











Lantoom Quarry, near Dobwalls, Cornwall - Phase 2 (area 4) Archaeological watching brief



Cornwall Archaeological Unit

Report No: 2022R046

Lantoom Quarry, near Dobwalls, Cornwall - Phase 2 (area 4)

Archaeological watching brief

Client	Lantoom Quarry
Report Number	2022R046
Date	October 2022
Status	Final
Report author(s)	Antony Angove
Checked by	Andy Jones
Approved by	Andy Jones
Project number	147045
Site code	LQ22
Data location	\\CAU\Archive\Sites\Lantoom quarry Phase 2_147045\Report
Historic England / ADS OASIS online reference	cornwall2-510282
Planning reference	PA12/00674

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit.

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Acknowledgements

This study was commissioned by Lantoom Quarry and carried out by Cornwall Archaeological Unit, Cornwall Council.

The fieldwork was carried out by Antony Angove.

The Project Manager was Andy Jones.

The views and recommendations expressed in this report are those of Cornwall Archaeological Unit and are presented in good faith on the basis of professional judgement and on information currently available.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.



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Abbreviations

- CAU Cornwall Archaeological Unit
- CIFA Chartered Institute for Archaeologists
- HE Historic England
- HER Cornwall and the Isles of Scilly Historic Environment Record
- LPA Local Planning Authority
- MCO Monument number in Cornwall HER
- NGR National Grid Reference
- OS Ordnance Survey

1 Summary

Cornwall Archaeological Unit (CAU) undertook an archaeological watching brief during August and September 2022, which involved the topsoil stripping of part 4 of the Phase 2 quarry extension for Lantoom Quarry.

Lantoom Quarry is located between Liskeard (2.5 km to the east), Dobwalls (1.5 km to the west) and on the immediate southern side of the A38. Phase 2 lies on the eastern side of the existent quarry.

A previous geophysical survey undertaken in 2011 had identified a number of potential archaeological features across of the whole Phase 2 field. Within the area 4 site boundary itself potential archaeological features included linear, curvilinear and pit-like anomalies.

However, no archaeological features or artefacts were revealed during the fieldwork for the current phase of the quarry.

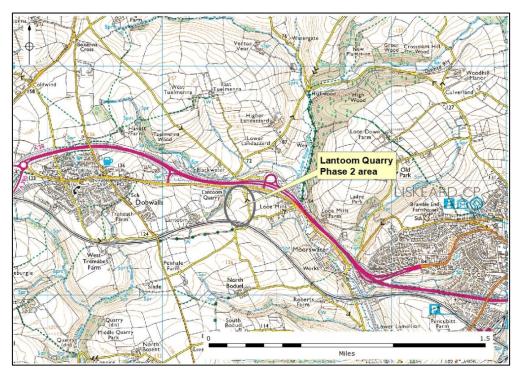


Fig 1 Location map.



Fig 2 Site extent – as supplied by the client. It also shows the watching brief site, area 4 (outlined in red).

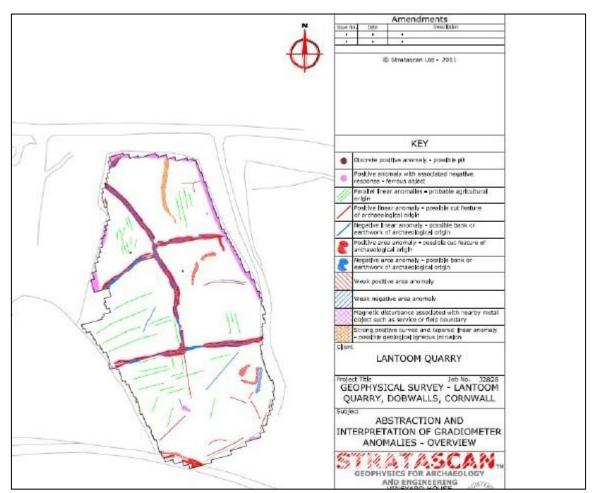


Fig 3 Geophysical survey carried out by Stratascan (2011) showing the whole of the Phase 2 area.

2 Introduction

2.1 Project background

Cornwall Archaeological Unit (CAU) was commissioned by Lantoom Quarry to undertake an archaeological watching brief for area 4 (an eastern part) of the Phase 2 quarry expansion area (see Fig 2). This work was carried out to satisfy Condition 17 (Reason – To record areas of historic interest), which is part of planning application PA12/00674.

Further details of the background and the aims and methods of the project can be found in the Written Scheme of Investigation (WSI) reproduced here in Appendix 1.

The area under investigation has previously been the subject of several stages of archaeological investigation and recording. A geophysical survey undertaken in 2008 (Stratascan 2011) (Fig 3), an archaeological watching brief carried out during Phase 1 in 2013 (Thorpe 2013), a watching brief carried out in the western part 1 of Phase 2 in 2018 (Thorpe 2018). Furthermore, watching briefs were carried out in a southern part 2 of Phase 2 in 2020 (Lawson-Jones 2020) and an eastern part 3 of Phase 2 in 2021 (Angove 2021).

The geophysical survey identified a number of ditches which are shown on the 1840 Tithe Map, as well as a small number of other anomalies which are not. These therefore had the potential to be of earlier date (Fig 3). Indeed, the Phase 2, area1 watching brief identified a small number of undated pits and removed field boundaries (Thorpe 2018). The Phase 2, area 2 watching brief identified a removed field boundary and two prehistoric worked flints, of Neolithic date, which were collected during topsoil stripping

(Lawson-Jones 2020). However, the Phase 2., area 3 watching brief did not identify any archaeological features or artefacts (Angove 2021).

2.2 Location and setting

The site lies in Liskeard parish, between Liskeard and Dobwalls, on the southern edge of the A38 (Fig 1). The wider Phase 2 field (3.65Ha) lies on the eastern edge of the current open quarry and slopes down from the south.

The Phase 2, area 4 stage of work covers a 0.25Ha area and is located at SX 22627 64777, adjoining the western edge of the Phase 2 field (Fig 2). Before mechanical topsoil stripping of the site, the field was down to grass (Fig 4 and 5).

Lantoom Quarry as a whole lies within an undulating landscape, cut through by a series of named and unnamed tributaries associated with East Looe River, plus a number of springs. The locally named Lantoom Stream runs some 50m west of the western edge of the site.

The underlying geology consists of slate and siltstones of the Saltash Formation belonging to the Devonian Period (BGS sheet 348). The overlying soils are well-drained and fine loam or silt. Figures 6 to 8 show the variation in the underlying natural geology once exposed.

There are no Scheduled Monuments or Listed Buildings within the immediate area of the quarry, although there are in the surrounding area medieval farming settlements and field systems, which reflect the sites landscape setting. To the northeast is the Caradon Hill Area of Great Landscape Value.

The Phase 2 field has a long history of enclosure with surrounding curvilinear boundaries indicating their medieval or earlier origins. In 1842 the Tithe Map (Fig 9) records all five of the then current fields as arable and leased by Joseph Moon from Samuel Trehawke Kekewich Esq. Subsequent aerial photography shows the site in 1946 (Fig 11), 2000 (Fig 12) and 2005 (Fig 13) as under pasture and in 2016 (Fig 14) as ploughed.

The site itself is located within Anciently Enclosed Land, this is land which has been settled since at least the medieval period and which often contains archaeological remains of prehistoric and medieval origin (Cornwall County Council 1996). It also lies within land classified as Farmland: Medieval Type, which typically contains curvilinear enclosed field patterns which are morphologically distinct from the generally straight-sided fields of later enclosure.

Known sites within the immediate 500m diameter area include:

- Medieval Lantoom settlement (MCO 15321). It lies to the southwest of the site and was first documented in 1286 when it was spelt Lanthome – a Cornish name combining *nans* 'valley' with an unknown element.
- Medieval North Boduel field system (MCO 21256). Located to the south of the site and includes the possible remains of enclosed strips within an open medieval field system.
- Post-Medieval Dobwalls milestone (MCO 48517). Made of granite and dating to about 1761 this milestone stands on the northern side of the A39, which was established under the Turnpike Act. It records the distances to Liskeard and Lostwithiel.
- Post-Medieval Sandy Lane railway bridge (MCO 55115). A 19th century bridge carrying the main rail line over a lane.
- Post-Medieval Lantoom Quarry (MCO 42412). This site is not marked on the 1840s Tithe map but is shown on the 1880 and 1907 OS historic mapping as a small quarry, which appears barely altered on the RAF 1946 aerial photograph (Fig 11). It has been plotted as part of the National Mapping Programme.
- The geophysical survey (Stratascan 2011), identified a number of linear anomalies which reflect an earlier field system that existed prior to the 1842 Liskeard Tithe Map (Fig 9). The field system was still shown on the 1907 OS map (Fig 10). The 1946 RAF

aerial photograph (Fig 11) of the site area shows the two main east to west boundaries as still in use. These were removed soon afterwards.

 Other geophysical anomalies and at least two pit-type responses were identified by the geophysical survey across the wider Phase 2 area, implying that other features may exist within the site of potential medieval and earlier date. The sites south facing, well-drained setting, close to water sources would have made the site an ideal area for early settlement and use.

There was, as a result, the potential for a variety of site types to exist within the quarry extension area.

3 Archaeological results

The watching brief took place on August 30th, 31st and September 1st, 2022. The results are presented here.

A total of 5 contexts were recorded. Full context descriptions are given in Appendix 2.

Contexts (1) to (5) relate to stratigraphy across the site (from top to bottom):

- Turf layer (1) rooty and organic.
- Topsoil (2) most recent plough horizon.
- Earlier plough/subsoils (3) and (4) variable, depending on underlying natural and moisture content.
- Natural subsoil (5) which varied from solid weathered blue/grey slate to yellow/orange decayed clay and shillet.

4 Discussion

The previous geophysical survey (Stratascan 2011) (Fig 3) had identified a number of discrete features including linear, curvilinear and pit-like anomalies in the immediate vicinity.

The watching brief provided an opportunity to evaluate these anomalies and undertake an investigation of the archaeological potential of the central and western edge of the Phase 2 field, as well as establishing ground conditions within the monitored area.

However, the results from the archaeological fieldwork revealed that the project area did not contain any archaeological features or deposits and did not lead to the recovery of any artefacts.

5 References

5.1 Primary sources (in chronological order)

Tithe Map and Apportionment, c1842. Parish of Liskeard (3) (licensed digital copy at CRO)

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, MasterMap Topography

5.2 Publications

Angove, A, 2021. Lantoom Quarry, Liskeard, Cornwall, Phase 2 (3). Archive report 2021R030.

- Cornwall County Council, 1996. Cornwall: A Landscape Assessment 1994, Report produced by Landscape Design Associates in association with Cornwall Archaeological Unit.
- Lawson-Jones, 2020. *Lantoom Quarry, Liskeard, Cornwall, Phase 2 (2)*. Archive report 2020R049.Stratascan, 2011. *Lantoom Quarry, Dobwalls, Cornwall*, Upton on Severn (Job ref. J2828)

Stratascan, 2011. Lantoom Quarry, Dobwalls, Cornwall, Upton on Severn (Job ref. J2828)

- Thorpe, C, 2013. *Lantoom Quarry, Liskeard Archaeological Watching* Brief, Archive report 2013R054.
- Thorpe, C, 2018. Lantoom Quarry, Liskeard, Cornwall, Phase 2 (1). Archive report 2018R057.

5.3 Websites

http://www.heritagegateway.org.uk/gateway/ Online database of Sites and Monuments Records, and Listed Buildings



Fig 4 Looking south-west across the site area prior to excavation.



Fig 5 Looking west across the site area prior to excavation.



Fig 6 Stripping of the western section of the site, looking west.



Fig 7 Stripping of the western section of the site, looking west.



Fig 8 Stripping of the eastern section of the site area, looking north.

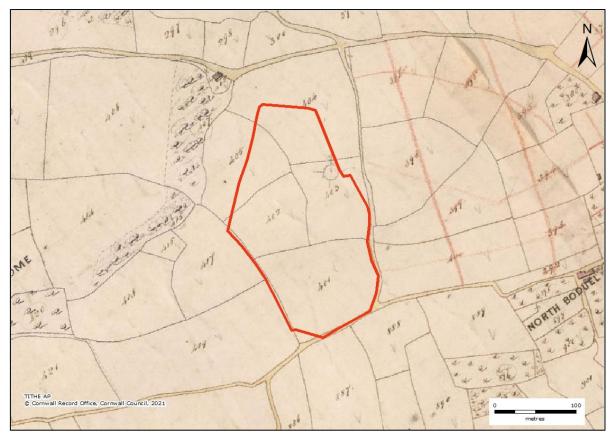


Fig 9 Tithe Map, c1840.



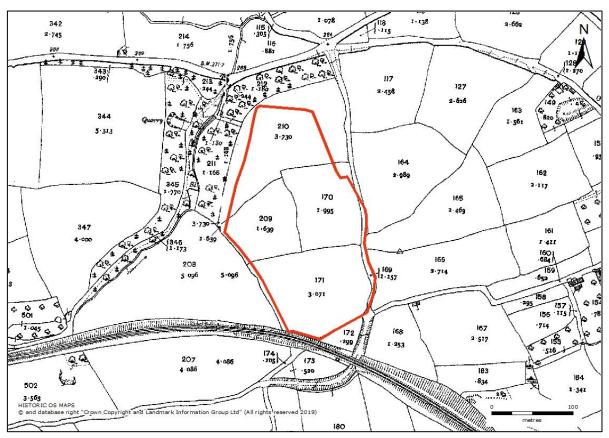


Fig 10 Second Edition of the Ordnance Survey 25 Inch Map, c1907.

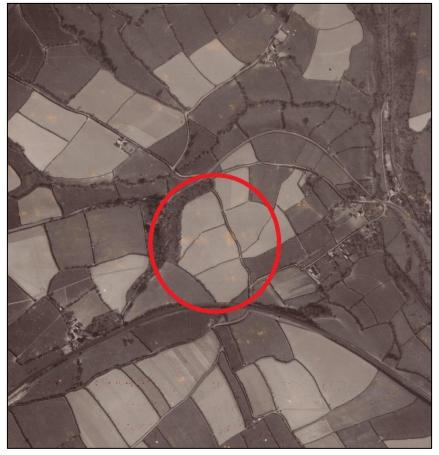


Fig 11 RAF Photograph 1946.



Fig 12 Aerial Imagery 2000.

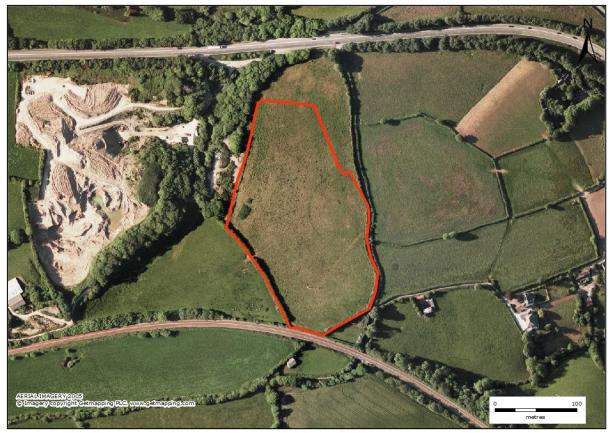


Fig 13 Aerial Imagery 2005.



Fig 14 Aerial Imagery 2016.

Appendix 1: Written Scheme of Investigation

Lantoom Quarry, Liskeard Phase 2 (1)

Client:	Lantoom Quarry
Planning ref:	PA12/00673

Project background

This document sets out a Written Scheme of Investigation (WSI) by Cornwall Archaeological Unit (CAU) for a programme of archaeological investigation at Lantoom Quarry near Liskeard (SX 22311 64880). The development (PA12/00673) will involve expansion of the quarry into the Phase 2 area which will be undertaken over a series of stages over the coming years. This Written Scheme of Investigation is an update of the project design which was produced by CAU in 2013 (Jones 2013). The archaeological recording has been requested by Phil Copleston, Cornwall Council's Senior Development Officer Historic Environment (SDHOE) and the scope of the project was agreed with him.

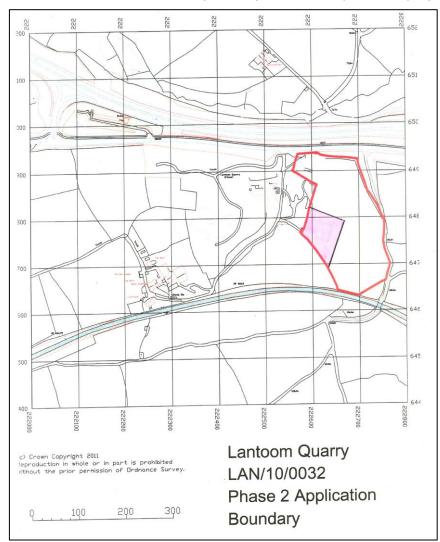


Figure 1: Site location map (Phase 2 area shaded).

Site history

The area under investigation has previously been the subject of a geophysical survey undertaken 2008 and an archaeological watching brief carried out in the Phase 1 area in 2013 (Stratascan 2011; Thorpe 2013). The geophysical survey identified a number of ditches which are shown on the 1840 Tithe Map as well as a smaller number which are not, and may therefore be of an earlier date. The archaeological watching brief identified a small number of undated pits and removed field boundaries.

Historic Landscape Character (HLC)

The area of the proposed development falls into land recorded by the Cornwall and Scilly Historic Environment Record as being 'Anciently Enclosed Land'. 'Anciently Enclosed Land' is land which has been settled and farmed since at least the medieval period and which often contains buried archaeological remains dating to prehistoric and medieval times. As such there is the potential for remains associated with earlier episodes of settlement activity to be uncovered.

Identified archaeological sites

A number of sites in the vicinity of the study area have been identified. They include:

- The settlement of Lantoom which lies to the south of the project area was first recorded in 1286 (MCO15321).
- The geophysical survey identified a number of linear anomalies which may be associated with earlier field systems.
- Other geophysical anomalies and pit type responses were identified by the geophysical survey across the development area.

Potential archaeological sites

There is potential for prehistoric and medieval sites to survive within the project area and there is the scope for the survival of unrecorded buried archaeological remains and artefacts of all periods.

Project extent

The Phase 2 (1) project area measures approximately 70m by 80m and is within the area shown in red on Figure 1.

Aims and objectives

The principal aim of the study is to gain a better understanding of the archaeology of the development in order to determine whether this area includes evidence for medieval or earlier activities and features.

The objectives are to:

• Obtain an archaeological record of the site in advance of quarry expansion.

Key objectives are to:

• Undertake and report on the results from the archaeological watching brief.

Working methods

All recording work will be undertaken according to the Chartered Institute for Archaeologists (CIfA) guidance (CIfA 2014a; 2014b; 2014c; 2017). Staff will follow the CIfA *Code of Conduct* (2014d). The Chartered Institute for Archaeologists is the professional body for archaeologists working in the UK.

Creation of the physical and digital archive

Following review with the CAU Project Manager the results from the fieldwork will be collated as an archive.

This will involve the following.

• All finds, etc, will be washed, catalogued, and stored in a proper manner (being clearly labelled and marked and stored according to CAU guidelines).

• All records (drawings, context sheets, photographs, etc) will be ordered, catalogued and stored in an appropriate manner (according to CAU guidelines).

• Colour digital images taken as part of the site archive will be either converted from colour to black and white negative film and added to the site archive, or deposited with the Archaeology Data Service (ADS).

- Completion of the Historic England/ADS OASIS online archive index.
- All correspondence relating to the project, the WSI, and a single paper copy of the report, stored in an archive standard (acid-free) documentation box.
- Drawn archive storage (plastic wallets for the annotated record drawings).
- Additional digital data (survey, external reports, etc)

Archive deposition

An index to the site archive will be created and the archive contents prepared for long term storage, in accordance with CAU standards.

• The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.

• Digital data will be stored on the Cornwall Council network which is regularly and frequently backed up.

• Digital data (CAU reports, external reports, survey data, geophysics data, digital photographs, etc) forming part of the site archive will be deposited with the ADS.

CAU uses the following file formats for stored digital data:

DOCX Word processed documents

XLSX Spreadsheets

PDF Exports of completed documents/reports/graphics

JPG Site graphics and scanned information

DNG or TIF Digital photographs

- DWG AutoCAD drawings, measured surveys
- MXD ArcView GIS (electronic mapping) data
- AI Adobe Illustrator graphics

Pre-fieldwork

In advance of the fieldwork CAU, will discuss and agree with the client:

- Working methods and programme.
- Health and Safety issues and requirements.
- Transfer of Title for artefacts.
- Obtaining an accession number from the appropriate archive repository.

Fieldwork: watching brief

The SDOHE has advised that a watching brief is required on the site in advance of the quarry expansion. This work will be guided by CIfA's guidance on undertaking watching briefs (CIfA 2014b).

All groundworks which might potentially contain archaeological features will be undertaken under archaeological supervision. This will include any removal of soil across the site, the excavation of footing or service trenches, or other activities which would result in the lowering of the present site levels. All soil stripping should be undertaken by a machine equipped with a toothless grading bucket where possible. Should archaeological features be revealed, mechanical excavation will be halted and the exposed features cleaned up by hand to determine their significance prior to either their recording or further mechanical excavation. The developer will allow reasonable time for the excavation and recording of any features thus revealed.

Recording

During the archaeological recording the archaeologist will:

• Identify and record any archaeological features that are revealed; the level of recording will be appropriate to the character/importance of the archaeological remains.

• Site drawings (plans and sections) will be made by pencil (4H) on drafting film; all drawings will include standard information: site details, personnel, date, scale, north-point.

• All features and finds will be accurately located at an appropriate scale.

• All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.

• Photographic recording will comprise colour photography using a digital SLR camera (with a resolution of 10 million pixels or higher; CAU will follow Historic England (2015) guidance on digital image capture and storage). Photographs will include a record of significant features and general working shots. A metric scale, site and context identifier, and a north arrow where appropriate, will be included in all record shots.

Treatment of human remains

• If human remains are discovered within an archaeological context on the site the client, the SDOHE, and Public Health, Cornwall Council will be informed.

• Any human remains should only be excavated and removed if it is considered that they will contribute towards further scientific understanding.

• A coroner's license must be obtained from the Ministry of Justice before any remains are disturbed.

• Any consents or licenses required will be obtained on behalf of the client by CAU.

• If human remains are uncovered, which require excavation, they will be will be excavated with due reverence. The site will be adequately screened from public view. Once excavated, human remains must not be exposed to public view. If human remains are not to be removed their physical security will be ensured, by backfilling as soon as possible after recording.

Treatment of finds

The fieldwork is likely to produce artefactual material. The following recording and retention policies will be followed:

• In the event that objects containing precious metal(s) are encountered, the coroner will be informed as per the provisions of the Treasure Act 1996.

• Significant finds in stratified contexts will be plotted on a scaled base plan or with a Leica GPS unit and recorded as small finds.

• All finds will be collected in sealable plastic bags which will be labelled immediately with the site code, the context number or other identifier, the type of material, and the finder's initials. The only exception to this policy will be that large assemblages of modern (post-1800) material may be representatively sampled.

• Modern (post-1800) finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.

Treatment of samples

The fieldwork may produce environmental samples. The following collection, recording and processing policies will be followed:

• Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within significant archaeological features that have the potential to contain palaeoenvironmental evidence and/or material suitable for scientific dating will be sampled.

• Where bulk samples are taken a minimum of 40 litres will be sampled from these deposits where feasible.

 In the event that significant organic remains are encountered, advice may be sought from the Historic England Regional Advisor for Archaeological Science.
All samples will be described to a standard format linked to a continuous numbering sequence.

• Bulk samples will be processed using flotation with appropriate mesh sizes.

Reporting

The results from the project will be drawn together and presented in a concise report. The scope of the report will be dependent on the scale and significance of the results from the project.

In the case of negative results the findings will be presented in a CAU short report format. In the case of limited results the findings will be presented in a concise archive report. Which type of report is most appropriate will be agreed by CAU and the SDOHE at the conclusion of the fieldwork stage.

In the case of significant and/or extensive results a post excavation assessment report will be produced in accordance with CIfA's guidelines for post-excavation assessment (2014c). This will include a summary of the site archive and work carried out for assessment, a discussion of the potential of the data, and an updated project design (UPD) setting out proposals for analysis and publication.

The report will include the following elements:

- Summary
- Project background
- Aims and objectives
- Methodology
- Location and setting
- Site history
- Archaeological results
- Conclusions
- References
- Project archive index

• Supporting illustrations: location map, historic maps, plans, elevations/sections, photographs

Timetable

The study is anticipated to commence later in 2018. CAU will require at least 2 weeks' notice before commencement of work, in order to allocate field staff and arrange other logistics.

The archive report will be completed within 3 months of the end of the fieldwork. The deposition of the archive will be completed within 3 months of the completion of the archive report.

Monitoring and Signing Off Condition

Monitoring of the project will be carried out by the SDOHE. Where the SDOHE is satisfied with the archive report and the deposition of the archive, written discharge of the planning condition will be expected.

• The SDOHE will monitor the work and should be kept regularly informed of progress.

• Notification of the start of work shall be given preferably in writing to the SDOHE at least one week in advance of its commencement.

• Any variations to the WSI will be agreed with the SDOHE, in writing, prior to them being carried out.

• If significant detail is discovered, all works must cease and a meeting convened with the client and the SDOHE to discuss the most appropriate way forward.

Monitoring points during the study will include:

- Approval of the WSI
- Completion of fieldwork
- Completion of archive report
- Deposition of the archive

References

CIFA, 2014a. Standard and guidance for archaeological field evaluation, CIFA, Reading

CIfA, 2014b. Standard and guidance for an archaeological watching brief, CIfA, Reading

CIFA, 2014c. Standard and guidance for archaeological excavation, CIFA, Reading

CIfA, 2014d. Code of Conduct, CIfA, Reading

CIfA, 2017. *Standard and guidance for historic environment desk-based assessment*, CIfA, Reading

Historic England 2015. *Guidance note on Digital Image Capture and File Storage,* Historic England, Swindon

Stratascan, 2011. Lantoom Quarry, Dobwalls, Cornwall, Upton on Severn (Job ref. J2828)

Thorpe, C, 2013. Lantoom Quarry, Liskeard: Archaeological watching Brief, CAU, Truro

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Appendix 2: Table of contexts

Area	Context Number	Type (Cut / Deposit / Build)	Feature	Description	Finds period	Period (only cuts / layers interpreted)
	1	D	Turf	0.05m deep. Grass and roots.	N/A	
	2	D	Topsoil	0.1m deep. Mixed dark grey brown clay loam with roots and very occasional shillet. Recently ploughed.	N/A	
	3	D	Former ploughsoil	0.1-0.2 m deep. Grey brown clay loam.	N/A	
	4	D	Former ploughsoil	0.2-0.5m deep. Red brown clay with shillet fragments.	N/A	
	5	D	Natural	Variable decaying hard grey/blue slate and softer yellowish orange clay and shillet.	N/A	

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