

LAND at TRETURFFE MANOR

Phase 2

LADOCK

CORNWALL

Results of a Geophysical Survey



South West Archaeology Ltd. Report no 200610



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Land at Trethurffe Manor Phase 2, Ladock, Cornwall

Results of a Geophysical Survey

By P. Bonvoisin
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Work undertaken by SWARCH for A&R Consultants (the Agent)
on behalf of DS Developments (the Client)

SUMMARY

South West Archaeology Ltd. was commissioned by A&R Consultants (the Agent) on behalf of DS Developments (the Client) to undertake a geophysical survey on land at Trethurffe Manor, Ladock, Cornwall. The work was carried out in advance of a planning submission for Phase 2 of a residential housing development.

The site is located on the eastern edge of the village of Ladock within medieval farmland. The surrounding landscape contains evidence of Prehistoric, medieval, and post-medieval settlement and farming activity. A geophysical survey carried out for Phase 1 identified two ring ditches and a series of linear anomalies (Bampton 2017a). The whole of Phase 1 was subject to a strip-map-sample exercise, and two Late Iron Age roundhouses and the fragment of a probable Middle Bronze Age sunken-featured roundhouse (Bampton 2017b) were investigated and recorded.

This survey covers the Phase 2 part of the site, but also a larger area to the east. It was not possible to survey the whole of the Phase 2 site as part of it is currently used as an access road and site compound for Phase 1. The results from the rest of the Phase 2 site are limited to modern features and a single probable interrupted field boundary. However, to the east of the Phase 2 site significant archaeological features were identified. With the caveat that the identified anomalies extended beyond the survey area, there appears to be an enclosed sub-circular late Prehistoric or Romano-British settlement ('round') 40-50m in diameter set within a possible sub-rectangular double-ditched enclosure c.100m across with rounded corners. Cornish rounds are relatively common, but the form and character of the larger sub-rectangular enclosure could suggest it is a Roman military site. Square 'rounds' are not uncommon, and if the two enclosures were contemporary, they may belong to a class of site known as a multiple enclosure fort. If the outer enclosure is Roman military then it would join a very small number of such sites in Cornwall.



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1.0 INTRODUCTION

LOCATION:	LAND AT TRETURFFE MANOR
PARISH:	LADOCK
COUNTY:	CORNWALL
NGR:	SW 89695 50824
PLANNING No.	PRE-PLANNING
SWARCH REF:	LTM20

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by A&R Consultants (the Agent) on behalf of DS Developments (the Client) to undertake a geophysical survey on land at Trethurffe Manor, Ladock, Cornwall as part of the planning submission for a proposed residential housing development. Phase 1 of the site was preceded by a desk-based assessment and walkover (Morris & Walls 2012), geophysical survey (Bampton 2017a) and open area excavation (Bampton 2017b). The current phase of works was carried out in accordance with ClfA guidelines.

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The Phase 2 site is located within the south-western quadrant of a large sub-rectangular field on the eastern edge of Ladock, to the rear of Trethurffe Villas and c.200m north-west of Trethurffe Manor (Figure 1). The site sits on a gentle south-west facing slope, ranging from c.59m AOD in the south to c.67m AOD at the northern extent of the site.

The soils of the area are the well-drained fine loamy soils over slate or slate rubble of the Denbigh 2 Association (SSEW 1983), overlying the siltstone and mudstone of the Grampound Formation. Superficial deposits of head (clays, silts, sands, and gravels) are recorded immediately to the south of the site (BGS 2020).

1.3 HISTORICAL BACKGROUND

A desk-based assessment and walkover survey has been carried out for the site by SWARCH (Morris & Walls 2012). What follows is a summary of the information given there. The manor of Trethurffe is first mentioned in c.1200 as *Trederveu*, although given that the place-name is Cornish and contains the element **tre-* meaning 'estate, farmstead', it is likely to be a settlement of pre-conquest origin (Padel 1985). The barton and manor of Trethurffe was the seat of a family of that name, one of whose co-heiresses (Elizabeth) married Edward de Courtenay of Landrake (1496-1555), a relative of the Earl of Devon (Lysons 1814). The de Courtenays continued to hold and seemingly reside at Trethurffe until the end of the 17th century, when William Courtenay (d.1683) left his estates to his brother-in-law, Humphrey Courtenay of Tremere, of the nearby parish of Lanivet. Trethurffe subsequently passed by marriage to Edmund Boyle (7th Earl of Cork) and William Poyntz, on the death of Kelland Courtenay, the grandson of Humphrey Courtney, in 1761 (Lysons 1814). The estates were subsequently divided and sold in the 1790s and 1800s (RIC HH/12/22). It is clear that by 1721 one John Andrew was resident at Trethurffe (CRO PL/21/10/3,4), and in 1730 he assigned his mortgaged property over to his son Dr. John Andrew, including parts of the barton of Trethurffe (CRO PL/21/14).

1.4 ARCHAEOLOGICAL BACKGROUND

The site lies within land recorded on the Cornwall and Scilly HLC as *Medieval Farmland – The agricultural heartland, with farming settlements documented before the 17th century AD and whose field patterns are morphologically distinct from the generally straight-sided fields of later*

enclosure. Either medieval or prehistoric origins. The Cornwall and Scilly HER records several heritage assets within 1km of the proposed development site; the key sites on that list are: the Grade I listed Church of St. Ladoca (HER No.22431); the 13th century Trethurffe Manor itself, which included a possible medieval chapel (22470 and 22368); a possible an Iron Age round to the south of the site (22406); and a Bronze Age axe find at Nankilly Farm to the east (20953). There is other documentary evidence for medieval and earlier sites in the surrounding area and records of post-medieval quarries and mining activity.

As noted above, a desk-based assessment and walkover survey (Morris & Walls 2012), geophysical survey (Bampton 2017a) and open area excavation (Bampton 2017b) have been carried out for the Phase 1 stage of the site. The geophysical survey and excavation identified and investigated two ring ditches that contained postholes and pits that almost certainly belonged to Late Iron Age structures, probably roundhouses. In the northern part of the site the remnants of a probable Middle Bronze Age sunken-featured roundhouse were identified, together with several clusters of pits of Prehistoric date. The site was crossed by a number of field ditches of probable medieval or post-medieval date. The archaeological potential of the site is self-evident.

1.5 METHODOLOGY

This work was undertaken in accordance with best practice. The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014).

LAND AT TRETURFFE MANOR PHASE 2, LADOCK, CORNWALL



FIGURE 1: SITE LOCATION (THE SITE IS INDICATED: PHASE 1 IN RED; PHASE 2 IN BLUE).

2.0 GRADIOMETER SURVEY

2.1 INTRODUCTION

An area of c.1.2ha was the subject of a magnetometry (gradiometer) survey. It must be stated that only the western part (0.6ha) of this area falls within Phase 2; the remaining part of the survey was undertaken in order to contextualise the results. The purpose of this survey was to identify and record magnetic anomalies within and around the proposed Phase 2 site. While identified anomalies may relate to archaeological deposits and structures, the dimensions of recorded anomalies may not correspond directly with any associated features. The following discussion attempts to clarify and characterise the identified anomalies. The survey was undertaken on the 2nd and 7th of June 2020 by P. Bonvoisin; the survey data was processed by P. Bonvoisin.

2.2 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: Geophysical Survey in Archaeological Field Evaluation (English Heritage 2008) and Standard and Guidance for Archaeological Geophysical Survey (CIfA 2014a).

The survey was carried out using a twin-sensor fluxgate gradiometer (Bartington Grad601). These machines are sensitive to depths of up to 1.50m. The survey parameters were: sample intervals of 0.25m, traverse intervals of 1m, a zigzag traverse pattern, traverse orientation was circumstantial, grid squares of 30×30m. The gradiometer was adjusted ('zeroed') every 0.5-1ha. The survey grid was tied into the Ordnance Survey National Grid. The data was downloaded onto Grad601 Version 3.16 and processed using TerraSurveyor Version 3.0.25.0. The primary data plots and analytical tools used in this analysis were Shade and Metadata. The details of the data processing are as follows:

Processes: Clip +/- 3SD; DeStripe all traverses, median. DeStagger of particular grids.

Area Details: 1.1921ha surveyed; Max. 109.53nT, Min. -159.88nT; Standard Deviation 10.71, mean 0.39nT, median 0.00nT.

2.3 SITE INSPECTION

The Phase 2 site consists of the south-western quadrant of a single large sub-rectangular field. The north-western quadrant of the field (Phase 1) has now been developed for housing, and the northern part of the Phase 2 site is currently occupied by the site compound. This is fenced off with HERAS fencing panels. An access road links the compound and Phase 1 site with the parish road that runs along the southern side of the field. The road itself is c.8m wide, but spoil from its excavation is piled up to either side and building materials have been stored here, meaning a strip c.25-30m wide could not be surveyed.

Excluding the site compound and road, the rest of the field is laid to pasture, and some tractor wheel ruts were observed across the site. The external field boundaries consist of stone-faced Cornish hedgebanks topped with hedge shrubs; the eastern boundary of the field is a straight mortared stone wall. The southern boundary contains some trees. No clear earthworks were observed. Photographs of the site can be found below and in Appendix 1.



FIGURE 2: VIEW ACROSS THE SOUTHERN PART OF THE PHASE 2 SITE SHOWING THE TRACK; VIEWED FROM THE EAST.



FIGURE 3: VIEW ACROSS THE NORTHERN PART OF THE PHASE 2 SITE; VIEWED FROM THE SOUTH-EAST.

2.4 RESULTS

Table 1 with the accompanying Figures 4 and 5 show the analyses and interpretation of the geophysical survey data. Additional graphic images of the survey data and numbered grid locations can be found in Appendix 2. Note that the graphics and interpretation include the south-east quadrant of the field, which lies outside the Phase 2 redline boundary, for context.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

Anomaly group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Very strong to moderate positive, probable/possible	Ovoid	Pits or cut features	Discrete cut features of a similar form but varying strength of response. Responses vary between c.+10nT to +65nT.
2	Strong to moderate positive, probable	Ovoid	Pits or cut features	Discrete cut features, with a less clear form than anomaly group 1. Possibly associated with anomaly group 3. Responses are <+30nT.
3	Strong positive, probable	Bent linear	Boundary ditch	Indicative of a ditch or boundary, possible enclosure surrounding anomaly group 8, likely associated with anomaly group 4. Responses of c.+8.3nT to +31.8nT.
4	Strong positive, probable	Linear	Ditch	Indicative of a ditch, likely associated with anomaly group 3. Responses of c.+9.9nT to +32.3nT.
5	Moderate positive, probable	Bent Linear	Ditch	Indicative of a ditch or cut feature, possibly associated with anomaly group 8, appears to be cut by anomaly group 7. Responses of c.+3.2nT to +7.8nT.
6	Strong positive, probable	Fragmented Linear	Possible ditch	Fragmented response of a possible ditch or cut feature, likely associated with anomaly group 7. Possibly continues on from ditch visible in the phase 1 survey. Responses of c.+10.5nT to +29.1nT.
7	Strong positive, probable	Fragmented Linear	Possible ditch	Fragmented response of a possible ditch or cut feature, likely associated with anomaly group 6. Possibly continues on from ditch visible in the phase 1 survey. Responses of c.+8.0nT to +33.1nT.
8	Strong positive to high moderate negative, probable	Curvilinear	Ditch or enclosure	Indicative of a ditch with possible bank, possible remains of a large structure. May be enclosed by anomaly group 3. Possibly associated with settlement to the immediate north-west. Responses of c.-24.1nT to +48.1nT.
9	Moderate positive, possible	Fragmented Linear	Possible disturbed ground	Indicative of discrete cut features or disturbed ground, runs parallel to features visible in phase 1 but situated within an area of disturbed ground. Responses of <+20nT.
10	Moderate to weak, possible	Amorphous area	Cut features	Indicative of cut features, may represent further pits but has an unclear form. Responses of <+15nT.
11	High moderate positive, possible	Fragmented linear/linears	Tracks/ditches	Indicative of cut features, follows similar orientation as ruts visible during the site visit. Responses of c.+8.6nT to +22.3nT.
12	Moderate positive, possible	Linears	Tracks/ditches	Indicative of cut features, follows similar orientation as ruts visible during the site visit. Responses of c.+8.6nT to +19.4nT.
13	Moderate positive, probable	Fragmented linear	Tracks/ditches	Indicative of cut features, follows similar orientation as ruts visible during the site visit. Responses of c.+7.2nT to +17.5nT.
14	Moderate to weak negative, possible	Parallel linears	Possible disturbed ground	Likely corresponds to disturbed ground adjacent to the trackway running north-south through the site. Responses of c.-10.6nT to -0.6nT.



FIGURE 4: SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING. PHASE 1 AND PHASE 2 OF THE SITE ARE INDICATED.

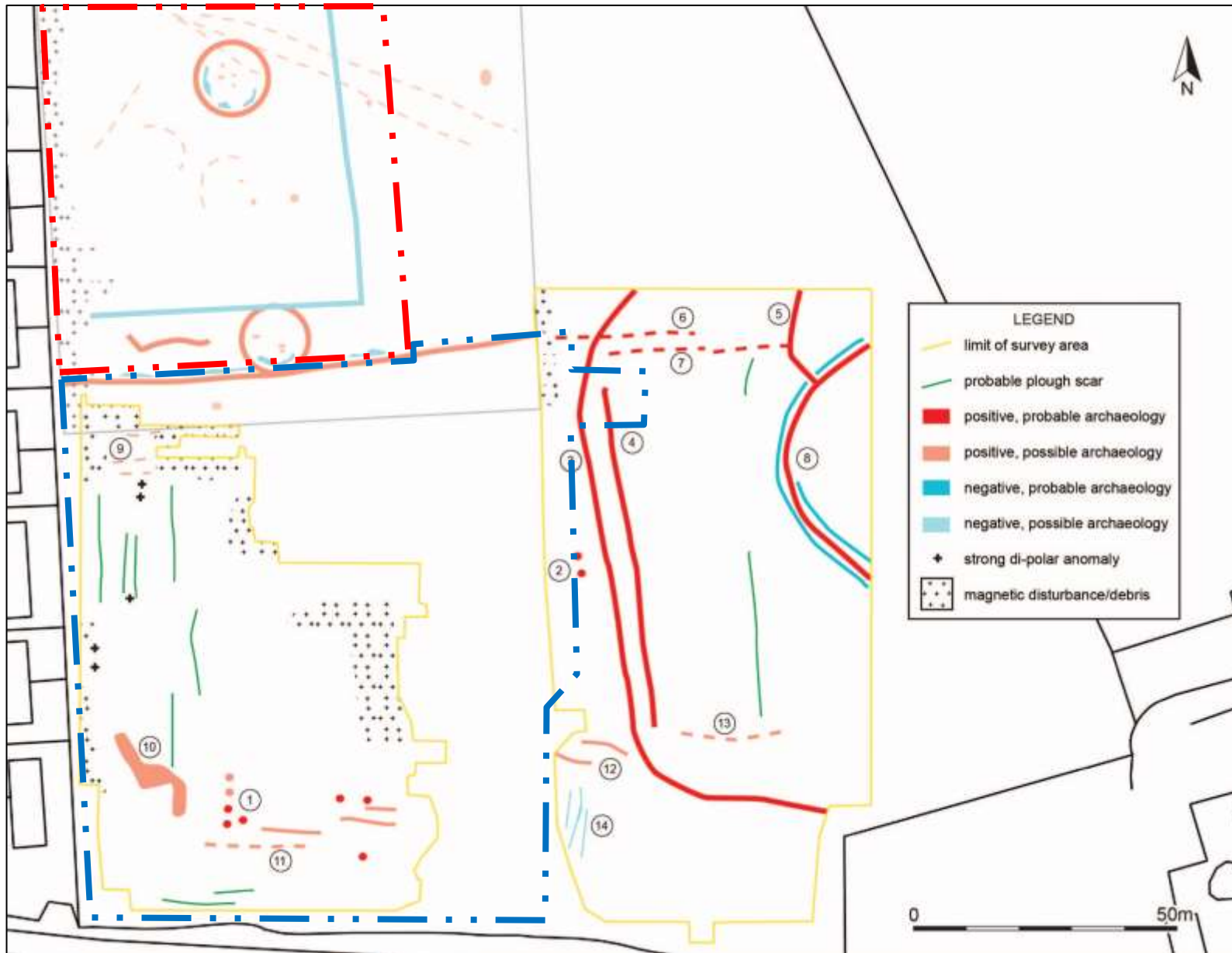


FIGURE 5: INTERPRETATION OF GRADIOMETER SURVEY DATA. PHASE 1 AND PHASE 2 OF THE SITE ARE INDICATED.

2.5 DISCUSSION

The survey identified 14 groups of anomalies. These were all undated linear and ovoid anomalies, with a clear enclosure with possible internal features beyond the edge of the Phase 2 site to the east. None of the identified anomalies correspond to features on the cartographic record.

Groups 1 (+10nT to +65nT) and 2 (<30nT) are positive ovoid anomalies indicative of pits or similar discrete cut features; anomaly group 1 presents as a clearer form. The higher readings may indicate metallic deposits, though the overall response of the site is high, and it may be due to near-surface geology.

Groups 3 (+8.3nT to +31.8nT) and 4 (+9.9nT to +32.3nT) are strong parallel positive linears (ditches) and likely to form part of the same feature (i.e. a double-ditched boundary). They are indicative of boundary or enclosure ditches and, given their position relative to anomaly group 8, are likely to be contemporary. On balance, it is probable they form part of an enclosed settlement of late Prehistoric or Romano-British date (i.e. a 'square round'), but the regular narrow double ditches *appear* to have rounded corners indicative of a Roman military site. If so, this would be highly significant as proven Roman military sites are exceedingly rare in Cornwall (just Restormel, Nanstallon and Calstock so far) and this would appear to be an atypical location based on current knowledge. If it is a Roman Fort, it is also curious that, in contrast to Restormel, there is little sign of internal features (Nicholas & Hartgroves 2018). Note that, for the most part, these anomalies lie just to the east of the Phase 2 site.

Group 5 (+3.2nT to +7.8nT) is a positive curved linear (ditch), with a lower response than many of the other anomalies within the survey area. It abuts anomaly group 8 and may be related; the relationship with anomaly group 7 is unclear. This anomaly lies to the east of the Phase 2 site.

Groups 6 (+10.5nT to 29.1nT) and 7 (+8.0nT to +33.1nT) are fragmented positive linears (ditches), that have an unclear corresponding negative response. The orientation of these anomalies would indicate they represent a continuation of a ditch identified running along the southern edge of the Phase 1 site.

Group 8 (-24.1nT to +48.1nT) forms part of a strongly curving linear or subcircular feature that extends beyond the edge of the survey area to the east; at its largest visible extent it would have a diameter of 40-50m. There appear to be features within the anomaly (not distinguished separately here). The size and shape of this anomaly strongly suggests it is the ditch of an enclosed settlement of late Prehistoric or Romano-British date (a 'round'). These are relatively common, and in parts of Cornwall there may be one or more per km². It appears to be located more-or-less centrally to a space defined by anomaly groups 3 and 4. If both are contemporary, it is possible that it forms a variant enclosure known as a multiple enclosure fort. If anomaly group 3 and 4 are Roman military, then the relationship is more complex and more significant. Note that this anomaly lies to the east of the Phase 2 site.

Group 9 (<20nT) are positive cut features, possibly demonstrative of recently disturbed ground.

Group 10 (<15nT) is an amorphous positive area, possible representing further pit/cut features although the form and response are less clear.

Groups 11 (+8.6 to +22.3nT), 12 (+8.6nT to 19.4nT) and 13 (+7.2nT to +17.5nT) are moderate positive partially fragmented linears (ditches), indicative of cut features. Possibly corresponding with the ruts/disturbed topsoil noted during the site visit but may belong to a single linear feature crossing the whole site from east to west.

Group 14 (-10.6nT to -0.7nT) are moderate negative linears that correspond to disturbed ground.

Numerous thin parallel linears appear to cross the site, more obviously to the west. These are likely to have arisen from recent agricultural activity such as ploughing. Magnetic disturbance and di-polar anomalies also appear across the site and can be attributed to recent metallic debris.

3.0 CONCLUSION

The site is located on the eastern edge of the village of Ladock within medieval farmland. The surrounding landscape contains evidence of Prehistoric, medieval, and post-medieval settlement and farming activity. A geophysical survey carried out for Phase 1 identified two ring ditches and a series of linear anomalies (Bampton 2017a). The whole of Phase 1 was subject to a strip-map-sample exercise, and two Late Iron Age roundhouses and the fragment of a probable Middle Bronze Age sunken-featured roundhouse were excavated (Bampton 2017b).

This survey covers the Phase 2 part of the site, but also a larger area to the east. It was not possible to survey the whole of the Phase 2 site as part of it is currently used as an access road and site compound for Phase 1. The results from the rest of the Phase 2 site are limited to modern features and a single probable interrupted field boundary. However, to the east of the Phase 2 site significant archaeological features were identified. With the caveat that the identified anomalies extended beyond the survey area, there appears to be an enclosed sub-circular late Prehistoric or Romano-British settlement ('round') 40-50m in diameter set within a possible sub-rectangular double-ditched enclosure c.100m across with rounded corners. Cornish rounds are relatively common, but the form and character of the larger sub-rectangular enclosure could suggest it is a Roman military site. Square 'rounds' are not uncommon, and if the two enclosures were contemporary, they may belong to a class of site known as a multiple enclosure fort. If the outer enclosure is Roman military then it would join a very small number of such sites in Cornwall.

4.0 BIBLIOGRAPHY

Published Sources:

- Chartered Institute of Field Archaeologists** 2014: *Standard and Guidance for Archaeological Geophysical Survey*.
- English Heritage** 2008: *Geophysical Survey in Archaeological Field Evaluation*.
- Lysons, D. & Lysons, S.** 1814: *Magna Britannia, volume 3: Cornwall*. London.
- Nicholas, P. & Hartgroves, S.** 2018: 'The Roman fort at Restormel: geophysical surveys 2007-2009', *Cornish Archaeology* 57, 169-188.
- Padel, O.J.** 1985: *Cornish Place-Name Elements*. Nottingham.
- Schmidt, A.** 2002: *Geophysical Data in Archaeology: A Guide to Good Practice*. ADS series of Guides to Good Practice. Oxbow Books, Oxford.
- Soil Survey of England and Wales** 1983: *Legend for the 1:250,000 Soil Map of England and Wales (a brief explanation of the constituent soil associations)*.

Websites:

- Archaeological Data Service (ADS)** 2017: *Archsearch & Grey Literature*
<http://archaeologydataservice.ac.uk>
- British Geological Survey** 2019: *Geology of Britain Viewer*.
http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html
- Cornwall Council Interactive Map** 2019: *HER and HLC*
<https://map.cornwall.gov.uk>

Unpublished Sources

- Bampton, J.** 2017a: *Land at Trethurffe, Ladock, Cornwall: Results of a Geophysical Survey*. SWARCH Report No. 170311.
- Bampton, J.** 2017b: *Land at Trethurffe, Ladock, Cornwall: Results of an Archaeological Excavation*. SWARCH Report No.171111.
- Morris, B. & Walls, S.** 2012: *Land at Trethurffe, Ladock, Truro, Cornwall: Results of a Desk-Based Assessment and Walkover Survey*. SWARCH report No.120912.

Cornwall Record Office:

Records of the Trehane Estate, **PL/21/14**

Cornish Studies Library:

Ladock Tithe Map, 1839
Ladock Tithe Apportionment, 1839
Ordnance Survey 1st Series Edition, 1875-1901
Ordnance Survey 2nd Series Edition, 1906-1908

Royal Institution of Cornwall

Manor of Trethurff (Ladock) Sale Particulars, **HH/12/22**

APPENDIX 1: SUPPORTING PHOTOGRAPHS: SITE INSPECTION



FIGURE 6: THE NORTH-WEST CORNER OF THE SITE; VIEWED FROM THE SOUTH-EAST.



FIGURE 7: VIEW ACROSS THE EASTERN HALF OF THE FIELD, BEYOND THE PHASE 2 SITE; VIEWED FROM THE SOUTH.



FIGURE 8: VIEW ACROSS THE EASTERN PART OF THE SITE, BEYOND THE PHASE 2 SITE; VIEWED FROM THE WEST.

APPENDIX 2: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY



FIGURE 9: SITE GRID LOCATION AND NUMBERING.

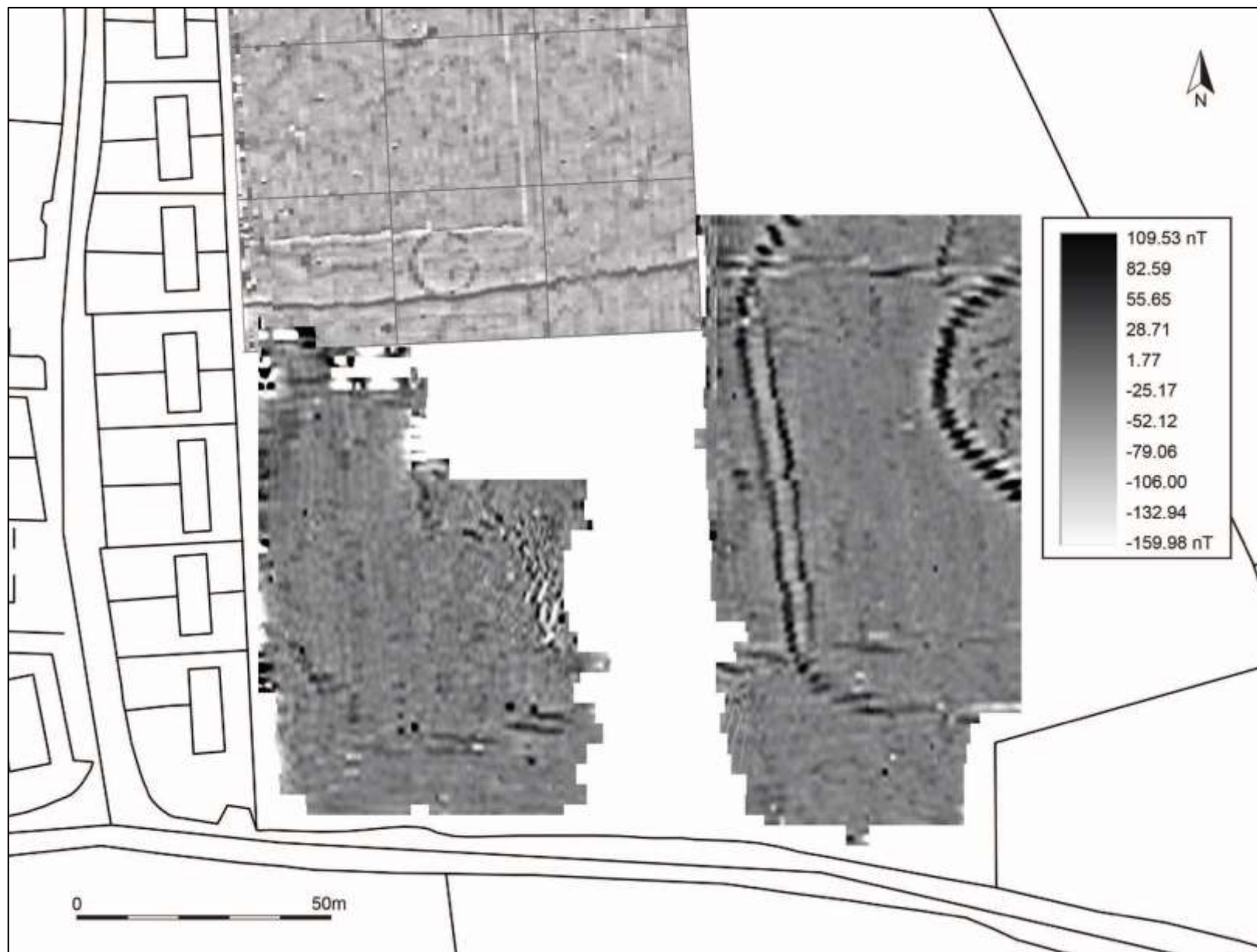


FIGURE 10: SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED; GRADIATED SHADING.

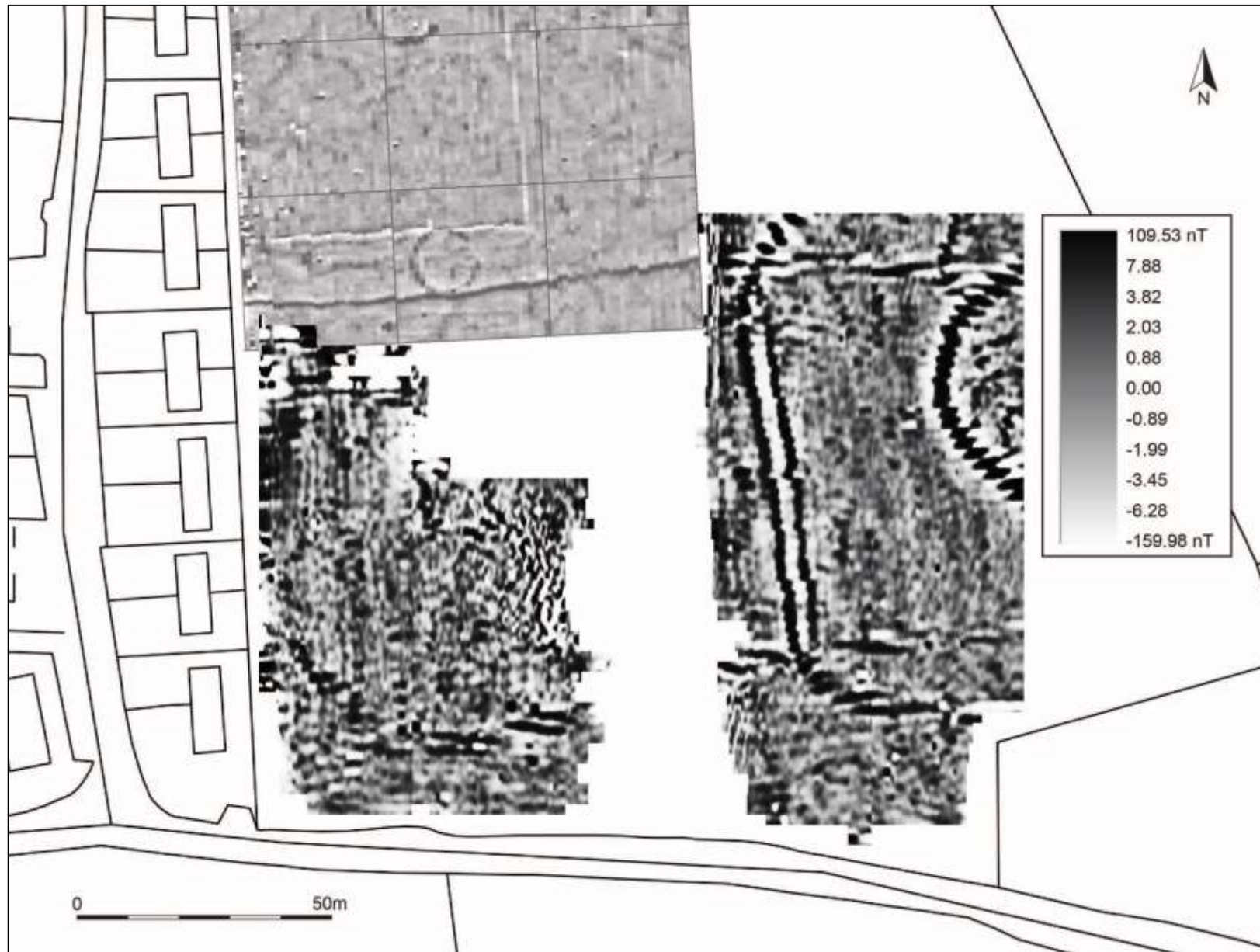


FIGURE 11: SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED; GRADIATED SHADING.

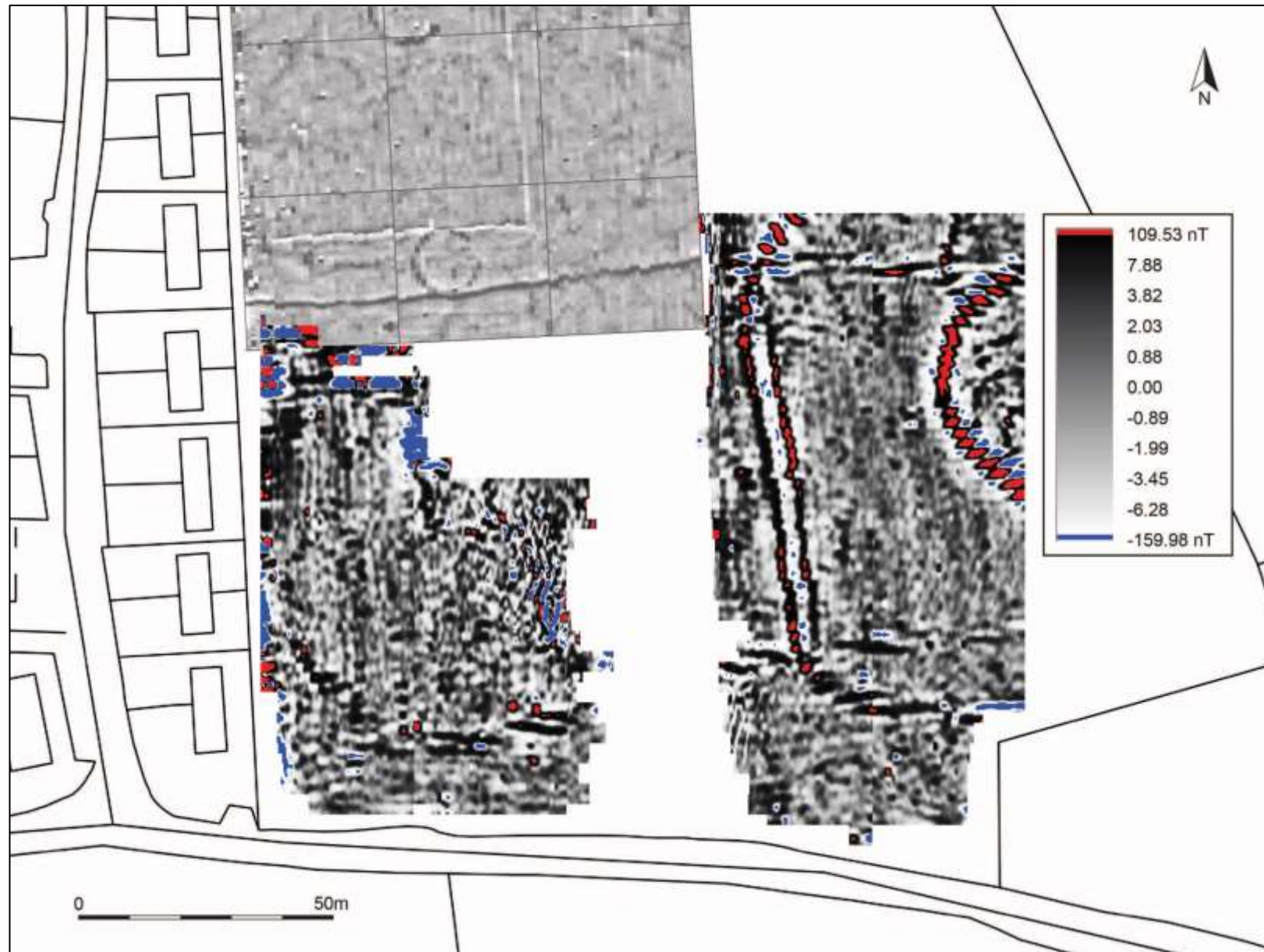


FIGURE 12: RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED; GRADIATED SHADING.

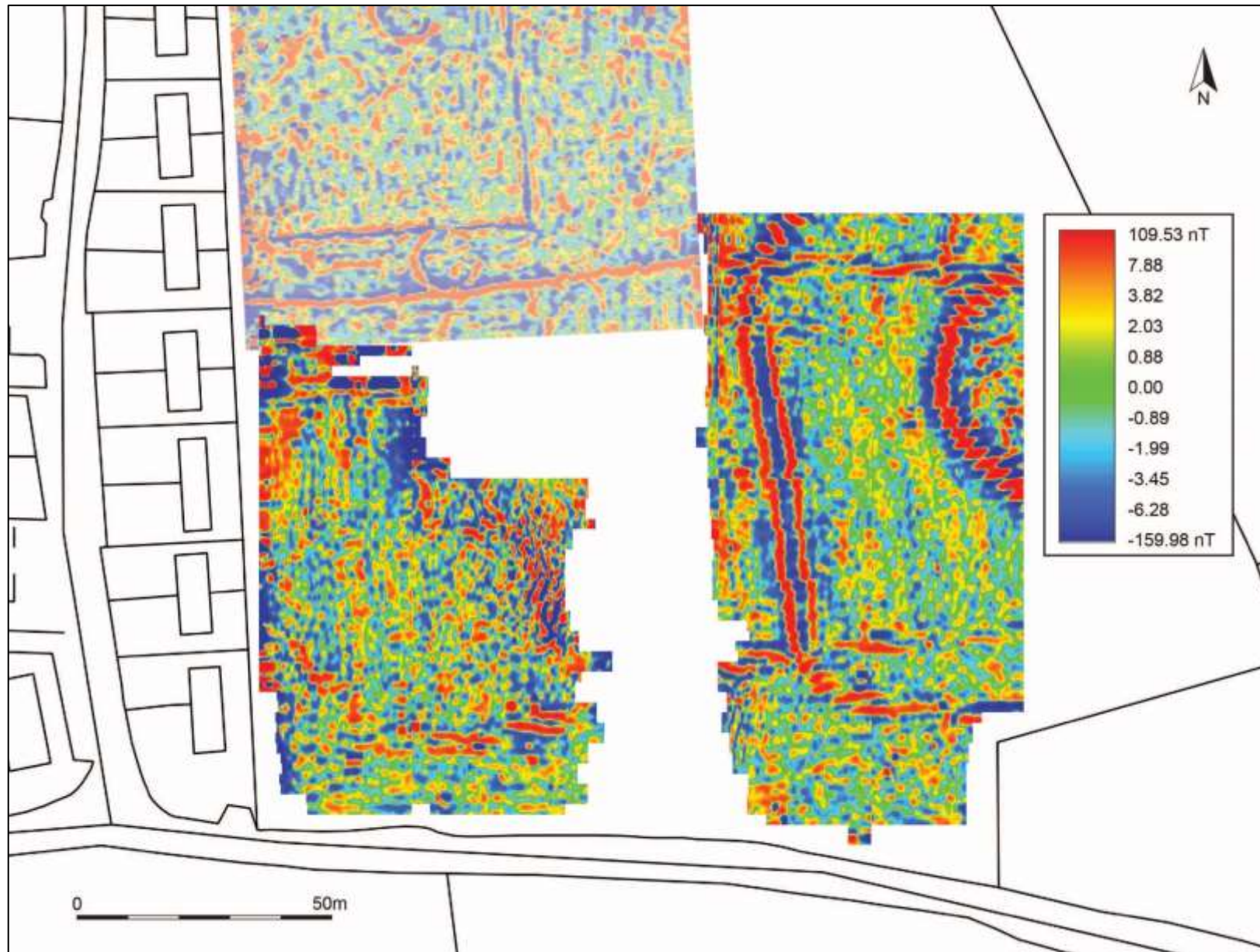


FIGURE 13: RED-BLUE-GREEN(2) SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED; GRADIATED SHADING.

APPENDIX 3: CARTOGRAPHIC SOURCES



FIGURE 14: EXTRACT FROM THE 1811 ORDNANCE SURVEY SURVEYOR'S DRAFT MAP (BL); THE LOCATION OF THE SITE IS INDICATED.



FIGURE 15: EXTRACT FROM THE 1843 LADOCK TITHE MAP (CRO); THE APPROXIMATE LOCATION OF THE SITE IS INDICATED.

LAND AT TRETURFFE MANOR PHASE 2, LADOCK, CORNWALL

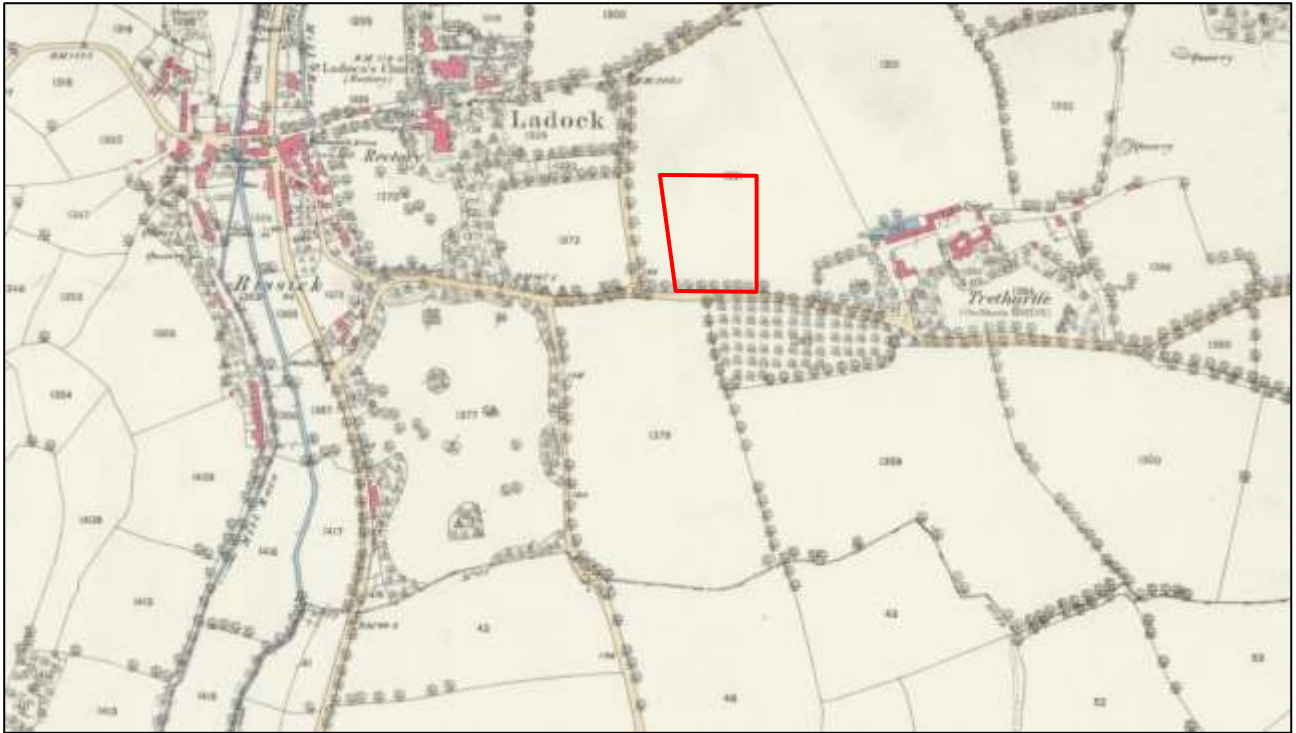


FIGURE 16: EXTRACT FROM THE 1880 ORDNANCE SURVEY 1ST EDITION 25 INCH SERIES MAP (SURVEYED 1879) (CRO); THE LOCATION OF THE SITE IS INDICATED.



FIGURE 17: EXTRACT FROM THE 1907 ORDNANCE SURVEY 2ND EDITION 25 INCH SERIES MAP (SURVEYED 1906) (CRO); THE LOCATION OF THE SITE IS INDICATED.



FIGURE 18: TOPOGRAPHICAL IMAGE BASED ON LIDAR DATA. THIS IS A QGIS-GENERATED IMAGE (TERRAIN ANALYSIS>SLOPE) OF TELLUS LIDAR SURVEY DATA [CONTAINS FREELY AVAILABLE LIDAR DATA SUPPLIED BY NATURAL ENVIRONMENT RESEARCH COUNCIL (CENTRE FOR ECOLOGY & HYDROLOGY; BRITISH ANTARCTIC SURVEY; BRITISH GEOLOGICAL SURVEY), ©NERC 2020.



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