### **(b) Geophysical (Magnetometer) Survey**

Initially, the field was quickly ‘scanned’ and two areas were noted for ‘ferrous-type’ anomalies, possibly indicative of ironworking. These were surveyed in detail (fig., Areas 1 and 2) and a third area surveyed across the leat system (fig., Area 3). The anomaly in Area 1 proved to be a modern ferrous (gas?) pipe crossing the field and this tended to mask any indications of possible buried archaeological features. Negative magnetic anomalies were noted in Area 2, whilst there was only one anomaly in Area 3, coinciding with part of one of the channels of the leat system.

LEA FORGE, WYBUNBURY, CHESHIRE: ARCHAEOLOGICAL ASSESSMENT.



## B. TRIAL TRENCHING

on the basis of the results of the ground and geophysical surveys, three 3x1m trenches were excavated in Area 2 on 25:v:91 where the combination of possible earthworks and negative magnetic anomalies held the best potential for buried archaeological features. In anticipation of structural remains being found the trenches were hand-dug to preclude the possibility of damage to archaeological remains in the soft sandy soil of the area.

### Results

The trenches were all dug to groundwater level at 1.5+m depth, revealing an apparently mixed and disturbed sequence of sand and humic sand deposits, below a sandy-loam topsoil. Finds comprised fragments of hand-made brick, roof tiles, lumps of slag and pottery sherds of the 18th-19th century which were concentrated along the bottom of the topsoil. Undisturbed natural deposits were not reached and there were no indications of structural or other substantial remains which might have belonged to the forge.

The work was inspected by the Mr Adrian Tindall, Principal Archaeologist, Cheshire County Council.

## C. CONCLUSIONS

The Lea Forge ironworks site remains unidentified. Although the presumption for its location in Area A was correct, based on the ground and geophysical surveys, there was no archaeological evidence for it within the trenches excavated. However, the extensive disturbed deposits and the nature of the finds recovered suggest that a structure, possibly belonging to the forge, stood somewhere in or near this area.

## D. RECOMMENDATIONS

Following the inconclusive results of the first stage assessment and on-site discussions with Mr Adrian Tindall. it has been indicated that a second stage of archaeological assessment is required. This would comprise:

(i) an extension of the topographical survey in Hammer Meadow, to include the area east the old mill race, towards Lea Forge Farm. Several surface features can be seen, mainly ditches and slight earthworks comparable with, and probably related to those surveyed on the west side of the mill race. They might also have been associated with the forge.

(ii) a more detailed appraisal of archive sources relating to Lea Forge at the Cheshire County Record Office, including the Doddington Tithe Map and Schedule (EDT 139/1&2), the Wybunbury Parish, Lea Township, Tithe Map and Schedule (EDT 240/1&2), the Walgherton Tithe Map and Schedule (ED'T 410/1&2) and various papers, including an Estate Map of Lea Township in 1762, in the Delves Broughton Collection (DDB/Q/1). A detailed analysis of the field and place names might reveal more closely the actual site of the forge.

(iii) Following on to steps (i) and (ii), a series of machine-dug trenches across Hammer Meadow to provide more definite evidence of the site of the forge and also examine the nature and function of the leat and ditch system across Hammer Meadow.

The suggested extent of the work required is shown on the fig., but the final location and number of trenches, particularly east of the old mill race, will obviously depend on the result of steps (ii) and (iii) Should the forge site be clearly identified, it will be necessary to excavate at least some of the trenches by hand.