

Land at Tolgus Redruth Cornwall

Archaeological Watching Brief



for
CORMAC

CA Project: 880088
CA Report: 16593

January 2017



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SUMMARY

Project Name: Land at Tolgus
Location: Redruth, Cornwall
NGR: SW 6885 4215
Type: Watching Brief
Date: 28 September–11 October 2016
Planning Reference: PA12/09717
Location of Archive: To be deposited with the Royal Cornwall Museum and the Archaeology Data Service (ADS)
Site Code: TOL 16

Cotswold Archaeology carried out an archaeological watching brief during groundworks associated with the creation of a compound on land at Tolgus, Redruth, Cornwall.

The watching brief recorded several ditches and two pits. Although undated artefactually, a small number of features was cut into the natural substrate and sealed by the subsoil, which might suggest that they are at least medieval/early post-medieval in date. Some of these earlier ditches match the alignments of the existing field system and are likely to represent former boundaries. The watching brief also recorded a small number of post-medieval/modern ditches, which are also likely to represent former boundaries.



1. INTRODUCTION

- 1.1 In September and October 2016, Cotswold Archaeology (CA) carried out an archaeological watching brief for CORMAC on land at Tolgus, Redruth, Cornwall (centred on NGR: SW 6885 4215; Fig. 1).
- 1.2 Cornwall Council has granted planning permission for a hybrid planning application (planning ref: PA12/09717), comprising:
- full permission for remodelling and downgrading of the A3047 between Tolgus Place Roundabout and Blowinghouse Roundabout and modification of the roundabouts themselves; and
 - outline planning permission for the erection of 370 dwellings, plus associated employment space, open space, green infrastructure, footpaths and cycle ways, car parking, and foul and surface water drainage infrastructure.
- 1.3 Condition 3 of the planning permission requires a programme of archaeological work. The scope of this archaeological work was defined subsequently by Phil Copleston and Charles Johns of the Cornwall Council Historic Environment Service (CCHES). The phase of the works to which this reports relates was an archaeological watching brief maintained during groundworks associated with the construction of a compound.
- 1.4 The watching brief was carried out in accordance with a detailed Written Scheme of Investigation (WSI) produced by CA (2016) and approved by the LPA acting on the advice of CCHES. The fieldwork also followed *Standard and guidance for an archaeological watching brief* (ClfA 2014).

The site

- 1.5 The proposed development site is situated outside of the north-western fringes of Redruth and encloses approximately 29.5ha in total. The main body of the site comprises a series of arable and pasture fields and lies between the A30 to the north/north-west and the A3047 to the south-east.

- 1.6 The area of monitored groundworks to which this report relates lay at the mid-eastern edge of the proposed development site and encompassed c. 3.9km² (Fig. 2).
- 1.7 The underlying geology of the site is mapped as Hornfelsed slate and Hornfelsed siltstone of the Mylor Slate Formation, with a band of Permian Felsite running through the approximate centre of the site on a north-east/south-west alignment. No superficial deposits are recorded in the main body of the site, although a band of alluvial clays, silts, sands and gravels runs along the north-eastern site boundary (BGS 2016).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The proposed development site has been the subject of a desk-based heritage assessment (CA 2012) and a geophysical survey (Stratascan 2012). The following text is summarised from these sources.

Prehistoric and Roman (pre-AD 410)

- 2.2 A cupmarked stone lies c. 200m north of the proposed development site's north-eastern end.
- 2.3 The cropmarks of a possible round (a small embanked settlement of late prehistoric or Roman date) have been recorded in the south-eastern part of the proposed developments site (outside of the present watching brief area). Additionally, a field in the southern part of the site (also outside of the present watching brief area) is recorded as 'Part of Ring Croft' on the 1841 Tithe Map, which might potentially hint at the former presence of a second round.

Early medieval and medieval (AD 410–1539)

- 2.4 The settlement of Tolgus (c. 50m east of the A3047) is first recorded in a document of 1280. The settlement of Chyandower (c. 50m south-east of Blowinghouse Roundabout) is first recorded in a document of 1522. It is likely that the proposed development site farmed part of the agricultural hinterland to these settlements in the medieval period.

- 2.5 Tin mining is recorded around Redruth from the medieval period onwards, but there is no known evidence for medieval tin mining at the proposed development site.

Post-medieval and modern (1539–present)

- 2.6 The field boundaries across the site are generally marked by Cornish Hedges, comprising hedges sandwiched between two parallel dry stone walls. These may be medieval in origin but they are considered more likely to be a result of post-medieval enclosure patterns. The Cornwall Historic Landscape Characterisation records the site as a mixture of 'Post-medieval Enclosed Land' and '20th-century settlement.'
- 2.7 The post-medieval and early modern periods saw a massive expansion in the copper and tin industries in Cornwall. The Cornwall and West Devon Mining Landscape World Heritage Site lies to the immediate east of the proposed development site and mining within the site itself was recorded from at least the mid 19th-century, as part of the 'sett' (area of mineral permissions) of the Great South Tolgus Tin and Mining Co. (formed 1847; closed 1871). A number of associated shafts and above-ground structures are recorded within the proposed development site on 19th-century cartographic sources (outside of the present watching brief area). Several of the mine buildings are still extant at the site, although they were modified extensively in the later 19th and/or 20th centuries for use as farm buildings.
- 2.8 In 1919–1927, Tolgus Mines Ltd operated at the site. A new shaft was excavated in the western area of the site (outside of the present watching brief area), at the spot now occupied by an industrial depot.

Geophysical survey

- 2.9 The geophysical survey recorded several linear and curved anomalies within the site (Fig. 2).

3. AIMS AND OBJECTIVES

- 3.1 As defined in the WSI (CA 2016), the objectives of the archaeological watching brief were to:
- record any evidence of past settlement or other land use prior to destruction by the proposed development;

- recover artefactual evidence to date any archaeological remains that may be identified;
- sample and analyse environmental remains to create a better understanding of past land use and economy; and
- archive and report on the results at a level appropriate to their significance.

4. METHODOLOGY

- 4.1 The fieldwork followed the methodology set out in the WSI (CA 2016). An archaeologist was present during intrusive groundworks, which comprised topsoil and subsoil stripping works in advance of the creation of a compound (Fig. 2).
- 4.2 Written, graphic and photographic records were compiled in accordance with CA *Technical Manual 1: Fieldwork Recording Manual*.
- 4.3 The watching brief archive will be deposited with the Royal Cornwall Museum. A digital archive will be prepared and deposited with the Archaeology Data Service (ADS). A summary of information from this project, as set out within Appendix B, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS

- 5.1 This section provides an overview of the watching brief results. Detailed summaries of the recorded contexts can be found in Appendix A. Figure 2 shows the area of monitored groundworks and the recorded archaeological features.
- 5.2 Natural geological substrate 1002 comprised light brown silty clay with bands of shillet and was revealed across the site at an average depth of 0.6m below present ground level. It was overlain by silty clay subsoil 1001 (averaging 0.2m in thickness), which was sealed in turn by modern topsoil 1000 (averaging 0.4m in thickness).

Undated (pre-modern)

- 5.3 The features discussed below were undated artefactually, but were cut into natural substrate 1002 and sealed by subsoil 1001, which suggests that they are at least medieval/early post-medieval in date (and potentially earlier).

- 5.4 Two intercutting ditches were recorded in the north-eastern part of the monitored area. The earliest in the sequence was south-east/north-west aligned ditch 1017/1034/1038, which was up to 0.65m wide and 0.1m deep. It was cut across by north-east/south-west aligned ditch 1013/1015/1032, which was up to 0.6m wide and 0.4m deep. Both of these ditches contained single silty clay fills. They corresponded to linear geophysical anomalies, although neither ditch extended for the full length of the anomalies.
- 5.5 North-west/south-east aligned ditch 1040/1042 lay at the north-eastern limit of the main monitored area. It corresponded to a geophysical anomaly and may have been the truncated continuation of ditch 1017/1034/1038. Ditch 1040/1042 was up to 0.68m wide and 0.14m deep, with a single silty clay fill.
- 5.6 Oval pit 1048 lay near the north-central limit of the monitored area. This pit was 1.98m long, 0.8m wide and 0.32m deep. It has been cut at its southern end by oval pit 1050, which was 1.06m long, 0.6m wide and 0.15m deep. Both of these pits contained single silty fills. They had not been detected by the geophysical survey.
- 5.7 North-east/south-west aligned ditch 1007/1009/1011 lay in the south-eastern corner of the monitored area. This ditch was 0.4m wide and 0.1m deep, with a single silty clay fill. This ditch had not been detected by the geophysical survey.
- 5.8 Towards the western limit of the main monitored area, three shallow ditch segments corresponded to a curved geophysical anomaly, presumably representing the truncated remnants of a single ditch. Ditch 1024 was 0.5m wide and 0.05m deep. Ditch 1026/1028/1030 was up to 0.95m wide and 0.15m deep. Ditch 1044/1046 was up to 0.95m wide and 0.22m deep. All three of these ditches contained single silty clay fills.
- 5.9 North/south aligned ditch terminus 1006 was exposed in the western part of the site. This ditch was 0.45m wide and 0.28m deep, with a single silty clay fill. It had not been detected by the geophysical survey.
- 5.10 North-east/south-west aligned ditch 1004 was exposed in the western part of the site. This ditch was 0.7m wide and 0.08m deep, with a single silty clay fill. This ditch had not been detected by the geophysical survey.

Post-medieval/modern

- 5.11 The following three features were undated artefactually, but were cut through subsoil 1001 and sealed by topsoil 1000, suggesting that they are post-medieval or later in date:
- 5.12 Pit/ditch terminus 1019 lay in the western part of the site. It was 1.2m wide and 1.04m deep, with a sequence of three silty clay fills. This feature had not been detected by the geophysical survey.
- 5.13 Two north-east/south-west aligned ditch termini (1054 and 1055; both unexcavated) were recorded at the northern limit of the monitored area. While ditch 1055 had not been detected by the geophysical survey, ditch 1054 corresponded to a geophysical anomaly.
- 5.14 North-east/south-west aligned ditches 1052 and 1053 (both unexcavated) ran parallel to each other in the centre of the monitored area, corresponding to a linear geophysical anomaly. Both of these ditches were cut through the subsoil and sealed by the topsoil; both contained modern pottery.

6. DISCUSSION

- 6.1 The archaeological watching brief recorded several ditches and two pits. The generally shallow nature of these features suggests that they have been plough-truncated in the late post-medieval/modern period.
- 6.2 Although undated artefactually, a small number of features was cut into the natural substrate and sealed by the subsoil, which might suggest that they are at least medieval/early post-medieval in date. Some of these earlier ditches match the alignments of the existing field system and are likely to represent former boundaries, although they are not shown on (and therefore presumably pre-date) the 1841 Tithe Map of Redruth.
- 6.3 The watching brief also recorded a small number of post-medieval/modern ditches, which are also likely to represent former boundaries.

- 6.4 There was a generally good correspondence between the watching brief results and the anomalies recorded by the previous geophysical survey (Stratascan 2012). The majority of the features recorded by the watching brief had been detected by the geophysical survey, although not every feature corresponded exactly to a geophysical anomaly, and vice versa.

7. CA PROJECT TEAM

Fieldwork was undertaken by Jerry Austin and Christina Tapply. This report was written by Jerry Austin. The report illustrations were prepared by Sam O'Leary. The project archive has been prepared for deposition by Hazel O'Neill. The project was managed for CA by Derek Evans.

8. REFERENCES

BGS (British Geological Survey) 2016 *Geology of Britain Viewer* <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>
Accessed 11 April 2016

CA (Cotswold Archaeology) 2016 *Land at Tolgus, Redruth, Cornwall Written Scheme of Investigation for a Programme of Archaeological Recording*

CA (Cotswold Archaeology) 2012 *Land at Tolgus Farm, Cornwall: Heritage Desk-Based Assessment* CA typescript report **12124**

Stratascan 2012 *Geophysical Survey Report: Tolgus Farm, Redruth, Cornwall*



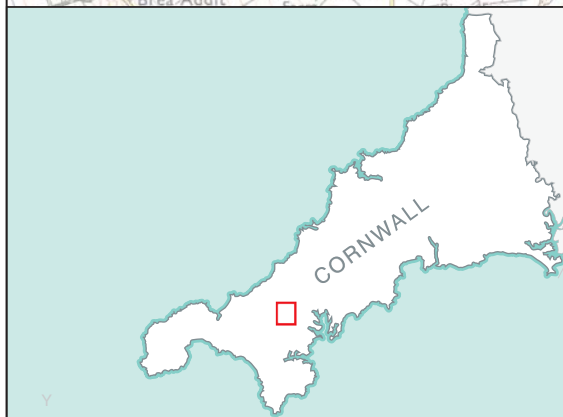
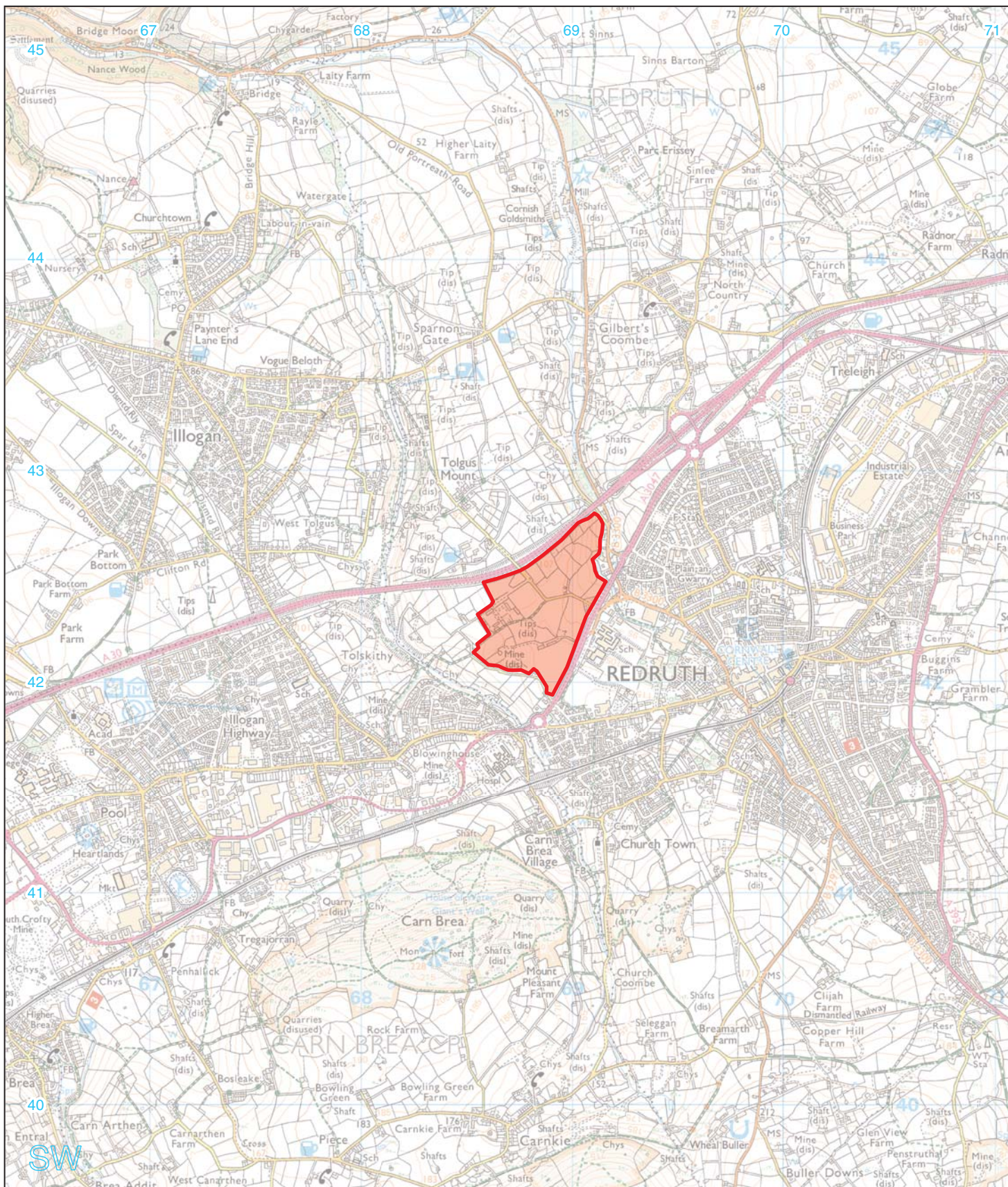
APPENDIX A: CONTEXT DESCRIPTIONS

Context No.	Type	Fill of	Context interpretation	Description	W (m)	D (m)
1000	Layer		topsoil	dark brown silty clay		0.4
1001	Layer		subsoil	mid brown silty clay		0.2
1002	Layer		natural subsoil	light brown silty clay with bands of shillet		
1003	Fill	1004	single fill, sedimentary	light brown silty clay	0.7	0.08
1004	Cut		ditch	NE/SW aligned	0.7	0.08
1005	Fill	1006	single fill, sedimentary	mid to light brown silty clay	0.45	0.28
1006	Cut		ditch terminus	N/S aligned	0.45	0.28
1007	Cut		ditch terminus	SW terminus of ditch	0.4	0.1
1008	Fill	1007	single fill, sedimentary	mid to dark brown silty clay	0.4	0.1
1009	Cut		ditch	ditch	0.37	0.06
1010	Fill	1009	single fill, sedimentary	mid to dark brown silty clay	0.37	0.06
1011	Cut		ditch	ditch	0.4	0.05
1012	Fill	1011	single fill, sedimentary	mid to dark brown silty clay	0.4	0.05
1013	Cut		ditch	ditch	0.32	0.1
1014	Fill	1013	single fill, sedimentary	mid reddish brown silty clay	0.32	0.1
1015	Cut		ditch	ditch, SW/NE aligned	0.6	0.4
1016	Fill	1015	single fill, sedimentary	mid reddish brown silty clay	0.6	0.4
1017	Cut		ditch	ditch, SE/NW aligned	0.65	0.09
1018	Fill	1017	single fill,	mid to light reddish brown	0.65	0.09
1019	Cut		pit/ditch terminus	SW/NE aligned, not bottomed	3.1	1.04
1020	Fill	1019	1 st fill, primary deposition	light greyish brown silty clay	0.2	0.72
1021	Fill	1019	2 nd fill, backfill	mid to dark greyish brown silty clay	1.1	0.65
1022	Fill	1019	3 rd fill, backfill	mid reddish brown silty clay	1.72	0.36
1023	Fill	1019	4 th fill, tertiary	mid to dark brown	1.6	0.18
1024	Cut		truncated ditch	SE/NW aligned	0.5	0.05
1025	Fill	1024	single fill, sedimentary	mid to light brown silty clay	0.5	0.05
1026	Cut		ditch	SE ditch terminus	0.95	0.15
1027	Fill	1026	single fill, sedimentary	mid brown silty clay	0.95	0.15
1028	Cut		ditch	ditch, SE/NW aligned	0.85	0.1
1029	Fill	1028	single fill, sedimentary	mid brown silty clay	0.85	0.1
1030	Cut		ditch	NW terminus of ditch	0.82	0.1
1031	Fill	1030	single fill, sedimentary	mid brown silty clay	0.82	0.1
1032	Cut		ditch	NE terminus of ditch	0.48	0.38
1033	Fill	1032	single fill, sedimentary	mid reddish brown silty clay	0.48	0.38
1034	Cut		ditch	ditch, SE/NW aligned	0.15	0.08

Context No.	Type	Fill of	Context interpretation	Description	W (m)	D (m)
1035	Fill	1034	single fill, sedimentary	mid to light reddish brown silty clay	0.15	0.08
1036	Cut		ditch	ditch, SW/NE aligned	0.25	0.18
1037	Fill	1036	single fill, sedimentary	mid reddish brown silty clay	0.25	0.18
1038	Cut		ditch	NW termination of ditch, NW/SE aligned	0.24	0.1
1039	Fill	1038	single fill, sedimentary	mid to light reddish brown silty clay	0.24	0.1
1040	Cut		ditch	ditch, SE/NW aligned	0.68	0.14
1041	Fill	1040	single fill, sedimentary	mid to light red brown silty clay	0.68	0.14
1042	Cut		ditch	SE truncation of ditch, SE/NW	0.3	0.05
1043	Fill	1042	single fill, sedimentary	mid to light red brown	0.3	0.05
1044	Cut		ditch	NE/SW aligned	0.95	0.22
1045	Fill	1044	single fill, sedimentary	mid to light brown silty clay	0.95	0.22
1046	Cut		ditch	SW terminus of ditch	0.72	0.1
1047	Fill	1046	single fill, sedimentary	mid to light brown silty clay	0.72	0.1
1048	Cut		pit	oval-shaped	0.8	0.32
1049	Fill	1048	single fill, backfill	mid to light yellow brown silty clay	0.8	0.32
1050	Cut		pit	oval-shaped	0.6	0.15
1051	Fill	1050	single fill, backfill	mid brown silty clay	0.6	0.15
1052	Cut		ditch	unexcavated		
1053	Cut		ditch	unexcavated		
1054	Cut		ditch	unexcavated		
1055	Cut		ditch	unexcavated		

APPENDIX B: OASIS REPORT FORM

PROJECT DETAILS		
Project name	Land at Tolgus, Redruth, Cornwall: archaeological watching brief	
Short description	<p>Cotswold Archaeology carried out an archaeological watching brief during groundworks associated with the creation of a compound on land at Tolgus, Redruth, Cornwall.</p> <p>The watching brief recorded several ditches and two pits. Although undated artefactually, a small number of features was cut into the natural substrate and sealed by the subsoil, which might suggest that they are at least medieval/early post-medieval in date. Some of these earlier ditches match the alignments of the existing field system and are likely to represent former boundaries. The watching brief also recorded a small number of post-medieval/modern ditches, which are also likely to represent former boundaries.</p>	
Project dates	28/09/16–11/10/16	
Project type	Archaeological watching brief	
Previous work	Desk-based assessment (CA 2012) Geophysical survey (Stratascan 2012)	
Future work	Unknown	
PROJECT LOCATION		
Site location	Tolgus, Redruth, Cornwall	
Study area (m ² /ha)	3,899m ²	
Site co-ordinates	SW 6885 4215	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project brief originator	N/A	
Project design (WSI) originator	Cotswold Archaeology	
Project Manager	Derek Evans	
Project Supervisor	Jeremy Austin and Christina Tapply	
MONUMENT TYPE		
None		
SIGNIFICANT FINDS		
None		
PROJECT ARCHIVES		
	Intended final location of archive	Content
Physical	N/A	N/A
Paper	Royal Cornwall Museum	Primary site recording forms
Digital	Archaeology Data Service (ADS)	Database, digital photos, scans of primary site recording forms
BIBLIOGRAPHY		
Cotswold Archaeology 2017 <i>Land at Tolgus, Redruth, Cornwall: Archaeological Watching Brief</i> CA typescript report 16593		



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PROJECT TITLE

Land at Tolgus, Redruth, Cornwall

FIGURE TITLE

Site location plan

0 1km

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FIGURE NO.

1



site boundary

observed groundworks

archaeological feature (undated)

post-medieval/modern

modern

field drain

treethrow

excavated intervention

section location

Stratascan 2016

KEY	
PROBABLE ARCHAEOLOGY	
	Positive anomaly / weak positive anomaly - probable cut feature of archaeological origin
	Negative anomaly / weak negative anomaly - probable bank or earthwork of archaeological origin
	Linear anomaly probably related to former field boundary
	Widely spaced curving parallel linear anomalies - probably related to ridge-and-furrow
POSSIBLE ARCHAEOLOGY	
	Positive anomaly / weak positive anomaly - possible cut feature of archaeological origin
	Negative anomaly / weak negative anomaly - possible bank or earthwork of archaeological origin
	Moderate strength discrete anomaly - possible thermoremanent feature
	Magnetic spike - probable ferrous object
OTHER ANOMALIES	
	Closely spaced parallel linear anomalies - probably related to agricultural activity such as ploughing
	Linear anomaly - probably related to pipe, cable or other modern service
	Linear anomaly - possibly related to land drain
	Magnetic disturbance associated with nearby metal object such as service or field boundary
	Strong magnetic debris - possible disturbed or made ground
	Scattered magnetic debris
	Area of amorphous magnetic variation - probable natural (e.g. geological or pedological) origin



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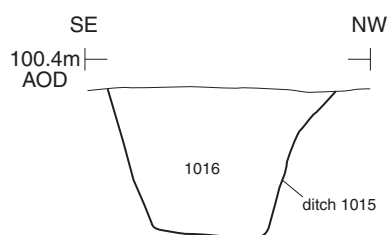
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PROJECT TITLE
Land at Tolgus, Redruth, Cornwall

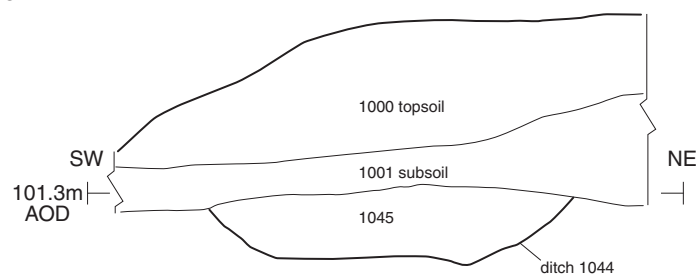
FIGURE TITLE
Trench location plan, showing
observed groundworks, geological
survey and archaeological features

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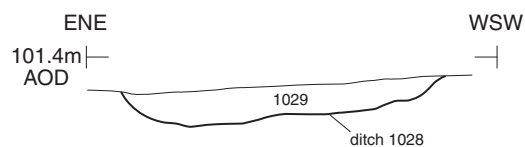
Section AA



Section BB



Section CC



Ditch 1044, looking north-west (scale 1m)



Ditch 1015, looking south-west (scale 0.4m)



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PROJECT TITLE

Land at Tolgus, Redruth, Cornwall

FIGURE TITLE

Sections and photographs

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FIGURE NO.

3

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