

LAND OFF HAMILTON CLOSE

KENWYN

TRURO

CORNWALL

Results of a Geophysical Survey and Archaeological Evaluation



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LAND OFF HAMILTON CLOSE, KENWYN, TRURO, CORNWALL RESULTS OF A GEOPHYSICAL SURVEY AND ARCHAEOLOGICAL EVALUATION

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SUMMARY

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) on land off Hamilton Close, Kenwyn, Truro, Cornwall. The site is located at the north-western edge of the settlement and south of New Mills Lane, consisting of two sub-rectangular fields. These lie within a later medieval and post-medieval agricultural field system, overlying a Prehistoric funerary and settlement landscape. Although Kenwyn was first documented in the 13th century, much of the settlement is 19th or 20th century in date and most of the houses immediately adjacent to the site were built in the last 20 years.

The geophysical survey identified seven undated groups of anomalies, including: former boundaries within the current field system; a curvilinear ditch; the eastern side of what appears to be a sub-rectangular; and a series of pits/tree-throws, many of which are likely to reflect modern disturbance. Two lengths of modern services were also identified. The straighter north-to-south orientated boundaries are likely to reflect earlier phases of the existing medieval to post-medieval field system. However, given the proximity of Prehistoric settlement sites within this landscape, it is possible that these could form part of a Prehistoric field system and a round/later rectangular enclosure.

The evaluation confirmed the presence of only a sparse number of archaeological features across the site. It identified that the enclosure in the south field is of Iron Age to Romano-British date. Whilst it remains unclear whether the remaining features were associated with the enclosure, as only a tiny scrap of (residual) Bronze Age pottery was recovered from their fill. The finds recovered from the topsoil demonstrate continued use of the site through the medieval and post-medieval periods; and it is likely that some or all of these other features represent field boundaries of unknown but presumed prehistoric date.

The archaeological potential of the site is restricted, the evaluation confirming the results of the geophysical survey, identifying the edge of a prehistoric enclosure with undated field system. Further intervention here is unlikely to be particularly rewarding, any settlement features within the site likely to have been heavily truncated; and the focus of the enclosure settlement likely to be in the fields to the west. A limited Strip, map, and sample over the footprint of the enclosure ditch should however be undertaken as a planning condition of any proposed development.



June 2020

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1.0 INTRODUCTION

LOCATION:	HAMILTON CLOSE, KENWYN
PARISH:	TRURO
COUNTY:	CORNWALL
NGR:	SW 81580 45655
OASIS NUMBER:	SOUTHWES1-392872
SWARCH REF.	KHC20A

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by CAD Architects (The Agent) to undertake a geophysical survey and evaluation trenching on land off Hamilton Close, Kenwyn, Truro, Cornwall, as part of the pre-application works on the site. This work was undertaken in accordance with best practice and ClfA guidance.

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The historic village of Kenwyn, now a suburb of the city of Truro, is located c.1km north of the city centre. The site is located at the north-western edge of the settlement, south of New Mills Lane, and consisting of two sub-rectangular fields on a south-facing slope at a height of between c.60-80m AOD (Figure 1). The site sits at the boundary of the well-drained fine loamy and fine silty soils over rock of the Denbigh 1 Association and the well-drained fine loamy soils over slate or slate rubble of the Denbigh 2 Association (SSEW 1983). These overlie the mudstones and sandstones of the Porthtowan Formation (BGS 2020).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

The site is situated on the western edge of settlement at Kenwyn, now a suburb of Truro. Historically, the site falls within the parish of Kenwyn in the deanery and west division of the hundred of Powder (Lysons 1814), although it now lies within the civil parish of Truro. Kenwyn (from the Cornish meaning *white rock* – Padel 1985) is first documented in the 13th century, and the church was a chapelry to Kea Church; the current church was constructed on the site of an earlier church in the 14th century.

The historic landscape in this area is characterised by the Cornwall Historic Landscape Characterisation (HLC) as medieval farmland (forming part of *Anciently Enclosed Land*), defined as *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.*

A moderate amount of archaeological investigations have taken place in the immediate area; predominantly comprising the assessment and survey of the wider landscape or individual buildings within the Truro Conservation Area. Those archaeological investigations that have taken place include: archaeological excavations at Beechwood Park (ECO3663), Lambessow (ECO1334); geophysical survey and archaeological monitoring associated with the Truro Park & Ride scheme (ECO3008; ECO3015); and geophysical survey of land at Pencoose (ECO3926), and at Polwhele Castle (ECO1767; ECO2077). Most notably, the geophysical survey at Pencoose (c.300m to the north of the proposal site) identified a probable Iron Age/Romano-British enclosed settlement and associated features.

Although there are no known heritage assets on the site, the Cornwall Historic Environment Record (HER) identifies the site as lying within a landscape with Prehistoric origins, barrows having been identified at Treliske (MCO3676-3682); and possible settlement at Featherbeds (MCO7944), Kenwyn (MCO8095), Newmill (MCO8285), Pencoose (MCO8311), Penventinnie (MCO56939), Stencoose Farm (MCO62158), Treliske (MCO8667), and Truro (MCO42, MCO86, MCO7806). Many of the farms and settlements in the area are at least medieval in origin: Truro Castle being constructed shortly after the Norman Conquest (MCO147); Carvedras being first recorded in 1250 (MCO13871), Truro Vein in 1337 (MCO18150), Newmills in 1366 (MCO15904), and Coosebean c.1400 (MCO14107). These were all set within an agricultural landscape of the medieval open- and strip-field system (MCO20995), as indicated by the curving boundaries of many of the surviving fields. However, it was the post-medieval period which saw the greatest development of the landscape, Truro expanding significantly following the construction of the railway (MCO62452), although the Kenwyn Road and Truro Conservation Areas (CA) with their numerous Listed Buildings largely pre-date this.

The 1809 Ordnance Survey surveyor's draft map (see Appendix 2 for the historic maps) shows the proposal site to the east of New Mills and indicates it lay within a largely undeveloped area of large open fields despite its near-roadside location. The 1840 Kenwyn tithe map provides much greater detail and many of the depicted field boundaries survive today. The site is shown as two plots (no.494 and no.498) to the north and south of a cottage; the accompanying apportionment indicates was owned by one Joseph Edwards and occupied by James Rooke. The fields were named *South Western Field* and *North Western Field*, the prosaic names indicating their position within the smallholding.

The Ordnance Survey (OS) 1st edition map of 1880 shows relative continuity with the tithe map, though plot no.498 has been sub-divided, a narrow parcel of land now split from the larger field; whilst a small out-building is shown in the north-west corner of plot no.494.

The 1907 2nd edition OS map depicts a landscape very similar to that of 1880. Kenwyn and Truro are shown to have expanded, but the proposal site and adjacent fields remain unchanged. This pattern continues into the middle of the 20th century, when buildings first begin to encroach onto the land to the west of Kenwyn Hill. However, commercial aerial photography indicates that it is not until c.2000 that new houses are constructed in plot no.495, and 2015-2019 on plot no.497; the stable building within plot no.498 also being constructed at this time. These images also show that plot no.494 was sub-divided into three paddocks by the beginning of the 21st century, reduced to two by 2005, and back to a single field by 2019.

1.4 METHODOLOGY

This work was undertaken in accordance with a best practice and ClfA guidance. Any desk-based assessment aspect of this report follows the guidance as outlined in: *Standard and Guidance for Archaeological Desk-Based Assessment* (ClfA 2014a) and *Understanding Place: historic area assessments in a planning and development context* (English Heritage 2012). The geophysical (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* (ClfA 2014b). The archaeological evaluation was conducted in accordance with a Written Scheme of Investigation (WSI) (Boyd 2020) drawn up in consultation with the Local Planning Authority and in line with ClfA guidelines (2014) and best practice. Three trenches, each 1.70m wide and totalling c.60m, were laid out by tape and opened by tracked mechanical excavator to the depth of weathered natural using a toothless grading bucket under archaeological supervision. Exposed archaeological deposits were excavated by hand and in accordance with the WSI and ClfA guidelines.

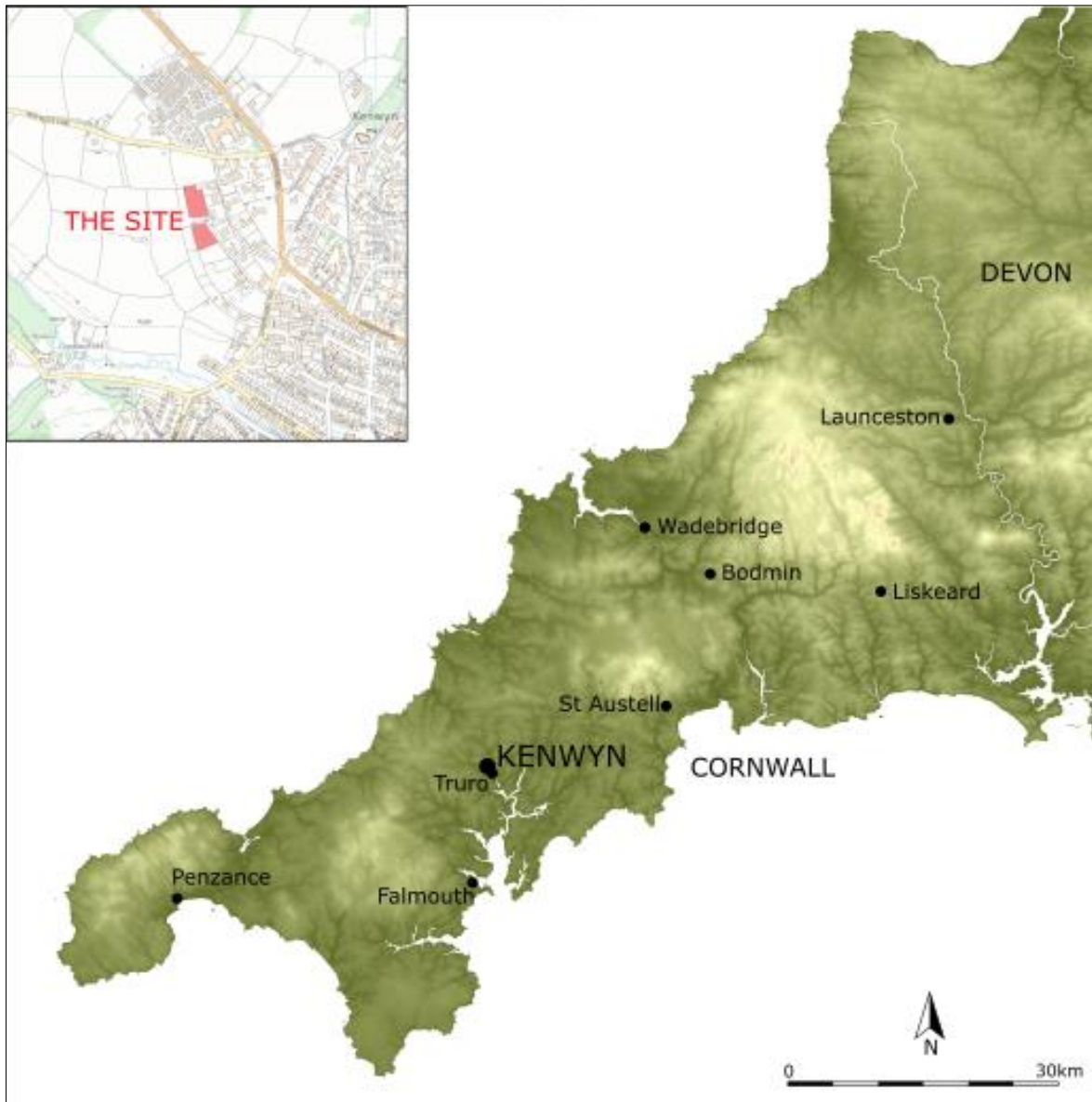


FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

2.0 GEOPHYSICAL SURVEY

2.1 INTRODUCTION

An area of c.0.6ha was the subject of a magnetometry (gradiometer) survey. The purpose of this survey was to identify and record magnetic anomalies within the proposed 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 9th of April 2020 by J. Bampton; the survey data was processed by J. Bampton.

2.2 SITE INSPECTION

The site was located across two fields; the north paddock and the south paddock described in relation to Hangman's Cottage. Both fields were under short, ankle length, tufty grass and had clearly been used until recently as livestock paddocks (horses). Both fields had been subject to ground investigation; some of the geotechnical/percolation pits were visible, but others had weathered in and grown over. However, it is likely that these will account for a number of the discrete anomalies identified in the survey results. Both fields slope gently to steeply (mostly moderately) from north to south.

The north paddock is bounded to the east and west by relatively low stone-faced (Cornish) hedgebanks with a combination of post-and-wire or wooden fences. A stone wall forms the northern boundary, with a modern fence line to the south. These were lined with typical local flora and trees. A large oak tree was present to the south-east corner of the field, a depression running to the boundary with Hangman's Cottage. Waterpipes were noted at the entrance in the south-eastern corner of this field. The northern end of the field has been subject to multiple episodes of terracing to accommodate agricultural buildings/stables and materials associated with adjacent modern building developments.

The south paddock was bounded to the north by a stone-lined terrace/track; to the west and south by a stone-faced (Cornish) hedgebank with post-and-wire fencing; and a wooden fence with wire along its eastern boundary. These were lined with typical flora and trees; the western boundary was particularly scrubby. There was some made ground at the northern end of the field, and a shed built into the north-west corner where the ground was uneven and tufty. This rectangular structure was built into the corner of the field, utilising the stone-faced hedgebanks (partly plastered) on two sides and completed in brick and blockwork. The pitched roof of corrugated sheet iron was carried on simple A-frame trusses with collars, of sawn timber with nailed joints. Where it was exposed, the floor appeared to be of scored brick (stable) pavers. Water pipes were noted in the north-east corner of the site and on the line of a former fence line in the middle southern part of the site.

2.3 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* (ClfA 2014b). 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*

3.0.43.10. 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 grids a1-a5, a7-a13 out- and inbound by 0.50m.

Details: 0.5743ha surveyed; Max. 126.23nT, Min. -114.46nT; Standard Deviation 14.64nT, mean 0.03nT, median 0.00nT.

2.4 RESULTS

Table 1 with the accompanying Figures 2 and 3 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 1.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Strong positive, probable	Linear	Ditch	North field: Indicative of a ditch. Aligned approximately north-south. Possibly associated with an earlier field system or drainage channel leading to Hangman's Cottage. Response of <+40nT.
2	Moderate positive, probable	Curvi-linear	Ditch	South field. Indicative of a ditch running east from the west boundary then turning to run south. Possibly defining original boundaries of this approximate enclosure. Respects north end of Group 4. Response of between +10nT and +28nT.
3	Strong positive, probable	Linear	Ditch	South field. Indicative of a ditch. Aligned approximately north-south. Associated with Group 1. Response of <+40nT.
4	Moderate-strong positive and negative, probable	Linear	Enclosure (bank and ditches?)	South field. Indicative of a Cornish hedgebank with a bank flanked by ditches. Defining a possible enclosure running to the west or at the edge of the field. Responses of between +20nT and +52nT for the westerly anomaly; -10nT to -27nT for the central anomaly; and +10nT to +24nT for the easterly anomaly.
5	Moderate-strong dipolar, possible	Ovoid	Bonfire or modern test pit	Indicative of possible in-situ burning or modern disturbance debris. Response of between +26nT and -63nT.
6	Strong, positive, possible	Ovoid	Pits, tree-throws, modern test-pits	Typically indicative of large discrete pits or tree-throws. 11 total (7 in north field; 4 in south field). In this case these responses are very strong and perhaps more indicative of a modern disturbance or debris. Some of these will probably equate to geotechnical pits that were noted to have been on site. Response of between +26nT and 102nT; typically between 35nT and 80nT.
7	Strong negative, possible	Ovoid	Pits, tree-throws, modern test-pits	Typically indicative of a large discrete feature in-filled with solid material such as concrete or stone or sealed with a solid pad. 3 examples, 1 in the north field, 2 in the south. These might equate to geotechnical pits and reflect the back-filling process. Be geological or modern dumps of debris. Responses of between -48nT and -57nT.

2.5 DISCUSSION

The survey identified seven groups of anomalies, including evidence of historic field boundaries, modern disturbance and possible agricultural activity, including possible drainage. The moderate to strong nature of the potential archaeological features or deposits suggests that they survive to a relatively good degree and the shallow nature of the topsoil.

The general geological variation across the site was between +/-8nT. Some of the higher responses within this range of readings, and the stronger isolated responses, are indicative of the underlying igneous geology (there are igneous dykes of Felsite in the area). Magnetic disturbance at the edges

and across parts of the site is associated with wire fencing, modern disturbance, and the presence of existing/demolished modern structures.

The identified anomaly groups include: linear ditches that may have formed elements of a medieval strip-field system; a curvilinear ditch which may relate to an earlier settlement enclosure; a possible bank with flanking ditches that appears to form part of a rectangular enclosure; modern disturbance, including possible geotechnical investigation pits; possible tree-throws; and two sections of modern service trenching. Cartographic and additional sources that support the following discussion and interpretation can be seen in Appendix 2.

Anomaly Group 1 consists of a strong (<+40nT) positive linear response indicative of a ditch in the north field. It is aligned approximately north to south and respects the existing boundaries, suggesting that it may have formed part of an earlier phase of the same field-system, or perhaps a drain/drainage channel leading to Hangman's Cottage.

Anomaly Group 2 consists of a moderate (+10nT to +28nT) positive curvilinear response indicative of a ditch located towards the northern end of the southern field. It runs broadly to the east from the western boundary, turning slightly to run to the south. Whilst not as straight as some of the other anomalies, it still appears to fall within the same field system, possibly as an earlier element. This feature also respects/is respected by the features of anomaly Group 4, and it is likely that the earlier of the two still formed a visible part of the landscape when the later one was created. It is possible it may form the surviving part of a Prehistoric enclosure, or a more clearly curving medieval boundary.

Anomaly Group 3 consists of a strong (<+40nT) positive linear anomaly indicative of a ditch towards the eastern edge of the southern field. It is aligned approximately north to south and, whilst not respecting the eastern boundary of the field, it respects the other boundaries, approximately aligning with anomaly Group 1, and this feature may form part of an earlier phase of the current field system, a break in the anomaly likely forming an access point.

Anomaly Group 4 consists of a moderate (-10nT to -27nT) negative anomaly with flanking moderate to strong (+10nT to +52nT) positive linear anomalies towards the north-western corner of the southern field. This grouping of responses is typically indicative of a Cornish hedgebank with flanking ditches. The features appear to form the eastern end of a rectangular enclosure which respects/is respected by anomaly Group 2, and it is likely that the earlier of the two still formed a visible part of the landscape when the later one was created.

Anomaly Group 5 consists of a strong (-63nT to +26nT) ovoid dipolar response towards the south-western corner of the southern field. The nature of the response is indicative of *in-situ* burning or modern disturbance and it is possible that this anomaly represents the site of a bonfire.

Anomaly Group 6 consists of 11 strong (+26nT to +102nT) discrete ovoid positive responses indicative of large pits or tree-throws, with seven identified in the north field and four in the south field. The strength of the responses suggests that the features are more likely to be modern than earlier in date and some may equate to geotechnical investigation pits. There appears to be some correlation with the distribution of geotechnical pits.

Anomaly Group 7 consists of a series of strong (-48nT to -57nT) discrete ovoid negative responses indicative of large features in-filled with solid material such as concrete or stone; or sealed with a solid pad. Three such anomalies were identified, one in the northern field and two in the southern field. These features may reflect geological anomalies (large stones/boulders); backfilling of geotechnical investigation pits; or modern dumps of debris. There appears to be some correlation with the distribution of geotechnical pits.

Modern service features were also identified, one running approximately north-west to south-east across the northern field from the corner of a removed structure to Hangman's Cottage; and one approximately north-east to south-west in the southern field towards one of the adjacent properties.



FIGURE 2: SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING.

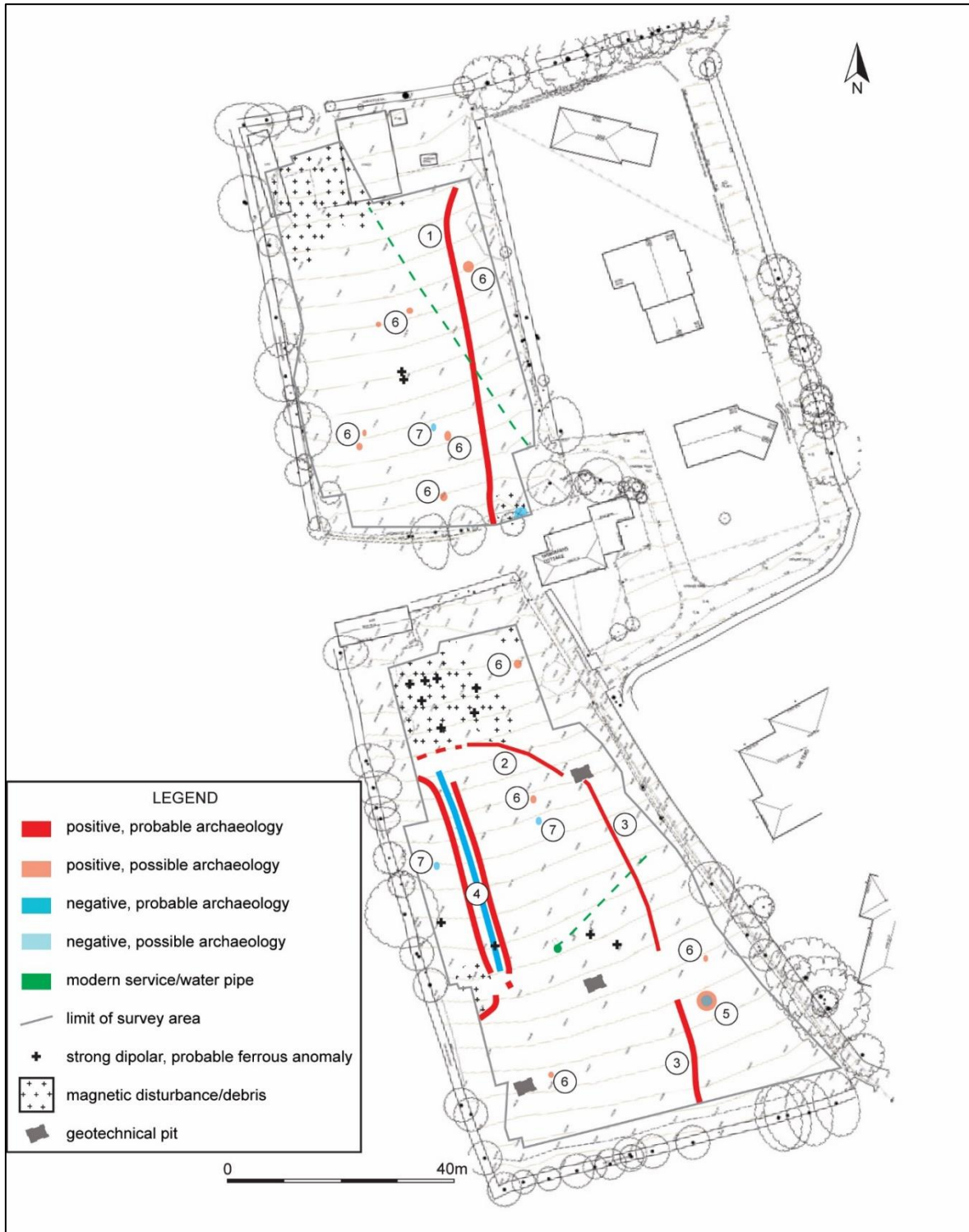


FIGURE 3: INTERPRETATION OF GRADIOMETER SURVEY DATA.

3.0 ARCHAEOLOGICAL EVALUATION

3.1 INTRODUCTION

The archaeological evaluation comprised the excavation of three trenches across two fields, each 1.70m wide and totalling c.60m in length a JCB excavator to the depth of weathered natural using a toothless grading bucket under archaeological supervision. Exposed archaeological features and deposits were excavated by hand and in accordance with the WSI and ClfA guidelines. The evaluation took place on 12th May 2020.

The excavations identified a total of six archaeological features, including: four ditches; one pit; and one pit/post-hole. A modern service trench was also identified. A complete description of all contexts can be seen in Appendix 4; detailed finds concordance in Appendix 5; and additional baseline photographs in Appendix 6.

3.2 RESULTS

3.2.1 DEPOSIT MODEL

The stratigraphy was fairly consistent across much of the site. A friable mid reddish-brown silt-loam topsoil overlay a friable yellowish-red silt-clay subsoil; and the natural shillet in yellow-grey sand-silt. The thickness of these soils was largely consistent across the site: the topsoil c.0.30-0.50m thick; the subsoil c.0.15-0.20m thick.

3.2.2 TRENCH 01

Trench 01 was located towards the centre of the north paddock, targeting a positive linear anomaly identified by the geophysical survey. It measured 20.60m long on an approximate east to west alignment; the topsoil was 0.30-0.36m thick; and subsoil 0.15-0.20m thick.

A total of two features (Figures 4-5) were identified within this trench: one ditch; and one modern service trench. Ditch [105] was located towards the eastern end of the trench, corresponding with the position of the positive linear anomaly identified on the geophysical survey. It was orientated approximately north to south, measuring 1.05m wide and 0.65m deep with steep sloping sides and flat to slightly concaved base. It contained a single fill: (106), mid yellowish-brown friable-soft silt-clay.

Modern service [103] was for a water pipe, and was located to the east of ditch [105], corresponding with the position identified on the geophysical survey.

3.2.3 TRENCH 02

Trench 02 was located towards the north-west corner of the south paddock, targeting a series of positive and negative linear anomalies identified by the geophysical survey and interpreted as part of an enclosure. It measured 20.20m long on an approximate east to west alignment; the topsoil was 0.35-0.50m thick; and subsoil 0.20-0.25m thick.

A total of two features (Figures 4-5) were identified within this trench: both ditches. Ditch [203] was located towards the centre of the trench, corresponding with the position of the positive linear anomaly identified on the geophysical survey. It was orientated approximately north to south, measuring 0.65m wide and 0.45m deep with steep sloping sides and slightly concave base. It contained a single fill: (204), a mid reddish-yellow-brown friable-soft silt-clay.



FIGURE 4: SITE PLAN SHOWING ARCHAEOLOGICAL FEATURES OVERLAID ON THE INTERPRETATION OF GRADIOMETER SURVEY DATA.

Ditch [205] was located to the west of ditch [203], corresponding with the position identified on the geophysical survey. It was orientated approximately north to south, measuring 2m wide and 0.75+m deep with steep sloping sides. It contained three fills: (206), grey-brown soft silt-clay; (207), reddish-grey friable-soft silt-clay; and (208), mid grey-yellow friable sand-silt re-deposited natural. The feature was not fully excavated.

Both of the ditches were sealed by an additional layer (209) beneath the subsoil, mid yellowish-red friable-soft silt-clay; likely to be the ploughed out remains of a bank.

3.2.4 TRENCH 03

Trench 03 was located towards the south-east corner of the south paddock, targeting a positive linear anomaly identified by the geophysical survey. It measured 20m long on an approximate east to west alignment; the topsoil was 0.30-0.35m thick; and subsoil 0.15-0.20m thick.

A total of three features (Figures 4-5) were identified within this trench: one ditch; one pit base; and one post-hole/pit base. Ditch [307] was located towards the centre of the trench, corresponding with the position of the positive linear anomaly identified on the geophysical survey. It was orientated approximately north to south, measuring 1.55m wide and 0.45m deep with steep sloping sides and slightly concave to flat base. It contained a single fill: (308), mid grey-brown friable-soft silt-clay.

Pit base [303] was located at the eastern end of the trench and was sub-circular in plan, measuring 0.40m in diameter and 0.08m deep with steep sloping sides and concave base. It contained a single fill: (304), mid brownish-yellow friable-soft silt-clay.

Post-hole/pit base [305] was located to the immediate west of pit [303]. It was sub-circular in plan, measuring 0.25m in diameter and 0.25m deep with steep sloping sides and flat irregular base. It contained a single fill: (306), mid brownish-yellow friable-soft silt-clay.

3.2.5 FINDS

Only a small quantity of finds was recovered during the excavations, including: one sherd (3g) of Bronze Age pottery from the fill of modern service trench [105]; 1 sherd (65g) of Late Iron Age/Romano-British Gabbroic pottery from the fill of ditch [205].

The assemblage recovered from the topsoil included one sherd (4g) of 14th-15th century green glazed coarseware, two sherds (26g) of 19th century refined redware, six sherds (36g) 19th-20th century of white refined and industrial wares; two sherds (10g) of post-medieval red earthenware, and one sherd (70g) of toiletry ceramic.

The finds recovered from the archaeological features indicate that the enclosure is of Iron Age to Romano-British in date (i.e. likely a round); the finds from the topsoil demonstrating that episodes of settlement and agricultural activity continued through the medieval and post-medieval periods.

3.3 DISCUSSION

The evaluation identified a total of six archaeological features which broadly validate the results of the geophysical survey, identifying several ditches and features associated with prehistoric settlement and surrounding agricultural activity. Most of the buried features did not produce dating evidence; those that did containing prehistoric pottery. Medieval and post-medieval pottery being recovered from the topsoil across the site. Whilst the ditches survive to a good depth, additional pit and post-hole features do not survive to any great depth beneath the topsoil, and it is likely that multiple phases of agricultural activity have truncated the features leaving only those that were larger and deeper excavated.

Given the paucity and wide date range of the artefactual evidence, it cannot be determined with any certainty whether the features belong to different phases of activity; or whether they all form part of a prehistoric settlement and field system based around enclosure ditch [205] and extending to the west. It is possible, however, that they represent multiple phases including medieval and later field systems, though which appear to respect each other and are therefore likely to have still been visual elements in the landscape. The form, scale, nature of the fills and the orientation of Ditches [105] and [307] would suggest that they are most likely part of the same feature, or at least are contemporary to each other.

The archaeological potential of the site is restricted, the evaluation confirming the results of the geophysical survey, identifying a prehistoric enclosure within part of an undated field system. Further intervention here is unlikely to be particularly rewarding, any settlement features within the site likely to have been heavily truncated; and the focus of the enclosure settlement likely to be in the fields to the west. However, it would be recommended that should the development proceed that an archaeological planning condition, which would focus upon a strip, map and sample area excavation of the part of the enclosure that falls in the western edge of the southern field is warranted to provide further environmental and artefactual evidence from the enclosure ditches.

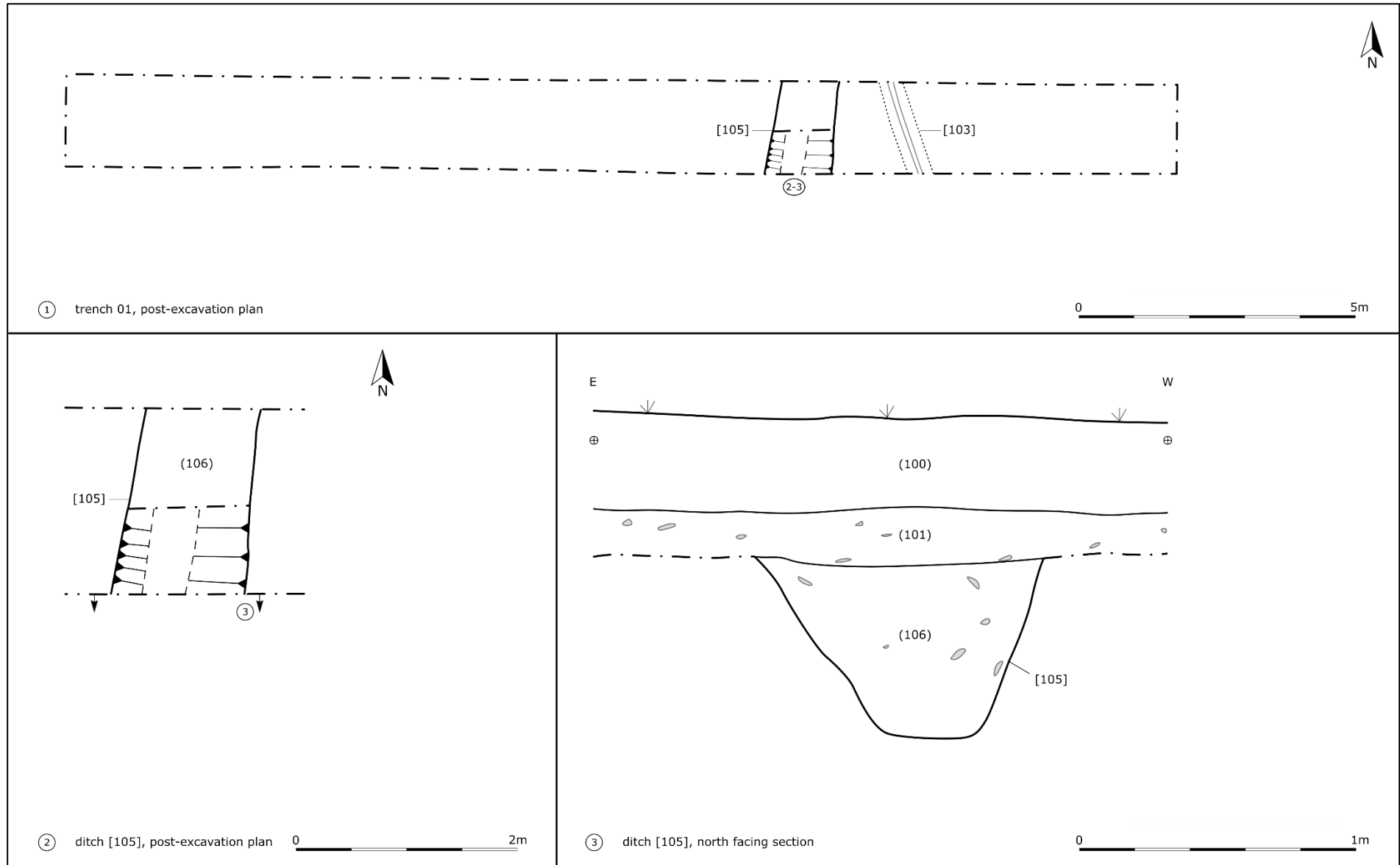


FIGURE 5: TRENCH 01, PLANS AND SECTIONS.

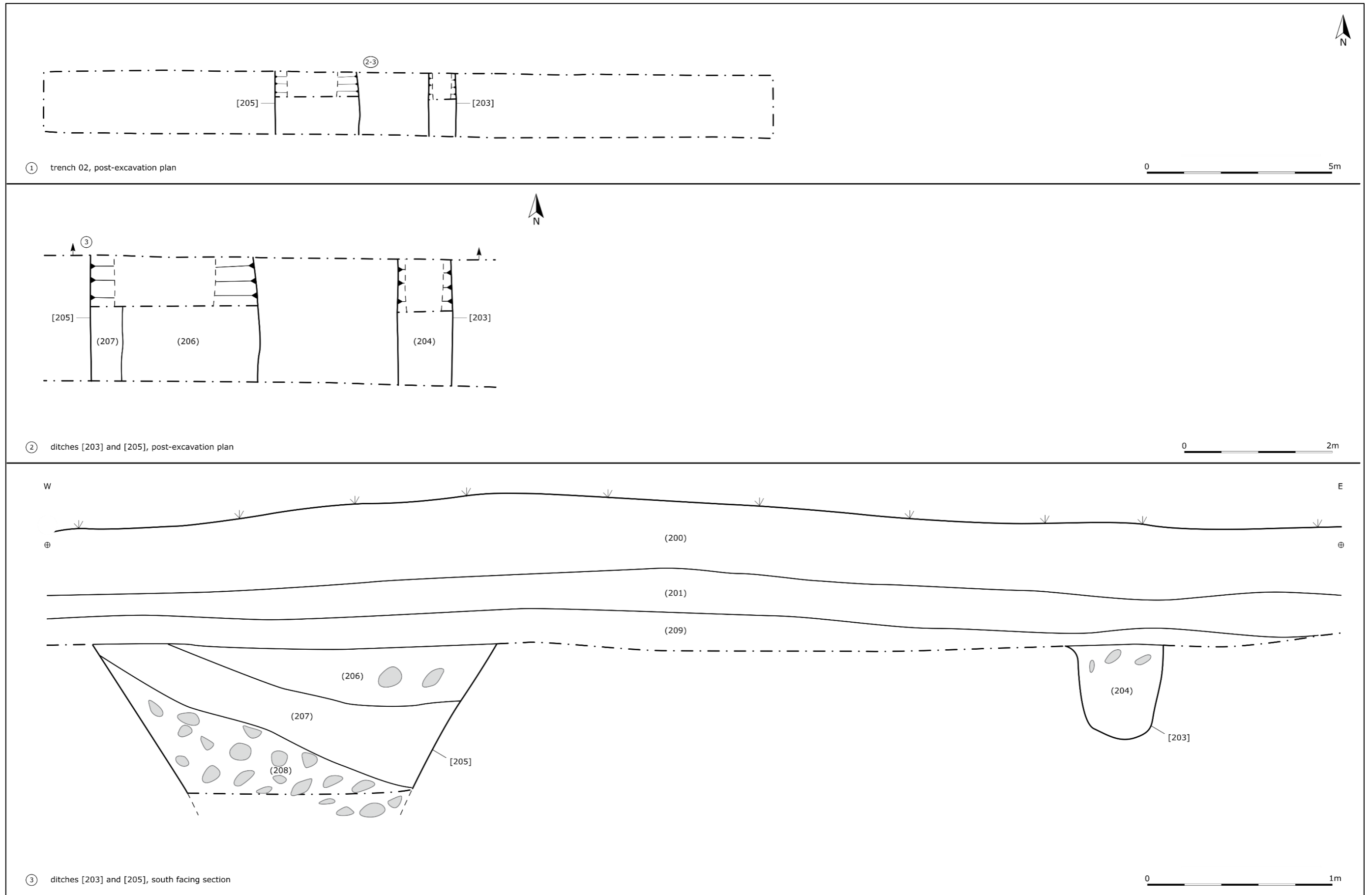


FIGURE 6: TRENCH 02, PLANS AND SECTIONS.

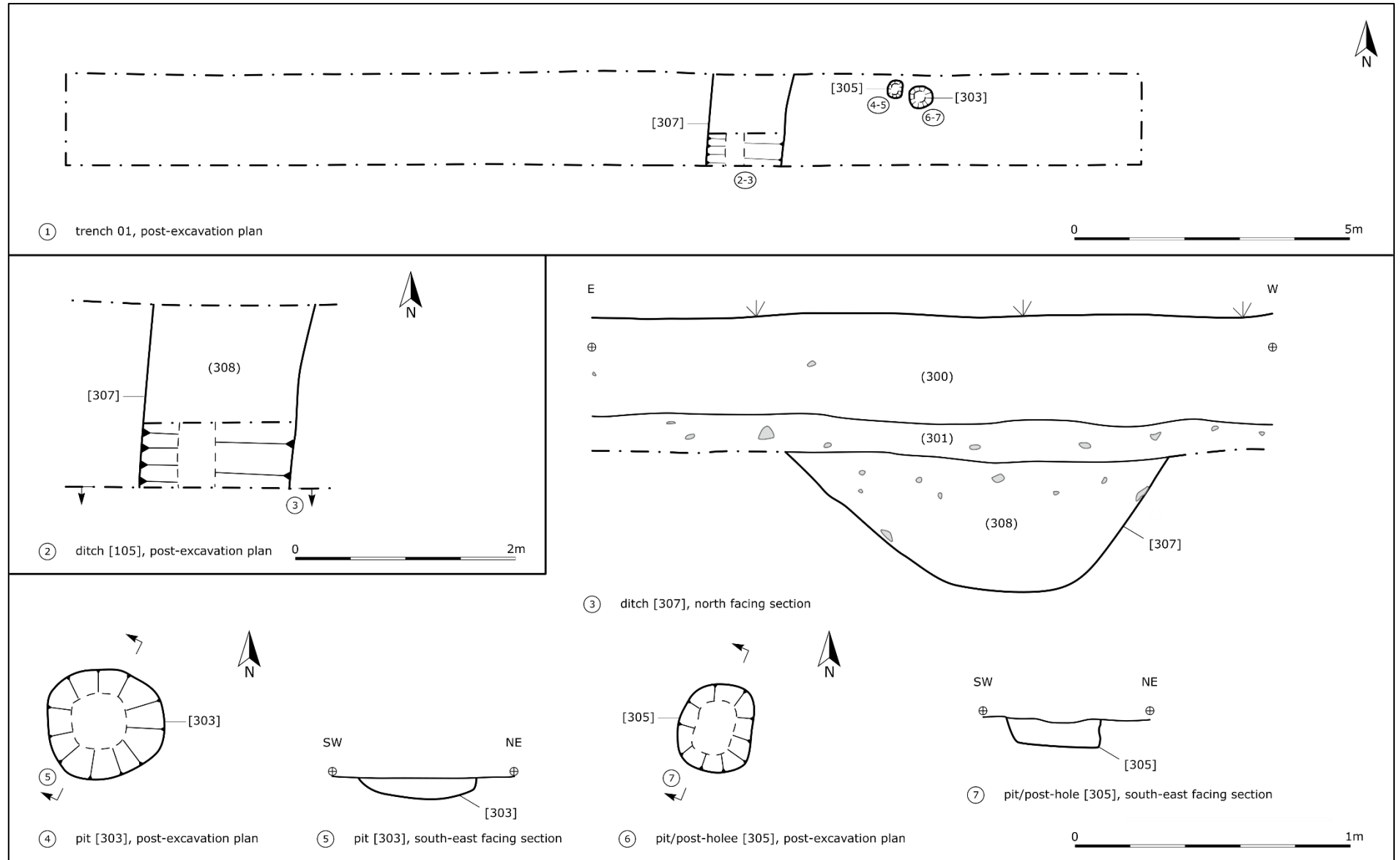


FIGURE 7: TRENCH 03, PLANS AND SECTIONS.

4.0 CONCLUSION

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) on land off Hamilton Close, Kenwyn, Truro, Cornwall. The site is located at the north-western edge of the settlement and south of New Mills Lane, consisting of two sub-rectangular fields. These lie within a later medieval and post-medieval agricultural field system, overlying a Prehistoric funerary and settlement landscape. Although Kenwyn was first documented in the 13th century, much of the settlement is 19th or 20th century in date and most of the houses immediately adjacent to the site were built in the last 20 years.

The geophysical survey identified seven undated groups of anomalies, including: former boundaries within the current field system; a curvilinear ditch; the eastern side of what appears to be a sub-rectangular; and a series of pits/tree-throws, many of which are likely to reflect modern disturbance. Two lengths of modern services were also identified. The straighter north-to-south orientated boundaries are likely to reflect earlier phases of the existing medieval to post-medieval field system. However, given the proximity of Prehistoric settlement sites within this landscape, it is possible that these could form part of a Prehistoric field system and a round/later rectangular enclosure.

The evaluation confirmed the presence of only a sparse number of archaeological features across the site. It identified that the enclosure in the south field is of Iron Age to Romano-British date. Whilst it remains unclear whether the remaining features were associated with the enclosure, as a tiny scrap of Bronze Age pottery was recovered from their fill. The finds recovered from the topsoil demonstrate continued use of the site through the medieval and post-medieval periods; and it is likely that some or all these features represent field boundaries of unknown but presumed prehistoric date.

The archaeological potential of the site is restricted, the evaluation confirming the results of the geophysical survey, identifying the edge of a prehistoric enclosure with undated field system. Further intervention here is unlikely to be particularly rewarding, any settlement features within the site likely to have been heavily truncated; and the focus of the enclosure settlement likely to be in the fields to the west. A limited Strip, map, and sample over the footprint of the enclosure ditch should however be undertaken as a planning condition of any proposed development.

5.0 BIBLIOGRAPHY & REFERENCES

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British Library (BL)

Ordnance Survey Surveyor's draft map for the Redruth area, 1809

National Library of Scotland (NLS)

Ordnance Survey 1st edition, 25-inch map, published 1880

APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY



FIGURE 8: GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING.

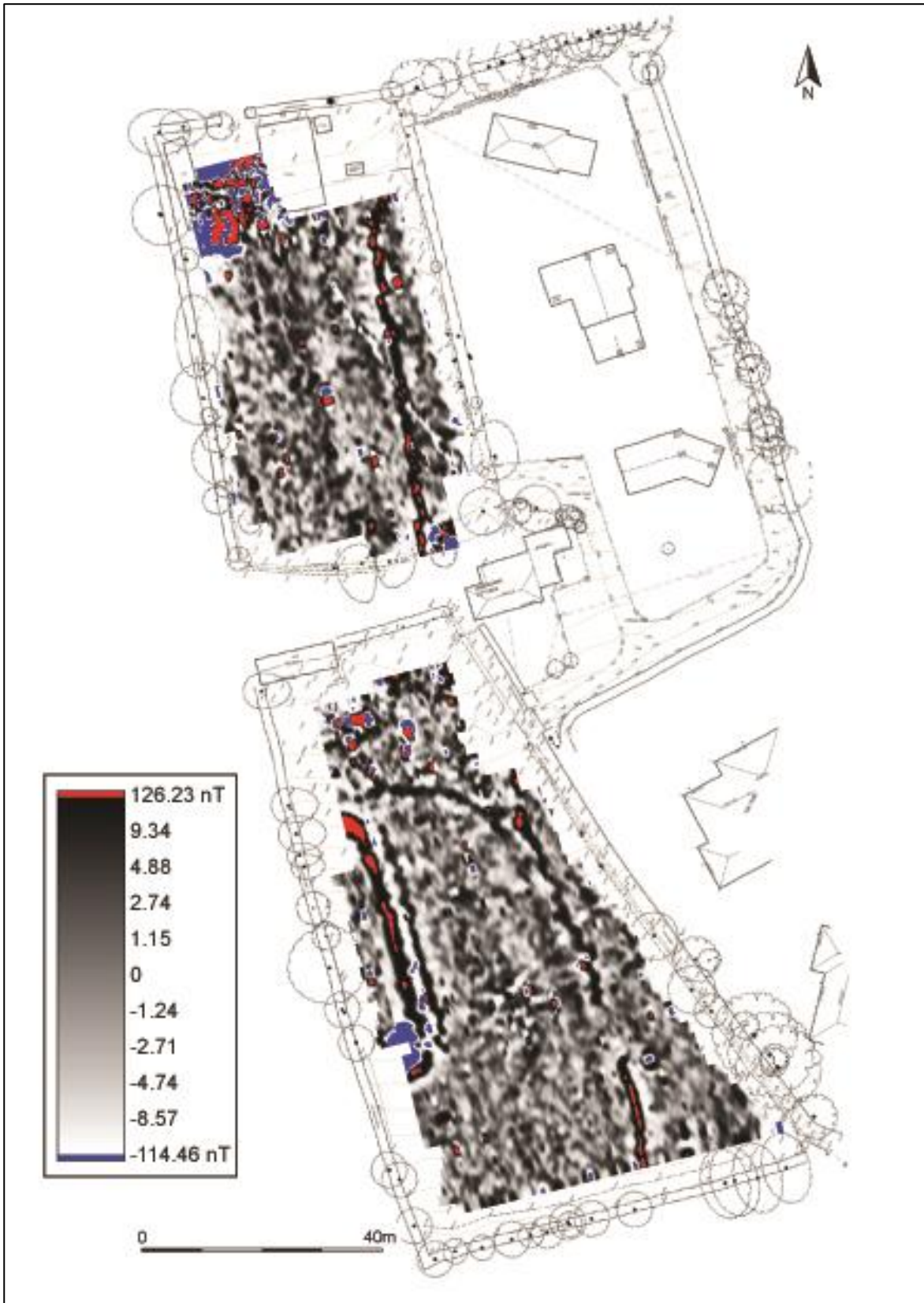


FIGURE 9: RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED; GRADIATED SHADING.

APPENDIX 2: SUPPORTING SOURCES



FIGURE 10: EXTRACT FROM THE 1809 OS SURVEYOR'S DRAFT MAP; THE APPROXIMATE LOCATION OF THE SITE IS INDICATED (BL).



FIGURE 11: EXTRACT FROM THE 1840 KENWYN TITHE MAP; THE SITE IS OUTLINED IN RED (SOURCE: PRO).

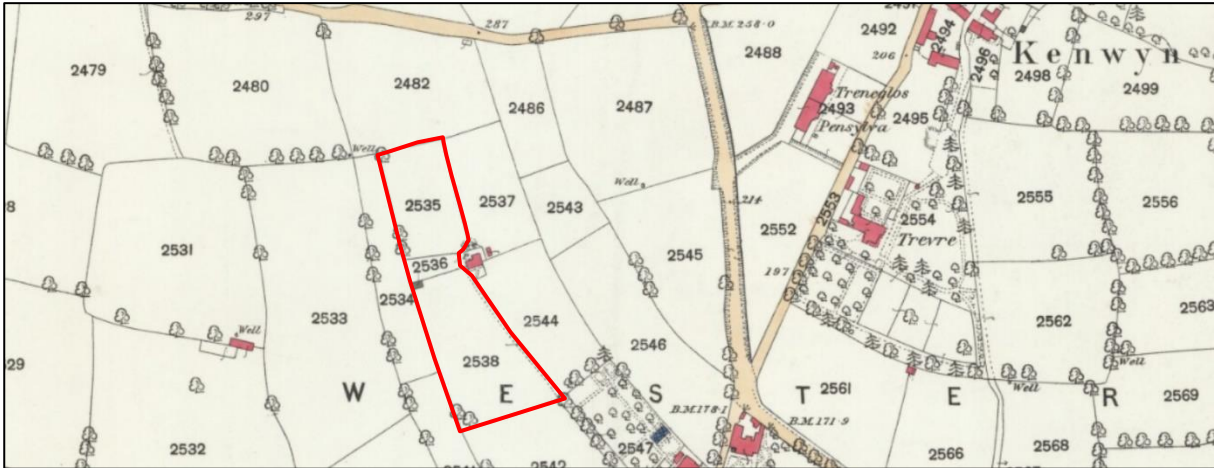


FIGURE 12: EXTRACT FROM THE OS 1ST EDITION 25 INCH MAP, PUBLISHED 1880; THE SITE IS OUTLINED IN RED (NLS).



FIGURE 13: IMAGE DERIVED FROM LIDAR DATA; THE SITE IS OUTLINED IN RED (PROCESSED USING QGIS VER2.18.4, TERRAIN ANALYSIS/SLOPE, VERTICAL EXAGGERATION 3.0). DATA: CONTAINS FREELY AVAILABLE DATA SUPPLIED BY NATURAL ENVIRONMENT RESEARCH COUNCIL (CENTRE FOR ECOLOGY & HYDROLOGY; BRITISH ANTARCTIC SURVEY; BRITISH GEOLOGICAL SURVEY); ©NERC.

APPENDIX 3: GEOPHYSICAL SURVEY SUPPORTING PHOTOGRAPHS



1. VIEW ALONG THE ACCESS IN THE SOUTH-EAST CORNER OF THE NORTH PADDOCK; VIEWED FROM THE EAST (NO SCALE).



2. VIEW ACROSS THE NORTH FIELD; VIEWED FROM THE SOUTH-EAST (NO SCALE).



3. VIEW ALONG THE SOUTHERN BOUNDARY OF THE NORTH FIELD; VIEWED FROM THE EAST (NO SCALE).



4. DETAIL OF THE DERELICT SHEDS IN THE NORTH-WESTERN CORNER OF THE NORTH FIELD; VIEWED FROM THE SOUTH-EAST (NO SCALE).



5. THE MODERN DISTURBANCE AT THE NORTH-EAST CORNER OF THE NORTH FIELD; VIEWED FROM THE SOUTH-WEST (NO SCALE).



6. DETAIL OF THE NORTHERN END OF THE NORTH FIELD SHOWING THE ADJOINING BUILDING SITE; VIEWED FROM THE SOUTH (NO SCALE).



7. VIEW ALONG THE NORTH BOUNDARY OF THE NORTH FIELD SHOWING THE EXISTING CONCRETE PAD AND ACCESS THROUGH THE NORTH-EAST CORNER; VIEWED FROM THE WEST (NO SCALE).



8. VIEW ACROSS THE NORTH FIELD; VIEWED FROM THE NORTH (NO SCALE).



9. VIEW ALONG THE ACCESS ROUTE TO THE SOUTHERN FIELD; VIEWED FROM THE EAST (NO SCALE).



10. VIEW ACROSS THE SOUTH FIELD; VIEWED FROM THE NORTH (NO SCALE).



11. VIEW ALONG THE NORTHERN BOUNDARY OF THE SOUTH FIELD; VIEWED FROM THE EAST (NO SCALE).



12. DETAIL OF STABLE/SHED IN THE NORTH-WEST CORNER OF THE SOUTH FIELD; VIEWED FROM THE SOUTH-EAST (NO SCALE).



13. DETAIL OF THE EAST ROOM OF THE STRUCTURE IN THE NORTH-WEST CORNER OF THE SOUTH FIELD, SHOWING THE BLOCK AND BRICK WORK CONSTRUCTION; VIEWED FROM THE SOUTH-EAST (NO SCALE).



14. DETAIL OF THE EAST END OF THE WEST ROOM OF THE STRUCTURE IN THE NORTH-WEST CORNER OF THE SOUTH FIELD, SHOWING PATCHED REPAIRS; VIEWED FROM THE SOUTH (NO SCALE).



15. DETAIL OF PAVERS IN THE FLOOR OF THE STRUCTURE; VIEWED FROM THE EAST (NO SCALE).



16. DETAIL OF THE ROOF STRUCTURE OVER THE WEST CELL OF THE STRUCTURE; VIEWED FROM THE EAST (NO SCALE).



17. DETAIL OF THE MODIFIED FIELD BOUNDARY, PLASTERED/RENDERED WHERE IT FORMS PART OF THE STRUCTURE; VIEWED FROM THE SOUTH (NO SCALE).



18. VIEW ALONG THE REMOVED FENCE LINE WITHIN THE SOUTH FIELD; VIEWED FROM THE EAST.



19. VIEW ALONG THE WESTERN BOUNDARY OF THE SOUTH FIELD; VIEWED FROM THE SOUTH.



20. VIEW ACROSS THE SOUTH FIELD; VIEWED FROM THE SOUTH.



21. VIEW ALONG THE SOUTHERN BOUNDARY OF THE SOUTH FIELD; VIEWED FROM THE WEST.



22. DETAIL OF THE SOUTHERN BOUNDARY OF THE SOUTH FIELD SHOWING THE CORNISH BANK AND FENCE BEHIND; VIEWED FROM THE EAST.



23. VIEW ACROSS THE SOUTH FIELD; VIEWED FROM THE SOUTH.

APPENDIX 4: CONTEXT DESCRIPTIONS

Context	Type	Description	Relationships	Depth/thickness (m)	Spot date
Trench 01					
(100)	Layer	Topsoil – mid eddish-brown friable silt-loam with occasional-rare stone.	Overlies (101)	0.30-0.36m thick	Modern
(101)	Layer	Subsoil – mid yellowish-red friable silt-clay with occasional-common shillet fragments.	Cut by [103]; overlies (105)	0.15-0.20m thick	-
(102)	Natural	Natural – shillet within mid yellow-grey friable sand-silt.	Cut by [105]	-	-
[103]	Cut	Modern service trench – linear feature orientated approximately north-west to south-east. Measures c.0.50m wide. Not excavated.	Filled by (104); cuts (101)	-	Modern
(104)	Fill	Fill of modern service trench [103] – mid grey builders sand mixed with mid reddish-brown friable silt-loam topsoil. Contains blue alkathene pipe.	Overlain by (100); fill of [103]	-	Modern
[105]	Cut	Ditch – linear ditch orientated approximately north to south. Measures 1.05m wide and 0.65m deep with steep sloping sides and flat base.	Filled by (106); cuts (102)	0.65m deep	-
(106)	Fill	Fill of ditch [105] – mid yellowish-brown friable-soft silt-clay with rare sub-angular stones towards the base.	Overlain by (101); fill of [105]	0.65m thick	-
Trench 02					
(200)	Layer	Topsoil – mid eddish-brown friable silt-loam with occasional-rare stone.	Overlies (201); same as (300)	0.35-0.50m thick	Modern
(201)	Layer	Subsoil – mid yellowish-red friable silt-clay with occasional-common shillet fragments.	Overlain by (200); overlies (209); same as (301)	0.20-0.25m thick	-
(202)	Natural	Natural – shillet within mid yellow-grey friable sand-silt.	Cut by [203], [205]; same as (302)	-	-
[203]	Cut	Ditch – linear ditch orientated approximately north to south. Measures 0.65m wide and 0.45m deep with steep sloping sides and slightly concave base.	Filled by (204); cuts (202)	0.45m deep	-
(204)	Fill	Fill of ditch [203] – mid reddish-brown friable-soft silt-clay with occasional sub-angular stone towards the top.	Overlain by (209); fill of [203]	0.45m thick	-
[205]	Cut	Ditch – linear ditch orientated approximately north to south. Measures 2m wide and 0.75+m deep with steep sloping sides. Not fully excavated.	Filled by (206), (207), (208); cuts (202)	0.75+m deep	Prehistoric
(206)	Fill	Upper fill of ditch [205] – mid grey-brown soft silt-clay.	Overlain by (209); overlies (207); fill of [205]	Up to 0.30m thick	Prehistoric
(207)	Fill	Fill of ditch [205] – mid reddish-grey friable-soft silt-clay.	Overlain by (206); overlies (208); fill of [207]	Up to 0.50m thick	Prehistoric
(208)	Fill	Fill of ditch [205] – mid grey-yellow friable sand-silt with common-abundant stone inclusions. Re-deposited natural collapse/push deposit.	Overlain by (207); fill of [205]	0.70+m thick	Prehistoric
(209)	Layer	Possible ploughed-out bank layer – mid yellowish-red friable-soft silt-clay.	Overlain by (201); overlies (204), (206)	c.0.20m thick	-
Trench 03					
(300)	Layer	Topsoil – mid eddish-brown friable silt-loam with occasional-rare stone.	Overlies (301); same as (200)	0.30-0.35m thick	Modern
(301)	Layer	Subsoil – mid yellowish-red friable silt-clay with occasional-common shillet fragments.	Overlain by (300); overlies (304), (306), (308); same as (201)	0.15-0.20m thick	-
(302)	Natural	Natural – shillet within mid yellow-grey friable sand-silt.	Cut by [303], [305], [307]	-	-
[303]	Cut	Pit – sub-circular feature. Measures 0.40m in diameter and 0.08m deep with steep sloping sides and concave base. Probable base of pit.	Filled by (304); cuts (302)	0.08m deep	-
(304)	Fill	Fill of pit [303] – mid brownish-yellow friable-soft silt-clay.	Overlain by (301); fill of [303]	0.08m thick	-
[305]	Cut	Pit/post-hole – sub-circular feature. Measures 0.25m in diameter and 0.10m deep with site steep sloping sides and flat irregular base.	Filled by (306); cuts (302)	0.10m deep	-

LAND OFF HAMILTON CLOSE, KENWYN, TRURO, CORNWALL

(306)	Fill	Fill of pit/post-hole [305] – mid brownish-yellow friable-soft silt-clay.	Overlain by (301); fill of [305]	0.10m thick	-
[307]	Cut	Ditch – linear ditch orientated approximately north to south. Measures 1.55m wide and 0.45m deep with steep sloping sides and slightly concave to flat base.	Filled by (308); cuts (302)	0.45m deep	-
(308)	Fill	Fill of ditch [307] – mid grey-brown friable-soft silt-clay.	Overlain by (301); fill of [307]	0.45m thick	-

APPENDIX 5: FINDS CONCORDANCE

Context	Notes	POTTERY			OTHER			DATE
		Sherds	Wgt. (g)	Notes	Frgs.	Wgt. (g)	Notes	
Topsoil	All trenches	6	36	White refined earthenware/industrial white wares				C19-C20
		2	26	Refined redware with glassy black glaze, teapot				C19
		2	10	Red earthenware, post-med, undiagnostic scraps				Post med
		1	70	Toiletry ceramic (toilet, basin etc.)				C20
		1	4	Medieval coarseware scrap, green glaze				C14-C15
(104)	Trench 1	1	3	Prehistoric scrap – Bronze Age gabbroic based fabric				Bronze Age
(207)	Trench 2	1	65	Late Iron Age, basal angle of globular storage jar, gabbroic with slate tempered based fabric				Iron Age/ Romano-British
		14	214					

APPENDIX 6: EVALUATION SUPPORTING PHOTOGRAPHS



1. TRENCH 01, POST-EXCAVATION; VIEWED FROM THE EAST (1M SCALE).



2. DITCH [105], POST-EXCAVATION; VIEWED FROM THE NORTH (1M SCALE).



3. DITCH [105], NORTH FACING SECTION; VIEWED FROM THE NORTH (1M SCALE).



4. DITCH [105], POST-EXCAVATION WITH MODERN SERVICE [103]; VIEWED FROM THE NORTH (1M SCALE).



5. (RIGHT) TRENCH 02, POST-EXCAVATION; VIEWED FROM THE EAST (1M SCALE).
6. (LEFT) DITCH [203], POST-EXCAVATION; VIEWED FROM THE SOUTH (1M SCALE).



7. DITCH [203], SOUTH FACING SECTION; VIEWED FROM THE SOUTH (1M SCALE).



8. DITCH [205], SOUTH FACING SECTION; VIEWED FROM THE SOUTH (1M SCALES).



9. DITCH [205], POST-EXCAVATION; VIEWED FROM THE SOUTH (1M SCALES).



10. (LEFT) TRENCH 03, POST-EXCAVATION; VIEWED FROM THE EAST (1M SCALE).

11. (RIGHT) PITS [303] AND [305], POST-EXCAVATION; VIEWED FROM THE EAST (1M SCALE).



12. PIT [303], SOUTH-EAST FACING SECTION; VIEWED FROM THE SOUTH-EAST (PART 1M SCALE).



13. DITCH [307], NORTH FACING SECTION; VIEWED FROM THE NORTH (1M SCALE).



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