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Tyringham Road, Lelant, Cornwall Archaeological Statement

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1 Introduction



Fig 1 Site location.

Cornwall Archaeological Unit (CAU) were commissioned by Nick Jackson on behalf of Ian Hobson Designs to carry out a geophysical survey of a proposed development site at Tyringham Road, Lelant (SW54373741) (Fig 1). The purpose of the survey is to inform the developer and the planning process; the planning application reference is APP/D0840/A/14/2229298. The survey area covers an area of approximately 1 HA and is located to the northwest of the houses on Tyringham Row.

The proposed development land is situated within land that has been classified as 'Anciently Enclosed Land' (AEL). This AEL classification identifies land that has been settled since at least the medieval period and which often contains buried archaeological remains dating to prehistoric and medieval times. The proposed development area is set within a field system of medieval origin (MCO21163): to the north of this are the Towan Fields; larger, more regular, fields of post-medieval intake.

The proposed development is located near to the medieval settlement of Lelant. The settlement of Lelant was first recorded as 'Lanata' in c1200. The name is Cornish and contains the element lann meaning 'enclosed cemetery' and the Cornish saint's name Anta forms the second part.

The proposed development is situated in an area with significant archaeological potential, which contains evidence of prehistoric, medieval and later activity.

Known archaeological sites that have been identified in the vicinity include:

- A documented Iron Age/Romano British enclosure or 'round' (MCO8060) to the southeast of the proposed development area: a field name 'The Round' is recorded in the Tithe Award for Lelant.
- A Roman coin, a copper alloy statera and an iron nail found to the west of the proposed development area (MCO45410).
- A field system of medieval origin (MCO21163): the proposed development is set within this.

- The medieval settlement of Lelant (MCO15375), located to the east of the proposed development.
- Traces of post-medieval mining visible on aerial photographs to the north of the development area (MCO50976).

In addition there is further potential for prehistoric, Romano-British and medieval sites to survive within the project area and for the survival of unrecorded buried archaeological remains and artefacts of all periods.

2 Aims

The principal aim of the study is to gain a better understanding of the impacts which would result from the construction of housing on land at Tyringham Road, Lelant, in the parish of Lelant.

The overall project aims are to:

- Collect and report on additional archaeological information within the development site in order to determine the potential direct impacts on the archaeology of the site which would result from the current proposal.
- To recommend any mitigation measures which might be required by the Senior Development Officer (Historic Environment) to offset or mitigate any determinable impacts on the site.

The site specific project aims are to:

- Produce a report summarising the geophysical survey in interpreted form.
- Inform whether further archaeological recording or other mitigation is recommended in advance of, or during the construction of housing.
- The objective of the project is to produce a report setting out the likely range of impacts of the development on heritage assets within the site and to make recommendations to the Senior Development Officer (Historic Environment) relating to the development proposed for this site.

3 Methods

3.1 Desk-based assessment

A rapid desk-based assessment was undertaken which included the consultation of readily available databases in order to obtain information about the history of the site and the structures and features that were likely to survive. The main sources consulted were as follows:

- Cornwall HER
- Early maps (see Section 7)

3.2 Geophysical survey

A suitably qualified sub-contractor (Stratascan) was contracted by Cornwall Archaeological Unit (CAU), Cornwall Council on behalf of the client, to carry out a geophysical survey of the land proposed for the housing development at Tyringham Road, Lelant. The survey area comprises slightly sloping grassland, bound by residential areas to the south and east and by pastoral fields to the north and west.

The magnetic survey was carried out using a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame. Each gradiometer has a 1m separation between the sensing elements so enhancing the response to weak anomalies. Readings were taken at 0.25m centres along traverses 1m apart, to a typical depth of penetration of 0.5m to 1.0m.

The data across the site showed a fairly low contrast between anomalies and the background magnetic response and this weak response suggests that the underlying geology may not be fully conducive to magnetic survey.

The data was presented both as a greyscale plot and a colour plot (Fig 4) showing extreme magnetic values, overlaid onto map data geo-referenced to the OS grid. A

separate catalogue map (Fig 5) graphically highlights the most significant anomalies regardless of their origin; a numerical key to a detailed anomaly catalogue is included within the survey report text (Davies and Reeves 2016).

4 Summary of Results

Note, figures in square brackets relate to features shown on the interpreted geophysics survey map (Fig 5).

The geophysical survey was undertaken by Stratascan and the report containing the processed results was received by Cornwall Archaeological Unit (CAU) on 8th February 2016 (Davies and Reeves 2016).

The report identified no features within the survey area of *probable* archaeological origin but there were a small number of magnetic anomalies of *possible* archaeological origin.

Two linear anomalies in the east of the site indicate former cut features of possible archaeological origin. Anomaly [1] comprises a positive linear and its negative response and may be a bank and ditch associated with a former north east-south west aligned field boundary or a feature of natural origin. Anomaly [2] is a weaker linear anomaly that may be of archaeological or agricultural origin.

Two areas of widely spaced parallel linear anomalies [3] may be associated with medieval or post-medieval ridge and furrow cultivation.

A weak positive linear anomaly [4] in the centre of the site is identified as relating to a former footpath north east-south west visible on the c1880 OS map (Fig 3); the earlier Tithe map for Lelant shows a field boundary in this location (Fig 2), which may have been removed by the 1880s but which the footpath respected.

A strong bipolar linear anomaly [5] in the west of the site is related to modern underground services. Areas of magnetic disturbance [6] are likely to relate to substantial ferrous objects nearby, such as fences or underground services. These may mask weaker archaeological anomalies but do not majorly affect the site. A number of magnetic 'spikes' [7] indicate ferrous metal objects, thought likely to be modern rubbish.

5 Significance

On the basis of the geophysical survey results, the features identified were considered unlikely to be of major archaeological significance. A slight caveat to this is the unconducive nature of the underlying geology to magnetic survey, but this is felt unlikely to have obscured much of significant archaeological interest.

Despite the potential for prehistoric and Romano-British remains in the area, the results of the geophysical survey appear to be predominantly associated with medieval and/or post-medieval agricultural features, such as former field boundaries and cultivation activity.

The larger linear anomaly [1] does not correspond with any known historic boundary shown on the historic OS or Tithe mapping within the survey area, although it may be linked with a hedge boundary shown on the Lelant Tithe map to the north of the survey area (Fig 3). The possibility that it reflects an enclosure boundary of prehistoric or Romano-British date cannot be wholly ruled out (the field bearing the name 'The Round' is located around 100m to the southeast), but a boundary of medieval or post-medieval origin seems more likely.

6 Recommendations for further recording

The geophysical survey did not reveal any probable archaeological features of significance, although there were a small number of possible archaeological features, considered as being largely agricultural in origin. However, the magnetic responses produced by the ground survey were acknowledged to be relatively weak and there were some areas where magnetic disturbance may mask additional archaeological features. In addition it is possible that small archaeological features within the survey area, such as pits and postholes, might not have been detected.

The proposed development site is located within an area of recognised archaeological potential and the Senior Development Officer (Historic Environment) retains the option to require further determination of the features revealed by the geophysical survey. This might be achieved either through evaluative trenching in advance of development or through an archaeological watching brief during associated groundworks. It is, however, (subject to agreement with the Senior Development Officer (Historic Environment)) recommended that:

- Groundworks for the development will be accompanied by an archaeological watching brief to determine whether below-ground remains are present and, if so, to make a proper record of these.
- Should significant archaeological features be exposed, the Senior Development Officer (Historic Environment) will be consulted as to any further mitigation of potential impact by the proposed development.

7 References

7.1 Primary sources

Ordnance Survey, c1880. 25 Inch Map First Edition (licensed digital copy at CAU) Ordnance Survey, c1907. 25 Inch Map Second Edition (licensed digital copy at CAU) Ordnance Survey, 2007. Mastermap Digital Mapping

Tithe Map and Apportionment, c1840. Parish of Lelant (microfiche copy at CAU)

7.2 Publications

Davies, R. & Reeves, S., 2016, Lelant, Cornwall, Geophysical Survey Report, Stratascan

7.3 Websites

http://www.heritagegateway.org.uk/gateway/
English Heritage's online database of Sites and Monuments Records, and Listed Buildings

8 Project archive

The CAU project number is 146547

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY.

Electronic data is stored in the following locations:

Project admin: \\Projects\Sites\Sites L\Lelant Tyringham Geophysical survey_146547 GIS projects and images: \\Historic Environment (Data)\HE_Projects\Sites_L\Lelant Tyringham Road Geophysical Survey_146547

Historic England/ADS OASIS online reference: cornwall2-241899

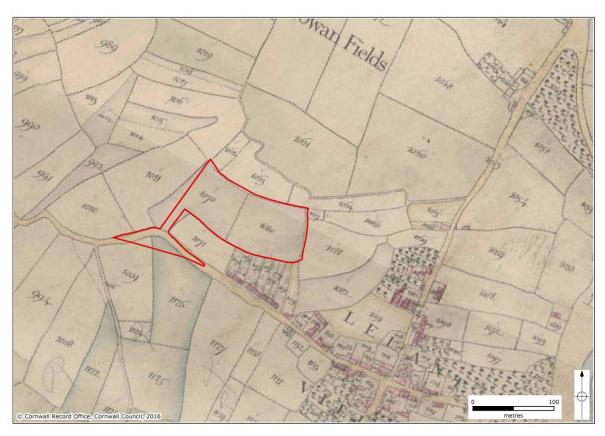


Fig 2 Extract from the Lelant Tithe Map c1840.

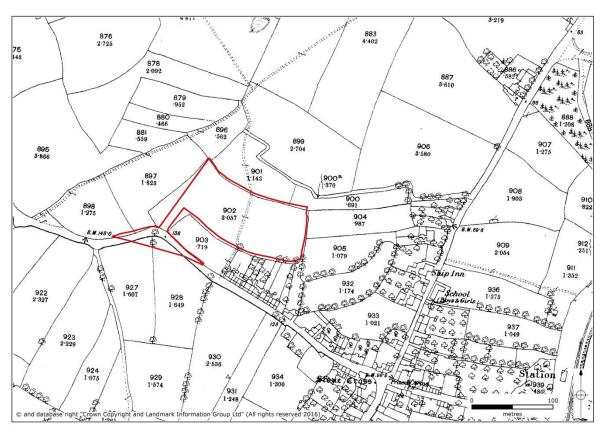


Fig 3 Extract from the OS First Edition 25 Inch Map c1880.



Fig 4 Colour plot of gradiometer data at Tyringham Road, Lelant (Davies and Reeves 2016, Fig. 3).

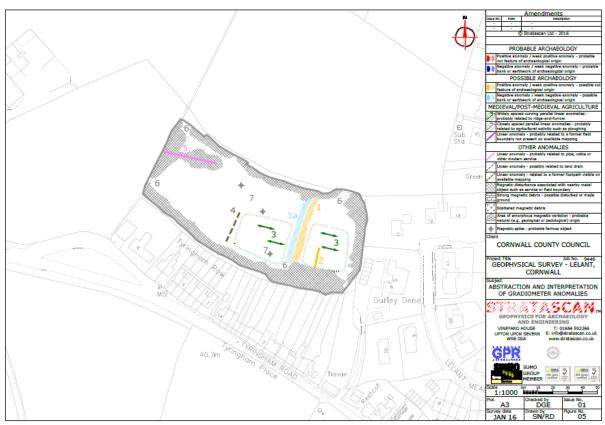


Fig 5 Abstraction and interpretation of gradiometer anomalies at Tyringham Road, Lelant (Davies and Reeves 2016, Fig. 5).