LAND AT GONWIN FARM
CARBIS BAY
ST IVES
CORNWALL

Results of an Archaeological Assessment & Geophysical Survey

South West Archaeology Ltd. report no. 251010

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

www.swarch.net

01769 573555
01872 223164

LAND AT GONWIN FARM, CARBIS BAY, ST IVES, CORNWALL

RESULTS OF AN ARCHAEOLOGICAL ASSESSMENT & GEOPHYSICAL SURVEY

By P. Webb
Report Version: Final
Draft issued: 10th October 2025
Finalised: 13th Ocotober 2025
Work undertaken by SWARCH for CAD Architects Ltd (the Client)

SUMMARY

This report presents the results of an archaeological assessment and geophysical survey carried out by South West Archaeology Ltd. (SWARCH) on land at Gonwin Farm, Carbis Bay, St Ives, Cornwall as part of a planning application for residential development of the land. The site is located at the edge of the settlement of Carbis Bay, overlooking the north Cornish coast at St Ives Bay. It comprises seven agricultural fields surrounding Gonwin Manor, a former medieval settlement/manor rebuilt as two post-medieval farms.

Prior to the 19th century the site and surrounding area had remained largely unchanged, the surrounding agricultural landscape divided into multiple smallholdings. Settlement began to expand during the post-medieval period, though significant change and growth at Carbis Bay only occurred following the construction of the St Ives branch of the Great Western Railway.

The site falls into an area that is classified in the Cornwall Historic Landscape Characterisation (HLC) as post-medieval enclosed land: 'land enclosed during the 17th, 18th and 19th centuries, usually from land that was previously upland rough ground and medieval commons'. This is bordered to the north and south by land designated as communications, beyond which are coastal rough ground and post-medieval enclosed land; whilst recreational land and medieval farmland lie to the east and 20th century settlement the west.

The geophysical survey identified 50 groups of anomalies comprising c.385 anomalies. These were a mix of linear ditch and/or bank features associated with phases of the existing and historic field-system, phases of possible prehistoric enclosure and settlement and modern service features. Possible pits and/or tree-throws, agricultural activity and anomalies associated with metallic debris and ground disturbance were also apparent.

The results of the geophysical survey would suggest that the archaeological potential for the site is low to moderate: many of the identified features are likely to relate to historic phases of field-system, some dating to the 20th century, others pre-dating the mid-19th century and tentatively suggested as being medieval and post-medieval in date. Some features, however, may relate to prehistoric settlement of the site associated with areas of prehistoric settlement and funerary activity present in the immediately surrounding landscape.

Any development of the site is likely to encounter and destroy the buried archaeological resource (should it be present), and further mitigation through, in the first instance, targeted evaluation trenching would validate and clarify the results of the geophysical survey.

October 2025

CONTENTS

LIST OF FIGURES

Cover plate: View across St Ives Bay from field F2; viewed from the west-south-west.

LIST OF TABLES

LIST OF APPENDICES

ACKNOWLEDGEMENTS

THE LANDOWNER FOR ACCESS
CORNWALL COUNCIL'S HISTORIC ENVIRONMENT AND PLANNING ADVICE OFFICER

PROJECT CREDITS

DIRECTOR: DR. SAMUEL WALLS, MCIFA
FIELDWORK: PETER WEBB; ALISTAIR NOCK, PCIFA
REPORT: PETER WEBB
EDITING: DR. SAMUEL WALLS, MCIFA
GRAPHICS: PETER WEBB

FIGURE 1: SITE LOCATION (THE SITE IS INDICATED). CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2025. LICENCE NUMBER 100022432.

1.0 INTRODUCTION

LOCATION:	GONWIN FARM, CARBIS BAY
PARISH:	ST IVES
DISTRICT:	ST IVES
COUNTY:	CORNWALL
NGR:	CENTRED ON SW 153475 38260
PLANNING APPLICATION NO:	PRE-PLANNING
SWARCH REF.	IGF25
OASIS REF:	SOUTHWES1-536581

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by the CAD Architects Ltd. (the Client) to undertake an archaeological assessment and geophysical survey on land surrounding Gonwin Farm, Carbis Bay, St Ives, Cornwall as part of a planning submission for proposed residential development of the land. This work was undertaken in accordance with best practice and CIfA guidance.

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site comprises seven agricultural fields that surround the medieval settlement of Gonwin, now recorded as Gonwin Manor. It lies at the eastern edge of Carbis Bay, *c.*2.5km south-east of St Ives within a mixed landscape agricultural fields (to the east and south), urban development (west) and coastline (north). The St Ives Bay Line railway runs along the northern edge of the site and the A3074 St Ives Road the southern edge, whilst Church Lane runs between fields F6 and F7. An access road to Gonwin Manor runs between fields F5 and F6.

Gonwin Manor is situated on the ridgeline of the North Cornish Coast as it overlooks St Ives Bay to the north; the land at the northern end of the site sloping moderately down to the north and north-east and the southern fields sloping down to the east between heights *c.*65m and *c.*77m AOD. The soils of this area are the well-drained fine loamy soils over slate or slate rubble of the Denbigh 2 Association (SSEW 1983) which overlies the hornfelsed slate and siltstone of the Mylor Slate Formation (BGS 2025).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Carbis Bay, in the historic parish of *Uny Lelant* (now subsumed into St Ives) in the deanery and east division of the hundred of *Penwith*. Settlement at Carbis is first recorded in 1391, the name *Carbis Bay* coming into common use after the Great Western Railway named their station Carbis Bay following the construction of the St Erth to St Ives line in 1877. Settlement at Gonwin is even earlier, first recorded in 1302; the manor dating to at least the 17th century when it was owned by the Pawleys, subsequently passing to the Praeds. By the 19th century, however, the old manor had been taken down and two farm houses built on the site.

At the time of the Tithe survey both farms at Gonwin and the landholdings of Trenoweth were under the ownership of Mrs Sophia Praed, mother and guardian of William Backwell Praed *esq.* (a minor), though the leases were divided: the eastern Gonwin farm to Captain John Hoskins; the western Gonwin farm to Andrew Hoskin; and the landholdings of Trenoweth to Sampson Howes. The proposal site comprises parts of seven plots divided between the farms at Gonwin and five plots associated with Trenoweth.

The site falls into an area that is classified in the Cornwall Historic Landscape Characterisation (HLC) as *post-medieval enclosed land*: 'land enclosed during the 17th, 18th and 19th centuries, usually from land that was previously upland rough ground and medieval commons'.

There is some evidence for prehistoric activity and settlement in the area, aerial photography suggesting the sites of possible funerary monuments and settlement enclosures with surrounding field-systems. It is likely that this activity continued into the Romano-British period, though evidence for this is limited. By the medieval period, there is increased evidence for settlement, including those Carbis, Gonwin and Trenoweth. It was the post-medieval period, however, that saw the greatest change in the area, through mining activity at the *East Providence* and *Hawk's Point* mines and the construction of the St Ives Branch of the Great Western Railway. Carbis Bay expanded during this period, but it was not until the 20th century that it saw significant growth. The impact of the Second World War on the area is demonstrated through the siting of a number of pillboxes and anti-aircraft batteries along the coastline. Limited archaeological intervention has occurred in the area, those that have identifying evidence for medieval and post-medieval ridge and furrow cultivation, though excavations at Polwithen Drive have identified Bronze Age flint and post-holes suggestive of prehistoric settlement in the area.

1.4 METHODOLOGY

The archaeological assessment follows the guidance outlined in: Conservation Principles: policies and guidance for the sustainable management of the historic environment (English Heritage 2008), The Setting of Heritage Assets (Historic England 2015), Seeing History in the View (English Heritage 2011), Managing Change in the Historic Environment: Setting (Historic Scotland 2010), and with reference to Guidelines for Landscape and Visual Impact Assessment 3rd Edition (Landscape Institute 2013). The impact assessment also follows the guidance outlined in the Principles of Cultural Heritage Impact Assessment in the UK produced by CIfA, IHBC and IEMA in July 2021.

The geophysical (gradiometer) survey was undertaken in accordance with current best practice and CIfA guidance; and follows the guidance outlined in *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008b); *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014b); *EAC Guidelines for the use of geophysics in Archaeology: Questions to Ask and Points to Consider* (Europae Archaeologiae Consilium/European Archaeological Council 2016).

'Archaeological geophysical survey uses non-intrusive and non-destructive techniques to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits, as far as reasonably possible, within a specified area or site on land, in the inter-tidal zone or underwater. Geophysical survey determines the presence of anomalies of archaeological potential through measurement of one or more physical properties of the subsurface.' (Standard and Guidance for Archaeological Geophysical Survey 2014).

The results of the survey will as far as possible inform on the presence or absence, character, extent and in some cases, apparent relative phasing of buried archaeology to inform a strategy to mitigate any threat to the archaeological resource.

1.5 SCOPE AND CONTEXT

The proposals are still at a masterplan stage, though are for a mixed-use development, including a care facility, hotel, supermarket and open spaces. This report is an initial assessment which seeks to feed into an iterative design process by highlighting the most archaeologically sensitive areas of the site, and indicating where mitigation measures including further archaeological work is likely to be needed to inform the design and layout of the development.

1.6 DEVELOPMENT PROPOSALS

The proposals are currently at masterplan stage with the final layout and design yet to be confirmed, but the current proposals are for a mixed-use development that comprises areas of residential, hospitality, commercial, and public open space, extending from the existing areas of development at the eastern edge of Carbis Bay. This would be supplemented by alterations to the road layout to the south, with the installation of a roundabout at the junction between the A3074 and Church Lane to address the anticipated increase in traffic. The main residential development of *c.*250-350 properties would be situated across the northern and western areas of the proposal site; a hotel and commercial building to the south-eastern corner; a supermarket with associated car park to the north of these; and a care facility to the north of the existing properties of Heatherbell Gardens. An area of open space is proposed to be situated to the south-east of Gonwin Manor.

1.7 CONSULTATION

This document is produced for consultation with relevant stakeholders as part of an iterative process. The Cornwall Historic Environment Team have been consulted on the scope of the assessment as part of the supply of HER data.

1.8 LIMITATIONS AND CAVEATS

The site visit was undertaken in September. The views and photographic evidence provided thus reflect a scenario in which vegetation was between the sparse state of winter coverage and its most verdant summer screening.

FIGURE 2: ILLUSTRATIVE LAYOUT FOR THE PROPOSED DEVELOPMENT (SUPPLIED BY THE CLIENT).

1.9 QUALITY ASSURANCE

This assessment has been undertaken by South West Archaeology Ltd. (SWARCH) is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (CIfA) and a member of the Federation of Archaeological Managers & Employers (FAME). SWARCH employees working on this project are appropriately qualified academically and commercially; SWARCH directors hold doctoral qualifications in archaeology and are Members (MCIfA) of the Chartered Institute for Archaeologists.

1.10 PREVIOUS WORK

Previous archaeological work in the local area has been relatively sparse, largely restricted to landscape scale surveys and assessments, but includes geophysical surveys at Laity Lane, Polwithen Drive and Tyringham Road which identified evidence for medieval and post-medieval agricultural activity; excavations at Polwithen Drive subsequently identifying Bronze Age flint and post-holes which suggest prehistoric settlement in the area.

2.0 ARCHAEOLOGICAL ASSESSMENT – DIRECT IMPACTS

2.1 STRUCTURE OF ASSESSMENT

For the purposes of this assessment, the *direct effect* of a development is taken to be its direct physical effect on the buried archaeological resource. In most instances the effect will be limited to the site itself. However, unlike designated heritage assets (see Section 4.0) the archaeological potential of a site, and the significance of that archaeology, must be quantified by means of a staged programme of archaeological investigation. Sections 2.2-2.5 examine the documentary, cartographic and archaeological background to the site; Section 3.6 summarises this information in order to determine the significance of the archaeology, the potential for harm, and outlines mitigation strategies as appropriate. Appendix 4 details the methodology employed to make this judgement.

2.2 DOCUMENTARY HISTORY

The site is located at the edge of the settlement of Carbis Bay, in the historic parish of *Uny Lelant* (now subsumed into St Ives) in the deanery and east division of the hundred of *Penwith* (Lysons 1814). Settlement at Carbis (*Carbous)*, from the Cornish *car-bons* meaning 'paved road, causeway' (Padel 1985) is first recorded in 1391, the name *Carbis Bay* coming into common use after the Great Western Railway named their station Carbis Bay following the construction of the St Erth to St Ives line in 1877 (Goacher 2015). Settlement at Gonwin (*Gonewyn*, *Gunwyn*), from the Cornish *goon* meaning 'downland, unenclosed pasture' or *guyn* 'white' (Padel 1985) is first recorded even earlier, in 1302 (MCO14561); the manor dating to at least the 17th century when it was owned by the Pawleys, subsequently passing to the Praeds. By the 19th century, however, the old manor had been taken down and two farm houses built on the site (Lysons 1814). Settlement at Trenoweth is first recorded as two sub-settlements *Trenewythbyghan* and *Trenewythmur* in 1324, both derived from the Cornish *tre* meaning 'estate, farmstead' and *noweth*, 'new', followed by either *byghan* ('small') or *meur* ('big, great').

At the time of the Tithe survey both farms at Gonwin and the landholdings of Trenoweth were under the ownership of Mrs Sophia Praed, mother and guardian of William Backwell Praed *esq.* (a minor), though the leases were divided: the eastern Gonwin farm to Captain John Hoskins; the western Gonwin farm to Andrew Hoskin; and the landholdings of Trenoweth to Sampson Howes. The proposal site comprises parts of seven plots divided between the farms at Gonwin and five plots associated with Trenoweth.

2.3 CARTOGRAPHIC DEVELOPMENT

There are a number of useful early maps available to this study, and whilst detail on these early maps is limited, they depict the early pattern of settlement. The first map to show any detail of the area is the 1748 Martyn Map of Cornwall (Figure 3) which provides a schematic layout of the county showing major settlements and estates. The settlements Boskerris, Carbis and Trenoweth are clearly shown, as are larger estates such as those of *Gonwin* and *Trevethoe* (which is recorded as the seat of *Prade esq*.), along with nearby farmhouses. Despite the lack of detail, the road layout does give a fairly good indication of the approximate site location.

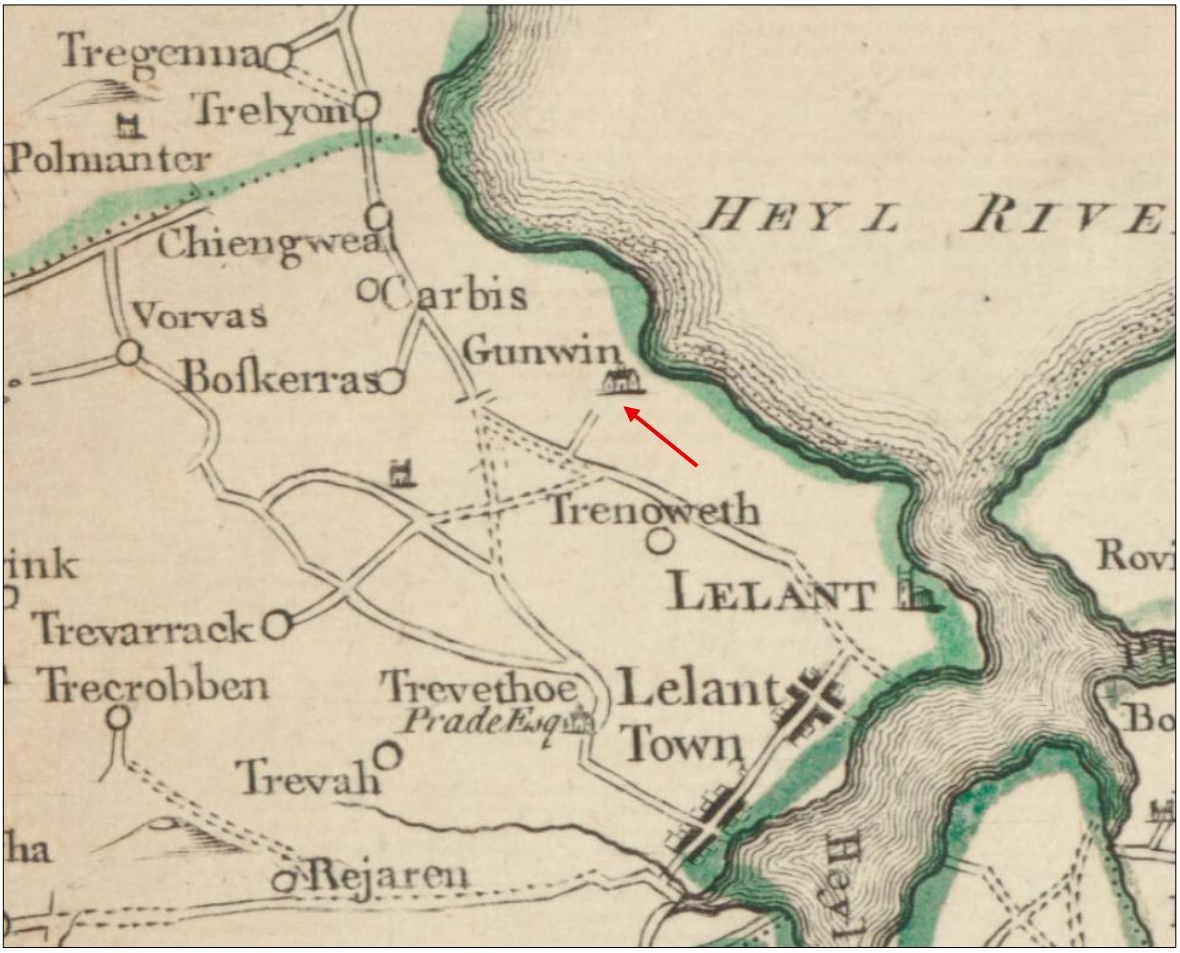


FIGURE 3: EXTRACT FROM THE MARTYN'S MAP OF CORNWALL, 1748; THE APPROXIMATE LOCATION OF THE SITE IS INDICATED (HARVARD UNIVERSITY MAP COLLECTION).

The first detailed cartographic source available to this study is the tithe map for the parish of Uny Lelant *c.*1839 (Figure 4) which provides a more accurate depiction of the settlements and land divisions of the area. Settlement at Carbis is depicted with rows of housing lining the road between *Higher* and *Lower Carbence*, much of what is now the village depicted as agricultural fields and isolated farms; whilst Gonwin is depicted as a cluster of buildings at the end of a track off the Lelant Road; Trenoweth a further cluster of buildings along the Lelant Road.

The proposal area is shown to comprise the greater portion of 13 plots surrounding Gonwin and to the east of Trenoweth. The accompanying apportionment lists the land was wholly owned by Mrs. Sophia Praed, Mother and Guardian of William Backwell Praed, esq. (a minor), who were recorded at the time as the proprietors of the nearby Trevethow Estate. The landholdings of Gonwin were split between two farms, that to the east (plot no. 863, *Park Darras* with burrows) leased to Captain John Hoskin and occupied by John Christophers; and to the west (plot nos. 803, *Higher Shelter Field*; 827, *Higher Cliff*; 840, *New Downs*; 850, *Shelter Field*; 851, *Long Stone Field*; and 852, *Town Field*) leased to and occupied by Andrew Hoskin. The remaining plots formed landholdings of Trenoweth (plot nos. 893, *Garden Close*; 894, *Mowhay*; 895, *Garden Behind the House*; 896, *Front Garden*; 908, House & Courtlage), leased to and occupied by Samson Howes. The fields at this time were all recorded as being a mix of arable (plot nos. 803, 840, 850, 851, 852, 863, 897 and 893), croft (plot no. 827), garden (895 and 896) or waste (part of plot nos. 851 and 863). Plot nos. 894, 908 are recorded as *Mowhay* or House and Courtlage with structures clearly depicted; further structures depicted between plot nos. 893/894 and within plot no. 895. The field names are all largely prosaic, reflecting states of cultivation, location and land-use. Of possible interest is a circular feature depicted in the south-western corner of plot no. 850 which may indicate the position of landscape feature such as a barrow or burrow (as is depicted and described within plot no. 863).

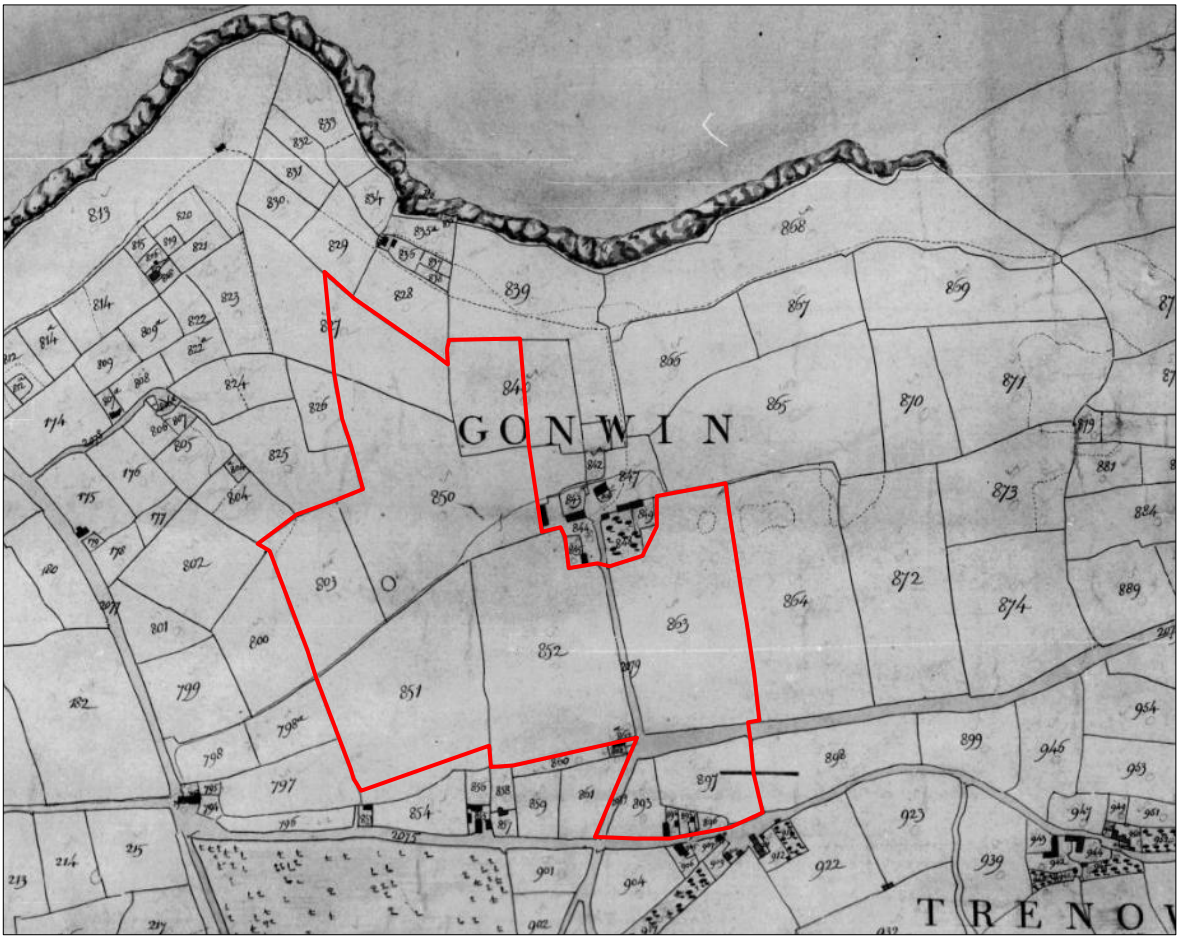


FIGURE 4: EXTRACT FROM THE UNY LELANT TITHE MAP OF *C.*1839; THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED (GENEALOGIST).

TABLE 1: EXTRACT FROM THE C.1839 UNY LELANT TITHE APPORTIONMENT (TNA). THE PLOTS WITHIN THE PROPOSAL AREA ARE SHADED.

Plot no.	Landowner	Occupier	Plot Name	Cultivation
Trenoweth (landowner Mrs Sophia Praed, Mother and Guardian of William Backwell Praed, A Minor)				
796	Joseph Murley (lessee)	Joseph Murley	Inclosure from Long Stone Common	Unimproved
853			Cottage and Garden	Garden
860			Long Slip	Waste
862			House and Courtlage	Homestead
862a			Garden	Garden
853			Cottage and Garden	Garden
860			Long Slip	Waste
862			House & Courtlage	Homestead
862a			Garden	Garden
854	George Perry (lessee)	William Champion and others	Inclosure from Long Stone Common	Unimproved
855			House of Three Dwellings and Courtlage	Homestead
856			Garden	Garden
857	Sampson Howes (lessee)	Sampson Howes	Garden and Timber House	Garden
858			Potatoe Plot	Arable
859			Higher Lane Field	Arable
861			Lower Lane Field	Arable
893			Garden Close	Arable
894			Mowhay	Homestead

895			Garden Behind the House	Garden
896			Front Garden	Garden
908			House and Courtlage	Homestead
Gonwin (landowner Mrs Sophia Praed, Mother and Guardian of William Backwell Praed, A Minor)				
797	Andrew Hoskin (lessee)	Andrew Hoskin	Down Field	Arable
798			Higher Way Field	Arable
798a			Lower Way Field	Arable
800			Higher Croft	Arable
802			Lower Croft	Arable
803			Higher Shelter Field	Arable
823			Waste on Towan	Waste
827			Higher Cliff	Croft
840			New Downs	Arable
843			Mowhay	Homestead
844			Farm House, Barn, Townplace and Courtlage	Homestead
845			Garden	Garden
850			Shelter Field	Arable
851			Long Stone Field	Arable
			Furze in Long Stone Field	Waste
852			Town Field	Arable
804	Herself	William Stephens	Turnpike Field	Croft
			Improvement in Turnpike Field	Arable
804a			Garden	Garden
824			Outside Field	Arable
			Croft in Outside Field	Croft
825			The Croft	Croft
826			Inside Field	Croft
828	Edward Richards (lessee)	Edward Richards	Higher Field	Arable
829			The Croft	Croft
830			Higher Cliff Improvement	Improved
839	Captain John Hoskin (lessee)	John Christophers	Venton Uny Ciff	Croft
842			Calves Meadow	Arable
846			Front Garden	Garden
847			Dwelling House, Front Yard and Outhouses	Homestead
848			Orchard	Orchard
849			Mowhay	Homestead
863			Park Darras	Arable
			Burrows in Park Darras	Waste
864			Park Ley	Arable
			Burrows in Park Ley	Waste
865			Higher Park Owls	Arable
866			Higher Park Owls	Arable
868			The Cliff	Furze and Rocks
897			Park Mead	Arable
898			Higher Field	Arable
Roads and Waste				
2079			Road from Gonwin to Lelant Church	

The First Edition Ordnance Survey map (six-inch), surveyed in 1877 but not published until 1887, (Figure 5) shows that significant change took place in the landscape around the proposal site in the

mid-19th century. Whilst settlement at Carbis can be seen to have grown (largely along the roadside), the most notable changes reflect the industrialisation of the landscape: the St Ives branch of the Great Western Railway can now be seen running along the northern edge of the proposal site; whilst the site of the ruins of an engine house at Charlestown demonstrate a mining presence, presumably associated with the mine workings at East Providence, which was in liquidation by 1871. Whilst the broad outline of the proposal area has remained the same, (limited) boundary rationalisation can be seen through the removal of plot no. 803 and boundary alterations between plot nos. 839 and 840. More substantial development can be seen through alterations to both of the farms at Gonwin: the Farm House within plot no. 844 seeing extensions and new ranges being built, along with the removal of the structure within plot no. 845. The dwelling within plot no. 847 has similarly seen extensions, though on a more limited scale, with demolition and reduction in the size of the outhouses having also occurred. The possible feature in the south-western corner of plot no. 850 also appears to have been lost.

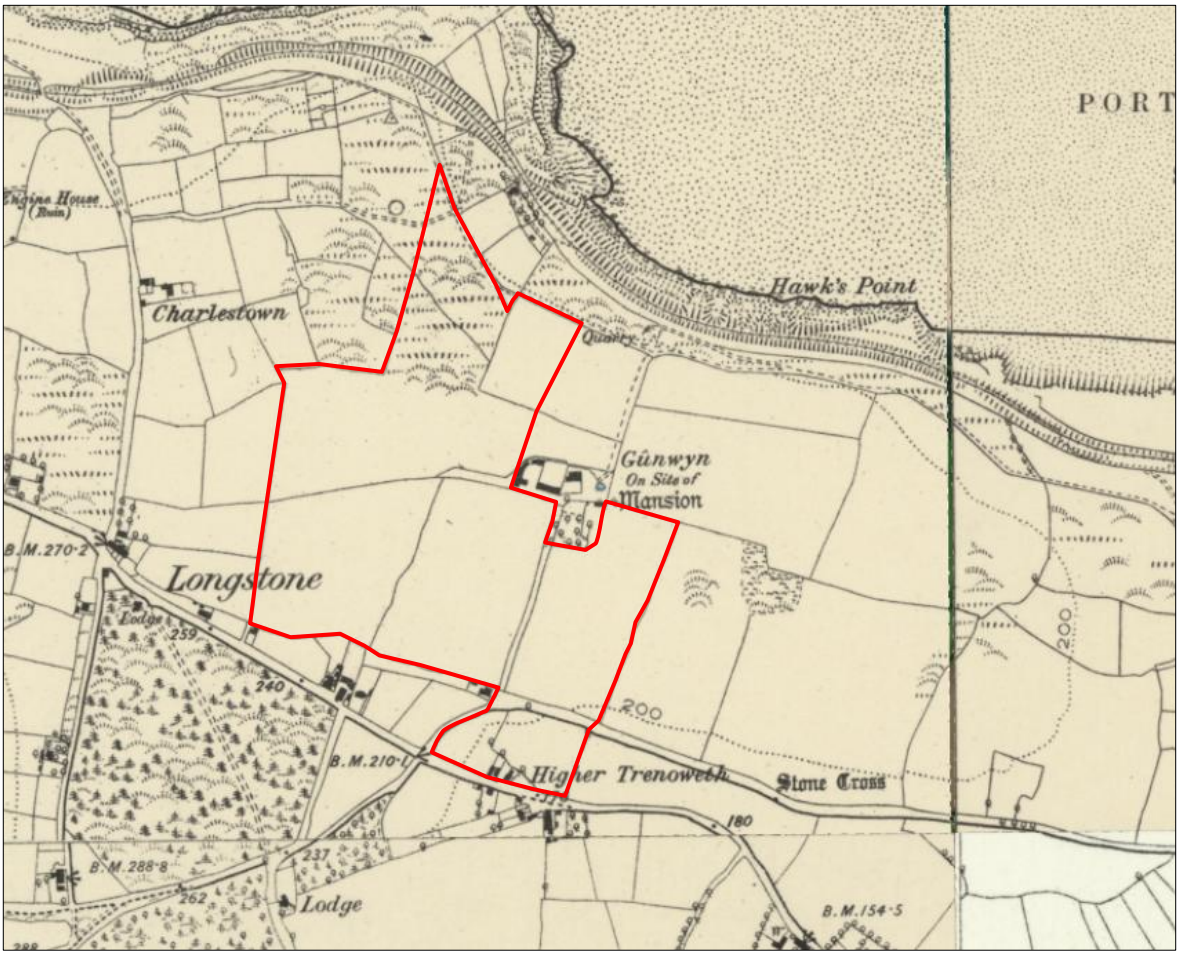


FIGURE 5: EXTRACT FROM THE 1877 (PUBLISHED 1887) ORDNANCE SURVEY FIRST EDITION 6-INCH MAP. THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED IN RED (NLS).

The 1908 Ordnance Survey Second Edition (six-inch) map (Figure 6) shows much the same landscape as the earlier First Edition map, though settlement can be seen to have expanded along the line of the railway and a number of mine shafts are depicted (several recorded as *old*). Within the proposal area, a new boundary creating the current edge of field F1 (see below) can be seen to have been added whilst the boundary between plot nos. 827 and 850 has been removed, new boundaries being added extending the eastern and southern boundaries of plot no. 840. Further development of the buildings at Gonwin can be seen with a northern range added to the eastern building within plot no. 844 and further extension to the dwelling within plot no. 847. To the south, several of the buildings at Higher Trenoweth can be seen to have been demolished with only one now being left within the proposal area.

Subsequent Ordnance Survey mapping (not depicted) demonstrates the continued growth of Carbis Bay which can be seen to border the western edge of the proposal area by 1963. The broad field layout as it exists today can be seen to be largely in place, with the exception of the boundary remaining along the southern edge of plot nos. 839/840; the final building within the proposal area at Higher Trenoweth having also been demolished.

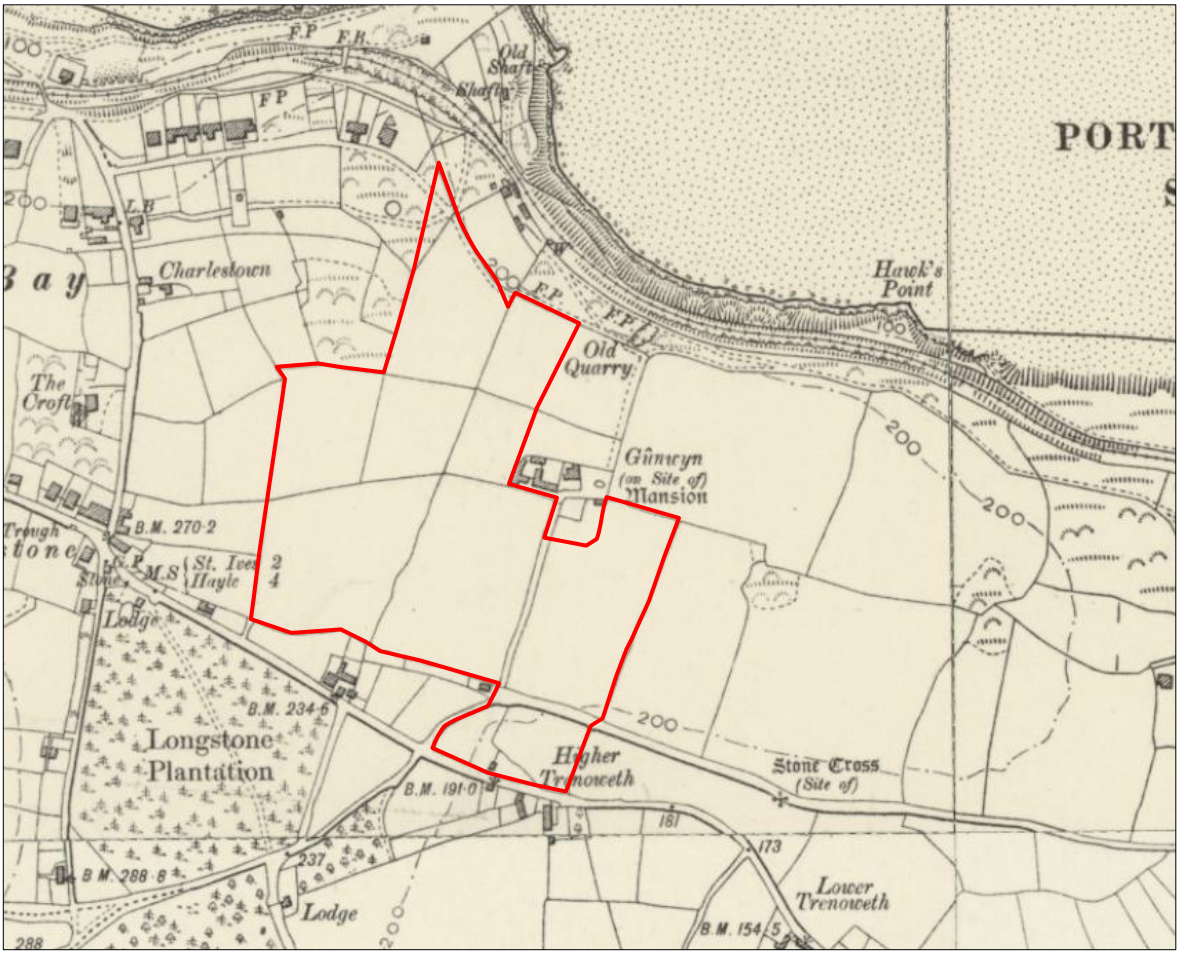


FIGURE 6: EXTRACT FROM THE 1908 (REVISED 1906) ORDNANCE SURVEY SECOND EDITION 6-INCH MAP. THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED IN RED (NLS).

2.4 AERIAL PHOTOGRAPHY AND SATELLITE IMAGERY

A review of the readily available satellite imagery indicates that only slight change occurred on the site during the later 20th century, the field layout in 2001 (Figure 7) appearing much as it had on the 1963 Ordnance Survey Mapping. The only development appears to be the construction of agricultural barns at the south-western corner of Gonwin Farm. The lines of some of the historic boundaries depicted on the 19th and 20th century mapping can be seen as cropmark features. By 2009 (Figure 8) the current field layout, along with the access route through plot no. 852, can be seen to be in place, whilst significant re-development of Gonwin Farm has occurred. Between 2004 and 2005 the agricultural barns to the south-west have been demolished, work beginning on re-modelling of the buildings from 2005, the current layout of buildings and landscaped gardens and pond being completed by 2009, suggesting that the property no longer functioned as a working farm.

FIGURE 7: AN AERIAL PHOTOGRAPH OF THE SITE FROM 2001 (©2025 INFOTERRA LTD. & BLUESKY). THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED (RED) ALONG WITH THE POSITIONS OF THE AGRICULTURAL BARNS (YELLOW), SURVIVING HISTORIC BOUNDARY (BLUE) AND CROPMARKS OF REMOVED HISTORIC BOUNDARIES (BLACK).

FIGURE 8: AN AERIAL PHOTOGRAPH OF THE SITE FROM 2009 (©2025 INFOTERRA LTD. & BLUESKY). THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED (RED) ALONG WITH THE POSITION OF THE ACCESS ROUTE THROUGH PLOT NO.852 (YELLOW).

2.5 LIDAR

LiDAR data is available at a survey interval of 0.50m for the site and for the surrounding area. Whilst a 25cm interval is preferable for the identification of archaeological features, especially within woodland, a 0.50m survey interval can be used, in particular for the identification of larger archaeological features. The LiDAR data is a 2021 data set. Digital Surface Model (DSM) (Figure 9) and Digital Terrain Model (DTM) (Figure 10) data sets have been analysed.

LiDAR imagery is very useful for identifying earthworks, even in fields that have been subject to ploughing. Many of the surrounding fields are shown marked by numerous parallel lines reflecting phases of historic and more recent agricultural practices. Fields boundaries and other features lost before 1840 are indistinct and broadly congruent with the existing field-system and do not appear to pre-date it. Agricultural activity can be seen across the proposal site, whilst significant disturbance can be seen in the south-eastern field, particularly surrounding the area of plot nos. 894-6. Only a small number of features can be seen: possible removed boundaries between plot nos. 840 and 850; whilst the informal trackway within plot no. 852 can also be seen.

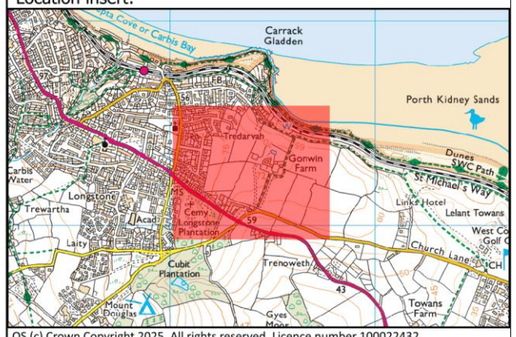
St Ives, Gonwin Farm
SWARCH Project no.: IGF25

LiDAR image of the proposal area

Image details: LiDAR DSM Multi-hillshade 315-35 z2 map. Contains Environment Agency data used under Open Governmnet Licence 3.0

Original scale: 1:3000 Drawn by: AN / PW

Location insert:



LEGEND

Site boundary

0 50 100 150 200 m

N

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

FIGURE 9: 0.50M LIDAR DSM FIRST RETURN DATA. PROCESSED USING QGIS 3.34 MULTI-HILLSHADE 315_35_Z2 SHOWING EXAMPLES OF AGRICULTURAL ACTIVITY (GREEN), HISTORIC BOUNDARIES (PURPLE) AND ACCESS TRACK (YELLOW). CONTAINS ENVIRONMENT AGENCY DATA USED UNDER OPEN GOVERNMENT LICENCE 3.0.

FIGURE 10: 0.50M LIDAR DTM FIRST RETURN DATA. PROCESSED USING QGIS 3.34 SLOPE_Z2 SHOWING EXAMPLES OF AGRICULTURAL ACTIVITY (GREEN), HISTORIC BOUNDARIES (PURPLE) AND ACCESS TRACK (YELLOW). CONTAINS ENVIRONMENT AGENCY DATA USED UNDER OPEN GOVERNMENT LICENCE 3.0.

2.6 ARCHAEOLOGICAL BACKGROUND

The site and the immediate surrounding area have been subject to limited change over the last two centuries, though Carbis Bay has grown significantly over this period, particularly following the construction of the St Ives branch of the Great Western Railway (and largely in the last 50 or so years), including to the boundary of the proposal site. Much of the surrounding area, however, has remained moderately unchanged, changes largely reflecting boundary removal and rationalisation. The site falls into an area that is classified in the Cornwall Historic Landscape Characterisation (HLC) as *post-medieval enclosed land*: 'land enclosed during the 17th, 18th and 19th centuries, usually from land that was previously upland rough ground and medieval commons'. This is bordered to the north and south by *communications*, beyond which are *coastal rough ground* and *post-medieval enclosed land*; whilst *recreational* land and *medieval farmland* lie to the east and *20th century settlement* the west.

The site has not been subject to any intrusive archaeological investigation, though much of the site was under consideration during a Forestry Commission project to create Selected Heritage Inventory for Natural England (SHINE) data in Low Sensitivity Areas (LSAs) (ECO6812; ECO7068).

Geophysical surveys off Tyringham Road to the east (ECO4710, Fleming 2016; ECO6256, Dean 2017) which identified evidence for medieval and post-medieval ridge and furrow cultivation, though the results of subsequent archaeological monitoring have not yet been publicly disseminated (ECO6821). Further geophysical surveys to the west at Laity Lane (ECO7132, Boyd & Webb 2023) and Polwithen Drive to the west largely only identifying features associated with phases of medieval and post-medieval field-systems (ECO5342, Bonvoisin & Webb 2019), though a subsequent watching brief at Polwithen Drive (ECO5786, Bampton 2021) identified Bronze Age flint and a pair of post-holes which suggest prehistoric settlement in the area. A nearby geophysical survey along Carninney Rise (ECO4985, Gater 2016) identified what was believed to be a lost round that is referred to in the Historic Environment Record (HER), though a subsequent watching brief (ECO5675, Morris 2021) concluded that they were in fact the remnants of medieval boundaries that were removed and rationalised during the post medieval period.

A 1km search radius has been considered in detail due to the prevalence of locally and nationally significant heritage assets within the wider landscape and for the potential impact of the proposed development on these assets; though reference is made to archaeological features and heritage assets within the wider landscape.

There are seven Listed Buildings (all Grade II) and one Scheduled Monument within 1km of the site. There are no Conservation Areas, Registered Battlefields, Registered Parks and Gardens, Scheduled Monuments or World Heritage Sits within 1km of the site.

The following is based on the entries in the Cornwall and Isles of Scilly Historic Environment Record (HER). It should be noted that this section of the report is based on the entries that are held by the Cornwall and Isles of Scilly Historic Environment Record (HER) which is partial and indicative rather than definitive and it is dependent on the frequency and the intensity of archaeological fieldwork in any one area.

2.6.1 PREHISTORIC 4000BC - AD43

There is no evidence for prehistoric activity on the site, though there is some evidence for prehistoric activity within the surrounding area. Much of the evidence recovered for earlier periods is often limited to the recovery of artefact scatters, with two such lithic scatters recorded to the north and east (MCO1204, MCO6694); a cut-down menhir recorded along Longstone Road (MCO7455). Aerial photography suggests the site of a possible barrow to the west-north-west (MCO50970), though association with nearby recorded mining activity may also be possible. It is not until the Iron Age that there is more conclusive evidence of settlement and activity, rectilinear

enclosures and surrounding field-systems are visible as cropmark features on aerial photographs to the south (MCO50978, MCO50980) and suggested as having prehistoric origins. Further possible evidence of prehistoric activity is suggested by field-names, including *White Burrow Croft* (barrow) (MCO3069), *Fuggoe* (fogou) (MCO6864), and *The Crilla* (hut circle) (MCO18862), though this has not been confirmed through intrusive archaeological investigation.

2.6.2 ROMANO-BRITISH AD43 - AD409

The is no evidence for Romano-British activity on the site. Whilst there is little evidence for the Romano-British occupation of the wider landscape, a Roman *statera* (MCO45410) was recovered during evaluation trenching at Tree Nook Farm, and it is likely that settlement of earlier periods continued.

2.6.3 MEDIEVAL AD410 – AD1540

Evidence for medieval activity on the site is largely derived from historic records, Gonwin (*Gonewyn*) being first recorded in 1302 (MCO14561), though the manor was first mentioned in 1516 and was subsequently demolished and replaced during the 1900s; the current house appearing to be entirely modern with no evidence for re-used building materials (MCO10804). Many of the surrounding settlements, including: Trevethoe (*Trevitho*, first recorded in 1150; MCO17913), Laity (*Lahitty*, first recorded in 1200; MCO15198), Boskerris (*Boskevreswartha*, 1314; MCO13520), Trenoweth (*Trenewythnyghan* and *Trenewythmur*, 1324; MCO17633), Carninney (*Karnenny*, 1327; MCO13827) and Carbis (*Carbous*, 1391; MCO13735) similarly have origins during this period. A series of crosses identified nearby (MCO5292, MCO5477, MCO6049) and a holy well (MCO7126) demonstrate further evidence for the period, lining routeways and indicating religious sites.

2.6.4 POST-MEDIEVAL AD1540 – AD1899

Many of the heritage assets that are recorded in the immediate vicinity of the site are post-medieval in date, most notably the St Ives Branch of the Great Western Railway (MCO63351), which was constructed in 1877 and brought mass market tourism to St Ives, softening the impact of the decline of fishing and mining in the area, whilst also changing the character of the settlement. These mines included: *Cupid* to the south (MCO11994), *East Providence* to the west-north-west (MCO12054) and *Hawk's Point* to the north (MCO12171), all of which were operational during the 19th century. Carbis Bay expanded during this period, a blacksmith's workshop (MCO9155), three methodist chapels (MCO32904; MCO32905; MCO52167) and a terrace of houses (MCO48448) all recorded from this period.

2.6.5 MODERN AD1900 – PRESENT AND UNKNOWN

There are no modern assets recorded on the site, though Gonwin Farm was the site of a military camp for Royal Artillery personnel who manned the light anti-aircraft bofor guns around Hayle Harbour (MCO42541); the strategic importance of the coastline during the Second World War further emphasised through the siting of a number of pillboxes and anti-aircraft batteries are recorded along the coastline to the north, many of which are extant but ruinous. A cold war bunker is also recorded c.935m to the west-south-west, though it has since been demolished and there is uncertainty with regards to its actual location (MCO56296).

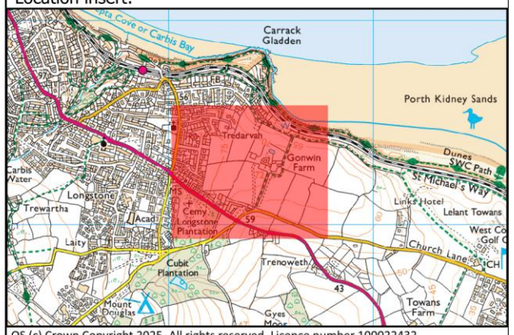
St Ives, Gonwin Farm
SWARCH Project no.: IGF25

Map of HER non-designated heritage assets

Image details: Non-designated assets within 1km of the proposal site

Original scale: 1:12,500 Drawn by: AN / PW

Location insert:



LEGEND

- 1km Radius
- Site boundary

HER Data

- Prehistoric
- Romano British
- Early Medieval
- Medieval
- Post Medieval
- Modern
- Unknown

0 100 200 300 400 500 m

N

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

FIGURE 11: MAP OF NON-DESIGNATED HERITAGE ASSETS WITHIN 1KM OF THE SITE AS RECORDED IN THE CORNWALL & ISLES OF SCILLY HISTORIC ENVIRONMENT RECORD. CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2025.

TABLE 2: TABLE OF NEARBY HERITAGE ASSETS (SOURCE: CORNWALL AND ISLES OF SCILLY HISTORIC ENVIRONMENT RECORD).

No.	Mon. No.	Name	Summary
1	MCO1204	PORTH KIDNEY - Prehistoric findspot	A flint flake was found on the west edge of Porth Kidney beach.
2	MCO3069	LOWER CARBENCE - Bronze Age barrow	The field-name 'White Burrow Croft' suggests the site of a barrow but there are no remains.
3	MCO6694	LELANT TOWANS - Prehistoric lithic scatter	
4	MCO6864	CHY AN GWEAL - Iron Age fogou, Romano British fogou	The name 'Fuggoe' suggests the site of a fogou but there are no remains.
5	MCO7455	LONGSTONE - Neolithic standing stone, Bronze Age standing stone	The remains of a menhir at Longstone 1.22m high, cut down from its original size. Granite.
6	MCO18862	BOSKERRIS WARTHA - Bronze Age hut circle, Iron Age hut circle	The field-name 'The Crilla' may indicate hut circles but there are no extant remains.
7	MCO50970	TREVETHOE - Prehistoric barrow, Post Medieval mound	A circular earth and stone mound is visible on aerial photographs.
8	MCO50978	TREVETHOE - Undated enclosure	Vague traces of a rectilinear enclosure of unceratin date, measuring 50m by 40m, is visible as a cropmark bank on aerial photographs.
9	MCO50980	TREVETHOE - Undated enclosure	An enclosure visible as a cropmark bank on aerial photographs.
10	MCO45410	TREE NOOK FARM - Romano British findspot	A Roman statera of bronze and iron nail found while trenching at Tree Nook Farm in or about 1962.
11	MCO13520	BOSKERRIS - Early Medieval settlement, Medieval settlement	The settlement of Boskerris is first recorded as "Boskevreswartha" in 1314.
12	MCO13520	BOSKERRIS - Early Medieval settlement, Medieval settlement	The settlement of Boskerris is first recorded as "Boskevreswartha" in 1314.
13	MCO14845	HENDRA - Early Medieval settlement, Medieval settlement	The settlement of Hendra is first recorded in 1235.
14	MCO17913	TREVETHOE - Early Medieval settlement, Medieval settlement	The settlement of Trevethoe is first recorded as "Trevitho" in 1150.
15	MCO5034	BOSKERRIS WARTHA - Medieval cross	A possible cross shaft is in use as a gatepost.
16	MCO5292	GONWIN - Medieval cross	A possible cross shaft in use as a gatepost, probably from a nearby field called 'Park an Grous'.
17	MCO5293	GONWIN - Medieval cross	The field-name 'Park an Grous' suggests the site of a cross. A cross shaft in use as a gatepost nearby may be associated with this name.
18	MCO5477	LELANT LANE - Medieval cross	The former position of a cross now in Lelant churchyard.
19	MCO5478	LELANT LANE - Medieval cross	A cross now standing on top of the hedge in a modern base.
20	MCO6048	TRENOWETH - Medieval cross	The field name 'Park Grouse' suggests the site of a cross but there are no remains.
21	MCO6049	TRENOWETH - Medieval cross	A cross recorded in 1820 and described in the 1880-90s is now missing.
22	MCO6135	TREVETHOE - Medieval cross	A cross head now in Lelant churchyard was removed from Rejarne in 1916 to the gardens at Trevethoe.
23	MCO7126	VENTON UNY - Medieval holy well	Venton Uny or Fairy Well, situated on the cliff. With associated clootie tree. A spring issues from a fissure in the rocks which has been enhanced to form a trough and channel. A square basin cut into the stone.
24	MCO10000	LAITY - Medieval chapel	The field-name 'Park Chapel' suggests the site of a chapel but there are no remains.
25	MCO10804	GONWIN - Medieval house	The site of a medieval house.
26	MCO13735	CARBIS - Medieval settlement	The settlement of Carbis is first recorded as "Carbous" in 1391.
27	MCO14561	GONWIN - Medieval settlement	Gonwin is first recorded in 1302.
28	MCO15198	LAITY - Medieval settlement	The settlement of Laity is first recorded as "Lahitty" in 1200.
29	MCO17633	TRENOWETH - Medieval settlement	The settlement of Trenoweth is first recorded as two sub-settlements, "Trenewythbyghan" and "Trenewythmur" in 1324.
30	MCO21163	LELANT - Medieval field system, Post Medieval field system	
31	MCO50966	LELANT TOWANS - Medieval field system	The remains of removed field boundaries are visible on aerial photographs.
32	MCO9155	LONGSTONE - Post Medieval blacksmiths workshop	
33	MCO11994	CUPID - Post Medieval mine	Cupid mine was in operation in 1820 and was connected with Hawk's Point mine
34	MCO12054	EAST PROVIDENCE - Post Medieval mine	
35	MCO12171	HAWKS POINT - Post Medieval mine	Hawk's Point mine was re-worked from 1849 to 1853, and resumed operations in the mid 1860's as Wheal Fanny Adela.
36	MCO28856	CARBIS BAY - Post Medieval huers hut	Hamilton Jenkin recorded the extant remains of a Huers Hut above Carbis Bay in 1938
37	MCO32904	CARBIS BAY - Post Medieval nonconformist chapel	Methodist chapel, probably approx 1900.
38	MCO32905	CARBIS BAY - Post Medieval nonconformist chapel	New Connexion Methodist chapel. Original chapel (now the Sunday school) circa mid C19, present chapel with datestone 1901.

No.	Mon. No.	Name	Summary
39	MCO48448	CARBIS BAY - Post Medieval terrace	Three terraced houses, Tregarthen, Godrevy and Chy-an-Kerris, Headland Road, Carbis Bay, designed by Silvanus Trevail.
40	MCO50969	TRENOWETH - Post Medieval mound	A circular mound of uncertain date and function is visible on aerial photographs.
41	MCO50976	LELANT TOWANS - Post Medieval spoil heap, Post Medieval pit	The remains of mining activities are visible on aerial photographs.
42	MCO50983	TREVETHOE - Post Medieval pit	Two circular pits are visible as a cropmark on aerial photographs.
43	MCO52167	CARBIS WATER - Post Medieval nonconformist chapel	A Wesleyan Methodist chapel is recorded on the 1st Edition 1880 OS Map.
44	MCO54218	CARBIS BAY - Late C19 milestone	A milestone survive on the NE side of the A3074 - PENZANCE 8, ST IVES 2 & HAYLE 4.
45	MCO56716	CARBIS BAY - C19 wreck	The remains of SS Vulture are visible at low tide on the eastern side of Carbis Bay.
46	MCO64275	CARBIS BAY - C18 house	Extant late C18 house. This was extended to the rear in the C19 and to the side (south) in the early C20
47	MCO65646	ST IVES - Post-medieval coffen stile	A post-medieval coffen stile in the parish of St Ives
48	MCO65647	ST IVES - Post-medieval coffen stile	A post-medieval coffen stile in the parish of St Ives
49	MCO65648	ST IVES - Post-medieval coffen stile	A post-medieval coffen stile in the parish of St Ives
50	MCO65649	ST IVES - Post-medieval coffen stile	A post-medieval coffen stile in the parish of St Ives
51	MCO69243	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
52	MCO70357	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
53	MCO70389	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
54	MCO70394	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
55	MCO70395	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
56	MCO70399	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
57	MCO70419	ST IVES - Post-medieval stile	A post-medieval stile in the parish of St Ives
58	MCO78542	BOSKERRIS WARTHA - C19 building	Ruined C19 building
59	MCO63351	ST IVES - Late C19 railway	Extant late C19 railway branch line, built in 1877, connecting at St Erth Station on the mainline. This brought mass market tourism to St Ives, softening the impact of the decline of both fishing and mining at this time and changing the character of the
60	MCO65204	CARRACK GLADDEN - Post Medieval building	Ruins of small building marked on both Ordnance Survey 1st Edition and 1st Revision are visible on recent Aerial Photographs
61	MCO65206	BOSKERRIS - Post Medieval field boundaries?	Three faint banks/breaks in slope visible on recent Lidar could be former field boundaries
62	MCO42351	PORTH KIDNEY - Modern pillbox	This was a Type 24 pillbox built to defend Porth Kidney Beach and is one of four situated here
63	MCO42352	PORTH KIDNEY - Modern pillbox	This is a Type 24 pillbox. It is unusual in that it has the ends of concrete blocks projecting at irregular intervals from the walls for camouflage purposes
64	MCO42353	PORTH KIDNEY - Modern pillbox	A pillbox with embrasures on the two sloping sides overlooking the beach in an easterly and westerly direction.
65	MCO42354	CARRICK GLADDEN CLIFFS - Modern pillbox	This is a Type 24 pillbox ruin situated halfway up the cliffs on the coastal footpath. It appears to have been camouflaged into the surrounding cliffs.
66	MCO42538	HAYLE HARBOUR - Modern anti aircraft battery	Site of a WW2 light anti aircraft battery
67	MCO42539	PORTH KIDNEY - Modern anti aircraft battery	Site of a WW2 Anti Aircraft Battery
68	MCO42540	GONWIN FARM - Modern anti aircraft battery	Possible site of light anti aircraft battery
69	MCO42541	GOWIN FARM - Modern military camp	
70	MCO43286	CARBIS BAY - Modern church	An Anglican church built in 1913.
71	MCO43377	PORTH KIDNEY - Modern pillbox	A recently discovered pillbox, buried in sand overlooking St Ives Bay.
72	MCO43378	PORTH KIDNEY - Modern pillbox	This pillbox is situated about 150 yards west of PRN 167326 and has been blown up since WW2.
73	MCO42929	CARBIS BAY - Modern pillbox	This is a square shaped pillbox with two embrasures in each of the two sides overlooking the beach.
74	MCO53466	LELANT TOWANS - Modern anti aircraft battery	Site of WW 2 light anti aircraft battery
75	MCO56296	ST IVES - Modern observation post	An ROC underground observation post also referred to as a nuclear post was constructed at this location in July 1962 and closed again in October 1968. There are no visible remains.
76	MCO65868	LELANT - Modern smithy	Site of smithy marked on Ordnance Survey historic maps
77	MCO66239	CARBIS BAY - Modern capstans	Location of capstans marked on Ordnance Survey 1st Revision map
78	MCO50989	MOUNT DOUGLAS - Undated enclosure	The vague outline of a narrow, rectilinear enclosure is visible as a cropmark ditch and bank on aerial photographs.
79	MCO56717	PORTH KIDNEY - Undated findspot, C18 ships mast?	A wooden post, possibly a ships mast, was reported on Porth Kidney beach after a storm.

TABLE 3: TABLE OF NEARBY DESIGNATED HERITAGE ASSETS (SOURCE: HISTORIC ENGLAND).

No.	ListEntry	Name	Grade
1	1136949	BOSKERRIS WOOLLAS	II
2	1143330	BOSKELLY	II
3	1143336	BOSKERRIS FARMHOUSE	II
4	1143337	TRENOWETH FARMHOUSE	II
5	1143402	STONE CROSS AT ENTRANCE TO LINKS HOTEL	II
6	1327780	The Count House and Providence House	II
7	1327816	NORTH LODGE AT TREVETHOE HOUSE	II
8	1018572	Wayside cross in Lelant Lane, 670m north west of St Uny's Church	SAM

TABLE 4: TABLE OF NEARBY HERITAGE INTERVENTIONS (SOURCE: CORNWALL & SCILLIES HER).

No.	Event No.	Name	Event Type
1	ECO1859	Porthminster	Management Recommendations; Site Survey
2	ECO4297	Cubit Lodge Heritage Impact Assessment	Assessment
3	ECO4450	Carninney, St Ives, Cornwall	Assessment
4	ECO4638	Lelant, Cornwall	Geophysical Survey
5	ECO4710	Tyringham Road, Lelant, Cornwall	
6	ECO4985	Carninney Rise, St Ives	Geophysical Survey
7	ECO5342	Land at Polwithen Drive	Assessment; Geophysical Survey
8	ECO5416	Land south of Poltreen Close	
9	ECO5469	The Cottage Hotel, Carbis Bay, St Ives, Cornwall: Archaeological Watching Brief Report	Watching Brief
10	ECO5675	Carninney Rise	Field Observation
11	ECO5786	Land at Polwithen Drive	Watching Brief
12	ECO6812	Forestry Commission Project K: Phase 1: West Cornwall	Assessment
13	ECO6821	Tyringham Road, Lelant, Cornwall	Watching Brief
14	ECO7068	Forestry Commission Project K: Rapid Area Assessment, 2023-2024	Assessment
15	ECO7132	Land off Laity Lane	Assessment; Geophysical Survey

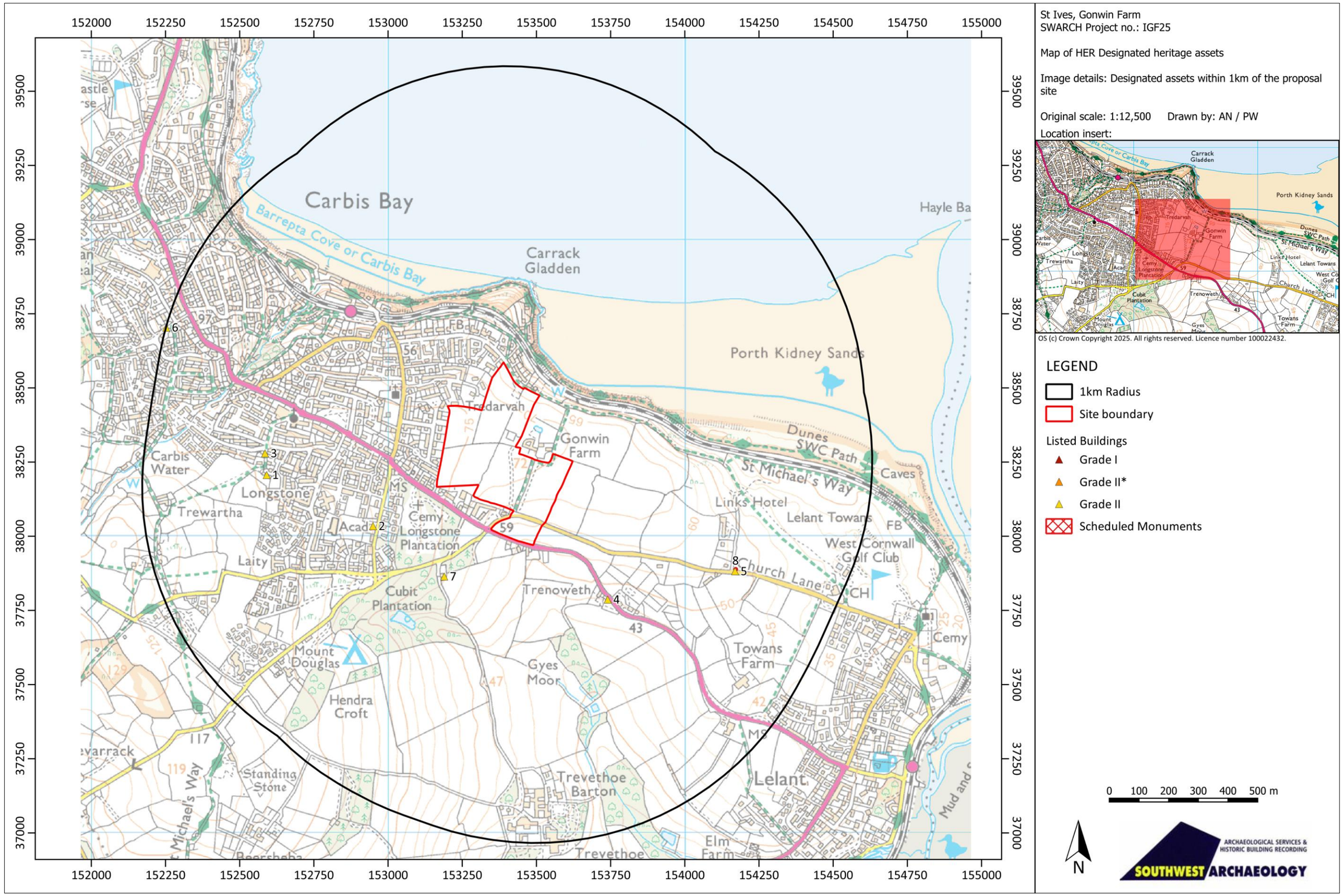


FIGURE 12: MAP OF DESIGNATED HERITAGE ASSETS WITHIN 1KM OF THE SITE AS RECORDED IN THE NATIONAL HERITAGE LIST FOR ENGLAND (NHLE) © HISTORIC ENGLAND 2025. CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2025.

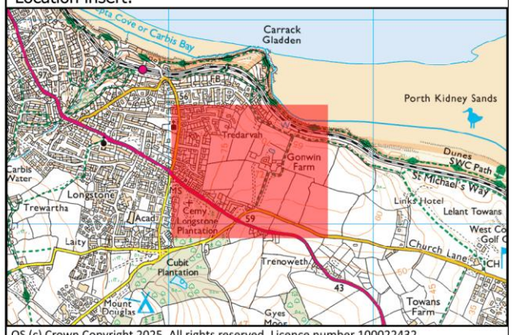
St Ives, Gonwin Farm
SWARCH Project no.: IGF25

Map of HER heritage interventions

Image details: Heritage interventions within 1km of the proposal site

Original scale: 1:12,500 Drawn by: AN / PW

Location insert:



LEGEND

- 1km Radius
- Site boundary
- HER Events

0 100 200 300 400 500 m

N

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

FIGURE 13: MAP OF HERITAGE INTERVENTIONS WITHIN 1KM OF THE SITE AS RECORDED IN THE NATIONAL HERITAGE LIST FOR ENGLAND (NHLE) © HISTORIC ENGLAND 2025. CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2025.

3.0 SITE INSPECTION AND WALKOVER SURVEY

3.1 INTRODUCTION

The site comprises seven sub-rectangular to irregular fields surrounding Gonwin Farm and to the east of modern residential development at Carbis Bay, overlooking the North Cornish Coast at St Ives Bay. All of the fields contained scrub/grass (Table 5). No earthwork features were visible (Figure 14), though historic and current agricultural use of the land since at least the medieval period is likely to have limited the survival of earthwork features within the fields. Supporting and additional photographic evidence of the walkover survey can be found in Appendix 1.

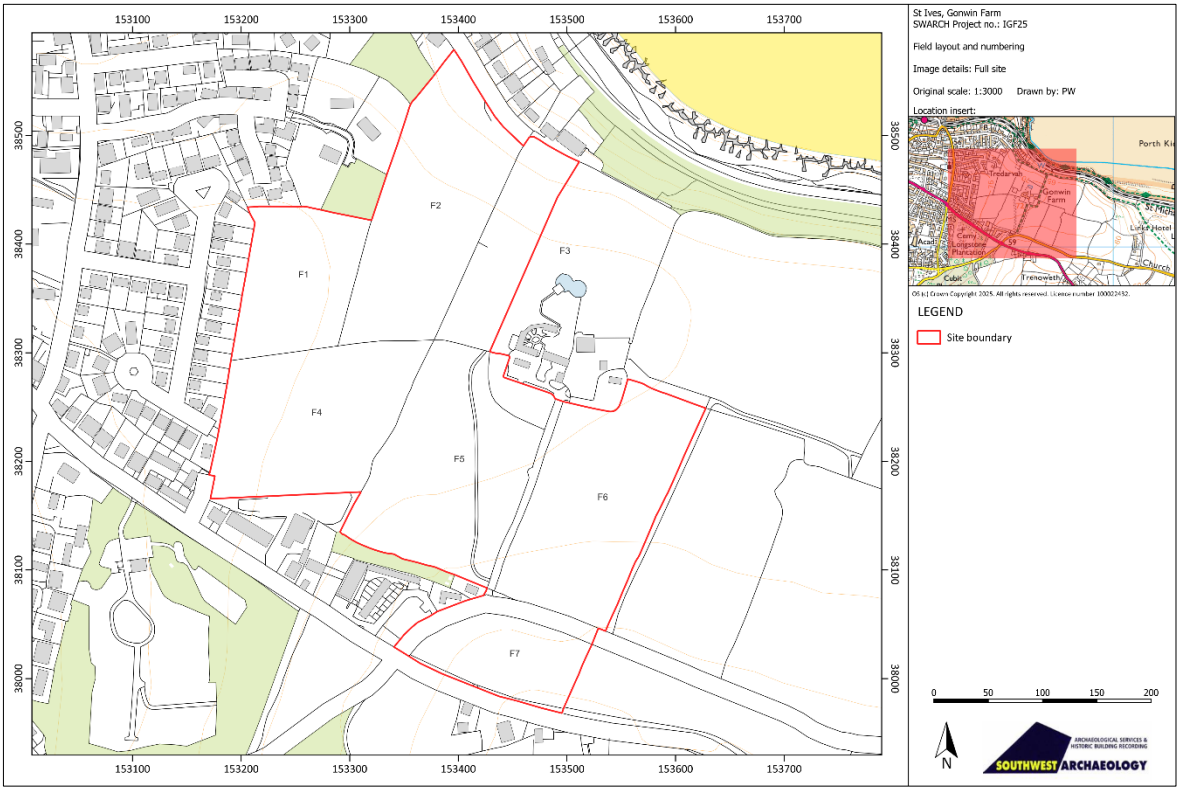


FIGURE 14: SITE PLAN SHOWING FIELD LAYOUT AND NUMBERING.

TABLE 5: STATE OF CULTIVATION AND FEATURES IDENTIFIED DURING THE WALKOVER SURVEY.

Field	Current Cultivation	Comments
F1	Scrub/grass	No earthwork features. Whilst flattened, length of grass up to knee height. Slopes gradually down to the north/north-east.
F2	Scrub/grass	No earthwork features. Whilst flattened, length of grass up to knee height. Slopes gradually down to the north/north-east, though more steeply at the northern end.
F3	Scrub/grass	No earthwork features. Whilst flattened, length of grass up to knee height. An enclosed dog paddock is located in the south-western corner. Slopes gradually down to the north/north-east, though more steeply at the northern end.
F4	Scrub/grass	No earthwork features. Whilst flattened, length of grass up to knee height. Slopes gradually down to the north/north-east, though more steeply at the northern end.
F5	Scrub/grass	No earthwork features. Whilst flattened, length of grass up to knee height. Slopes gradually down to the north/north-east, though more steeply at the northern end.
F6	Crop/grass	No earthwork features. Crop short. Slopes gently down to the south and south-east.

3.1.1 FIELD F1

A sub-rectangular field (*c.*1.33ha) of scrub/grass orientated approximately north to south. The ground slopes gradually down to the north and north-east. It is bordered to the north and west by residential properties; to the east by field F2; and to the south by field F4. The field boundaries all comprise overgrown, sparsely tree-lined stone-faced hedgebanks.

No earthwork features were visible within this field.

3.1.2 FIELD F2

A sub-rectangular field (*c.*2.44ha) of scrub/grass orientated approximately north-north-east to south-south-west. The ground slopes moderately down to the north and north-east, more steeply so at the northern end. It is bordered to the north and north-west by residential properties; to the east by field F3; to the south by field F4; and to the south-west by field F1. Where they were identifiable the field boundaries comprise overgrown, sparsely tree-lined stone-faced hedgebanks.

No earthwork features were visible within this field.

3.1.3 FIELD F3

An irregular to sub-rectangular field (*c.*1.93ha) of scrub/grass orientated approximately north-north-west to south-south-east. The ground slopes moderately down to the north and north-east, more steeply at its northern end. It is bordered to the north residential properties and areas of scrub; to the east by agricultural land; to the south by manicured lawns, landscaping features and the buildings of Gonwin Manor; to the south by field F5; and to the west by field F2. Where identifiable, the field boundaries comprise overgrown sparsely tree-lined stone-faced hedgebanks.

An enclosed (by post and wire fencing) dog exercise paddock is located in the south-western corner of the field.

No earthwork features were visible within this field.

FIGURE 15: FIELD F1, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-EAST.

FIGURE 16: FIELD F2, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE SOUTH-WEST.

FIGURE 17: FIELD F3, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-WEST.

3.1.4 FIELD F4

A sub-rectangular field (*c.*2.17ha) of scrub/grass orientated approximately east-north-east to west--south-west. The ground slopes moderately down to the east. It is bordered to the north by fields F1 and F2; to the east by field F5; and to the south and west by residential properties. The field boundaries to the north, east and west comprise overgrown, sparsely tree-lined stone-faced hedgebanks; that to the south formed by an overgrown mound.

No earthwork features were visible within this field.

FIGURE 18: FIELD F4, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-EAST.

3.1.5 FIELD F5

A sub-rectangular field (*c.*2.64ha) of scrub/grass orientated approximately north-north-east to south-south-west. The ground slopes moderately steeply down to the south and south-east. It is bordered to the north by Gonwin Manor; to the east by the access lane to Gonwin Manor with field F6 beyond; to the south by residential properties and garden; and to the west by field F4. The field boundaries comprise overgrown, sparsely tree-lined stone-faced hedgebanks.

A single earthwork feature, a linear informal access track running from the south-eastern corner to the middle of the northern boundary, was identified within this field.

3.1.6 FIELD F6

A sub-rectangular field (*c.*2.42ha) of grass crop orientated approximately north-north-east to south-south-west. The ground slopes moderately down to the south and south-east. It is bordered to the north and east by agricultural land; to the south by Church Lane with field F7 beyond; and to the west by a public footpath and the access lane to Gonwin Manor with field F5 beyond. The field boundaries comprise overgrown, sparsely tree-lined stone-faced hedgebanks.

No earthwork features were visible within this field.

FIGURE 19: FIELD F5, VIEW ALONG THE ACCESS TRACK ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH.

FIGURE 20: FIELD F6, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-EAST.

3.1.7 FIELD F7

A sub-rectangular field (*c.*0.95ha) of scrub orientated approximately west-north-west to east-south-east. The ground slopes moderately down to the south-east. It is bordered to the north by Church Lane with field F5 beyond; to the east by agricultural land; to the south by the A3074 with residential properties and agricultural land beyond; and to the west by Church Lane with residential properties beyond. Where identifiable, the field boundaries comprise overgrown, sparsely tree-lined stone-faced hedgebanks.

No earthwork features were visible within this field.

This field was not surveyable as it was too overgrown.

FIGURE 21: FIELD F7, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-NORTH-EAST.

4.0 GEOPHYSICAL SURVEY

4.1 INTRODUCTION

An area of *c.*13.50ha (*c.*10ha surveyed) was the subject of a magnetometry (gradiometer) survey to inform management plans and future use of the land. The purpose of this survey was to identify and record magnetic anomalies within the site boundary. While identified anomalies may relate to archaeological deposits and features, the dimensions of the 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 in September 2025 by A. Nock and P. Webb; the survey data was processed by P. Webb. Supporting photographic evidence from the site inspection can be seen in Appendix 1; detailed survey data in Appendix 2; and additional graphic images of the survey data and numbered grid locations can be found in Appendix 3.

4.2 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: *EAC Guidelines for the use of geophysics in Archaeology: Questions to Ask and Points to Consider* (Europae Archaeologiae Consilium/European Archaeological Council 2016) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 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- and set out using a Leica CS15 GNSS Rover GPS. The data was downloaded onto *Grad601 Version 3.16* and processed using *TerraSurveyor64 Version 4.1.13.0*. The primary data plots and analytical tools used in this analysis were *Shade* and *Metadata*. The details of the data processing are as follows:

TABLE 6: SURVEY DETAILS

Metadata:	Max (nT)	Min (nT)	Standard Deviation (nT)	Mean (nT)	Median (nT)
F1: Area surveyed (ha) 1.0516					
Raw Values:	97.96	-100.00	6.77	-0.13	-0.15
Adjusted Values:	103.32	-100.32	6.73	0.14	0.00
Values post-clipping at 1 SD:	6.87	-6.58	2.14	0.04	0.00
F2: Area surveyed (ha) 1.9048					
Raw Values:	98.63	-100.00	5.81	0.90	0.71
Adjusted Values:	105.91	-102.62	5.52	0.09	0.00
Values post-clipping at 1 SD:	5.61	-5.43	1.57	0.03	0.00
F3: Area surveyed (ha) 1.5987					
Raw Values:	97.90	-100.00	10.52	-1.14	-0.92
Adjusted Values:	116.72	-122.47	9.41	-0.02	0.00
Values post-clipping at 1 SD:	9.39	-9.42	4.69	0.09	0.00
F4: Area surveyed (ha) 1.5781					
Raw values:	97.92	-100.00	3.21	1.43	1.38
Adjusted values:	100.65	-98.62	3.06	0.08	0.00
Values post-clipping at 1 SD:	3.14	-2.98	1.41	0.03	0.00
F5: Area surveyed (ha) 1.814					
Raw values:	98.59	-100.00	6.11	0.89	0.86
Adjusted values:	121.42	-101.78	5.57	0.07	0.00
Values post-clipping at 1 SD:	5.64	-5.50	2.84	0.00	0.00
F6: Area surveyed (ha) 1.9509					
Raw values:	98.60	-100.00	4.54	0.63	0.50
Adjusted values:	98.50	-101.47	4.42	0.14	0.00
Values post-clipping at 1 SD:	4.56	-4.27	2.55	0.05	0.00

Processes:
Clip +/- 1SD; removes extreme data point values.
DeStripe all traverses, median; used to equalise underlying differences between grids (potentially caused by instrument drift or orientation, directional effects inherent in magnetic instrument, or differences in instrument set up during survey e.g. using two gradiometers).
DeStagger selected grids, all traverses out- and inbound by 0.25m to 0.50m reduces staggering effects within data derived from zig-zag collection method.

4.3 RESULTS

Table 7 with the accompanying Figures 22-35 show the analyses and interpretation of the geophysical survey data.

TABLE 7: INTERPRETATION OF GRADIOMETER SURVEY DATA.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
Field F1				
1	Weak to moderate positive & negative, probable	Linear	Historic boundary (double ditch & bank)	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately north-north-east to south-south-west. Weaker responses may indicate areas of shallow survival. Depicted on historic mapping. Responses of between -6.20nT to -0.01nT and +0.01nT to +15.22nT.
2	Moderate positive, possible	Linear	Double ditch	Indicative of cut and infilled features such as ditches. Orientated approximately west-north-west to east-south-east. Weaker responses may indicate only shallow survival. Responses of between +0.14nT and +23.08nT.
3	Weak positive, possible	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately west-north-west to east-south-east. Weaker responses may indicate only shallow survival. Responses of between +0.37nT and +8.31nT.
4	Weak to strong positive, possible	Discrete	Pit or tree-throw	Indicative of cut and infilled discrete features such as pits. Weaker responses may indicate natural features such as tree-throws. Responses of between +0.37nT and +20.95nT.
5	Very strong bipolar (mixed response), probable	Linear	Modern service	Indicative of a buried modern service. Orientated approximately east-north-east to west-south-west. Responses of between -98.23nT and +102.19nT.
	Weak positive & negative, possible	Linear	Agricultural activity	Linear striations covering the field with regularity. Indicative of ploughing. Weaker mixed positive and negative responses may suggest shallow ploughing. Orientated between approximately north-east to south-west and north-west to south-east. Responses of between -5.73nT and +9.68nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -29.30nT and +40.72nT.
	Strong dipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between -100.01nT and +98.51nT.
Field F2				
6	Weak positive, possible	Linear	Historic boundary (ditch)	Indicative of cut and infilled features such as ditches. Orientated approximately north-west to south-east. Depicted on historic mapping. Responses of between +0.44nT and +4.88nT.
7	Weak positive & negative, probable	Linear	Historic boundary (double ditch & bank)	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately west-north-west to east-south-east. Weaker responses may indicate only shallow survival. Depicted on historic mapping Responses of between -6.39nT to -0.03nT and +0.03nT to +10.95nT.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
8	Weak positive & negative, probable	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately north-east to south-west. Responses of between -9.29nT to -0.05nT and +0.11nT to +4.38nT.
9	Weak positive & negative, probable	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately north-north-east to south-south-west. Weaker responses may indicate only shallow survival. Responses of between -0.02nT to -3.52nT and +0.16nT to +8.99nT.
10	Weak positive, probable	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately west-north-west to east-south-east. Weaker responses may indicate only shallow survival. Responses of between +0.10nT and +5.60nT.
11	Weak positive, probable	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately west-north-west to east-south-east. Weaker responses may indicate only shallow survival. Responses of between +0.18nT and +5.72nT.
12	Weak positive, possible	Linear (sub-rectangular)	Ditch (enclosure)	Indicative of cut and infilled features such as ditches forming one end of a possible rectangular enclosure. Orientated approximately north-east to south-west. Weaker responses may indicate shallow and partial survival. Reponses of between +0.06nT and +6.35nT.
13	Weak positive, possible	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately north-west to south-east. Possible return at south-eastern ends suggests forms possible enclosure. Weaker responses may indicate only shallow and partial survival. Responses of between +0.05nT and +5.58nT.
14	Weak positive, possible	Penannular	Ring-ditch / drip-gully	Indicative of cut and infilled features such as a ring-ditch/drip-gully indicating possible prehistoric settlement activity. Weaker responses may indicate only shallow and partial survival. Responses of between +0.05nT and +4.04nT.
15	Weak positive, possible	Linear	Double ditch	Indicative of cut and infilled features such as ditches. Orientated approximately east to west. Weaker responses may indicate only shallow and partial survival. Responses of between +0.11nT and +3.94nT.
16	Very weak positive, possible	Linear to sinuous	Ditch or geological feature	Indicative of cut and infilled features such as ditches. Orientated approximately north-east to south-west. Weaker responses may indicate only partial survival or natural/geological origin. Responses of between +0.05nT and +3.22nT.
17	Weak to strong positive, possible	Discrete	Pit or tree-throw	Indicative of cut and infilled discrete features such as pits. Weaker responses may indicate natural features such as tree-throws. Responses of between +0.30nT and +36.83nT.
18	Very strong bipolar (mixed response), probable	Linear	Modern service	Indicative of a buried modern service. Orientated approximately east-north-east to west-south-west. Responses of between -97.03nT and +101.56nT.
19	Very strong bipolar (mixed response), probable	Rectangular	Disturbed ground	Indicative of disturbed ground. Rectangular form suggesting an area of stoned ground/hardstanding used as a yard. Orientated approximately north-east to south-west. Responses of between -102.61nT and +101.23nT.
	Weak positive & negative, possible	Linear	Agricultural activity	Linear striations covering the field with regularity. Indicative of ploughing. Weaker mixed positive and negative responses may suggest shallow ploughing. Orientated between approximately north-east to south-west and north-west to south-east. Responses of between -6.98nT and +7.02nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -17.24nT and +23.55nT.
	Strong dipolar	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
	(mixed response)			-102.28nT and +99.53nT.
Field F3				
20	Moderate to strong positive & negative, probable	Linear	Historic boundary (double ditch & bank)	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated between approximately north-north-east to south-south-west and north-west to south-east. Depicted on historic mapping. Responses of between -28.55nT to -0.24nT and +0.26nT to +36.46nT.
21	Moderate to strong positive & negative, probable	Linear	Historic boundary (double ditch & bank)	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material. Orientated approximately north-west to south-east. Depicted on historic mapping. Responses of between -10.45nT to -0.02nT and +0.04nT to +22.69nT.
22	Strong positive & negative, probable	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately north-west to south-east. Responses of between -44.67nT to -0.33nT and +0.35nT to +26.56nT.
23	Strong positive & negative, probable	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated between approximately north-north-east to south-south-west and north-west to south-east. Weaker responses may indicate only shallow survival. Responses of between -21.26nT to -0.04nT and +0.24nT to +35.03nT.
24	Weak to moderate positive, possible	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately north-west to south-east. Weaker responses may indicate only shallow survival. Responses of between +0.05nT and +13.29nT.
25	Strong positive & negative, probable	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately north-west to south-east. Responses of between -14.92nT to -0.07nT and +0.30nT to +34.66nT.
26	Strong positive & negative, probable	Linear (sub-rectangular)	Ditch & bank (enclosure)	Indicative of cut and infilled features such as ditches with associated flanking relict banked/compacted material. Appears to form corner of a rectangular enclosure. Orientated approximately north-north-east to south-south-west. Responses of between -19.97nT to -0.28nT and +0.26nT to +37.81nT.
27	Weak to moderate positive & negative, possible	Linear to sinuous	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately north-east to south-west. Responses of between -18.66nT to -0.44nT and +0.54nT to +18.06nT.
28	Weak positive, possible	Linear	Ditch or agricultural activity	Indicative of cut and infilled features such as ditches. Orientated approximately north-north-east to south-south-west. Weaker responses may indicate only shallow survival or deeper-cut examples of agricultural activity. Responses of between +0.05nT and +7.87nT.
29	Weak positive & negative, possible	Linear	Agricultural activity or ditch & bank	Indicative of deeper-cut examples of agricultural activity or possible shallow survival of ditch features. Orientated approximately north-north-east to south-south-west. Responses of between -17.57nT to -0.71nT and +0.03nT to +16.52nT.
30	Weak to strong positive, possible	Discrete	Pit or tree-throw	Indicative of cut and infilled discrete features such as pits. Weaker responses may indicate natural features such as tree-throws. Responses of between +0.32nT and +60.13nT.
31	Very strong bipolar (mixed response), probable	Linear	Modern service	Indicative of a buried modern service. Orientated approximately east to west. Responses of between -122.46nT and +102.26nT.
	Weak positive & negative, possible	Linear	Agricultural activity	Linear striations covering the field with regularity. Indicative of ploughing. Weaker mixed positive and negative responses may suggest shallow ploughing.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
				Orientated between approximately north-north-east to south-south-west and north-west to south-east. Responses of between -6.94nT and +15.13nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -103.44nT and +97.97nT.
	Strong dipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between -93.23nT and +111.63nT.
Field F4				
32	Very weak positive, possible	Linear	Double ditch or agricultural activity	Indicative of cut and infilled features such as ditches. Orientated approximately north-east to south-west. Weaker responses may indicate only shallow and partial survival or deeper-cut examples of agricultural activity. Responses of between +0.13nT and +6.43nT.
33	Very weak positive, possible	Linear	Double ditch or agricultural activity	Indicative of cut and infilled features such as ditches. Orientated approximately north-north-east to south-south-west. Weaker responses may indicate only shallow and partial survival or deeper-cut examples of agricultural activity. Responses of between +0.02nT and +4.37nT.
34	Weak to very weak positive, possible	Linear	Ditch or agricultural activity	Indicative of cut and infilled features such as ditches. Orientated approximately north-west to south-east. Weaker responses may indicate on shallow and partial survival or deeper-cut examples of agricultural activity. Responses of between +0.21nT and +7.33nT.
35	Weak positive, possible	Curvilinear	Ditch or agricultural activity	Indicative of cut and infilled features such as ditches. Orientated approximately east to west. Weaker responses may indicate only shallow and partial survival or deeper-cut examples of agricultural activity. Responses of between +0.12nT and +7.26nT.
36	Weak positive & negative, possible	Linear	Agricultural activity or ditch & bank	Indicative of deeper-cut examples of agricultural activity or possible shallow survival of ditch features. Orientated between approximately north-east to south-west and north-west to south-east. Responses of between -3.35nT to -0.17nT and +0.31nT to +9.82nT.
37	Weak to strong positive, possible	Discrete	Pit or tree-throw	Indicative of cut and infilled discrete features such as pits. Weaker responses may indicate natural features such as tree-throws. Responses of between +0.89nT and +29.55nT.
	Weak positive & negative, possible	Linear	Agricultural activity	Linear striations covering the field with regularity. Indicative of ploughing. Weaker mixed positive and negative responses may suggest shallow ploughing. Orientated between approximately north-east to south-west and north-west to south-east. Responses of between -5.79nT and +6.29nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -97.18nT and +100.53nT.
	Strong dipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between -66.91nT and +96.69nT.
Field F5				
38	Weak positive, possible	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately west-north-west to east-south-east. Weaker responses may indicate only shallow and partial survival. Responses of between +0.18nT and +10.78nT.
39	Weak to moderate positive & negative, probable	Linear	Ditch & bank	Indicative of cut and infilled features such as ditches with associated flanking relict banked/compacted material. Orientated approximately north-west to south-east. Responses of between -11.82nT to -0.10nT and +0.07nT to +19.18nT.
40	Weak positive & negative, possible	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked//compacted material typical of traditional hedgebank construction. Orientated approximately north-north-east to south-south-west. Weaker responses may indicate only shallow and partial survival. Responses of between -10.37nT to -0.04nT and +0.15nT to +6.60nT.
41	Weak positive & negative, possible	Linear	Agricultural activity or ditch &	Indicative of deeper-cut examples of agricultural activity or possible shallow survival of ditch features. Orientated

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
			bank	approximately north-north-east to south-south-west. Responses of between -10.06nT to -0.02nT and +0.10nT to +9.04nT.
42	Very strong bipolar (mixed response), probable	Linear	Track	Indicative of disturbed ground. Southern end shows signs of stoned ground/hardcore. Orientated approximately north-north-west to south-south-east. Responses of between -99.65nT to -0.07nT and +0.09nT to +121.42nT.
43	Weak to strong positive, possible	Discrete	Pit or tree-throw	Indicative of cut and infilled features such as pits. Weaker responses may indicate natural features such as tree-throws. Responses of between +0.54nT and +53.91nT.
	Weak positive & negative, possible	Linear	Agricultural activity	Linear striations covering the field with regularity. Indicative of ploughing. Weaker mixed positive and negative responses may suggest shallow ploughing. Orientated between approximately north-north-east to south-south-west and north-west to south-east. Responses of between -9.47nT and +8.05nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -98.75nT and +94.49nT.
	Strong dipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between -101.78nT and +99.50nT.
Field F6				
44	Moderate positive & negative, probable	Linear	Historic boundary (double ditch)	Indicative of cut and infilled features such as ditches. Orientated between approximately north-north-east to south-south-west and west-north-west to east-south-east. Depicted on historic mapping. Responses of between +0.42nT and +16.70nT.
45	Strong positive & negative, probable	Linear	Double ditch & bank	Indicative of cut and infilled features such as ditches flanking central relict banked/compacted material typical of traditional hedgebank construction. Orientated approximately west-north-west to east-south-east. Responses of between -15.07nT to -0.01nT and +0.26nT to +29.13nT.
46	Moderate positive, probable	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately north-north-east to south-south-west. Weaker responses may indicate only shallow and partial survival. Responses of between +0.05nT and +11.28nT.
47	Moderate positive, possible	Linear (sub-rectangular)	Ditch	Indicative of cut and infilled features such as ditches. Orientated between approximately north-north-east to south-south-west and north-west to south-east. Responses of between +0.60nT and +14.55nT.
48	Weak positive, possible	Linear	Ditch	Indicative of cut and infilled features such as ditches. Orientated approximately north-north-west to south-south-east. Responses of between +0.08nT and +10.00nT.
49	Weak positive & negative, possible	Linear	Agricultural activity or ditch & bank	Indicative of deeper-cut examples of agricultural activity or possible shallow survival of ditch features. Orientated between approximately north-north-east to south-south-west and north-west to south-east. Responses of between -9.14nT to -0.33nT and +0.04nT to +10.00nT.
50	Weak to strong positive, possible	Discrete	Pit or tree-throw	Indicative of cut and infilled discrete features such as pits. Weaker responses may indicate natural features such as tree-throws. Responses of between +0.50nT and +53.60nT.
	Weak positive & negative, possible	Linear	Agricultural activity	Linear striations covering the field with regularity. Indicative of ploughing. Weaker mixed positive and negative responses may suggest shallow ploughing. Orientated between approximately north-east to south-west and north-west to south-east. Responses of between -9.34nT and +9.64nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -100.04nT and +96.01nT.
	Strong dipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between -101.47nT and +98.50nT.

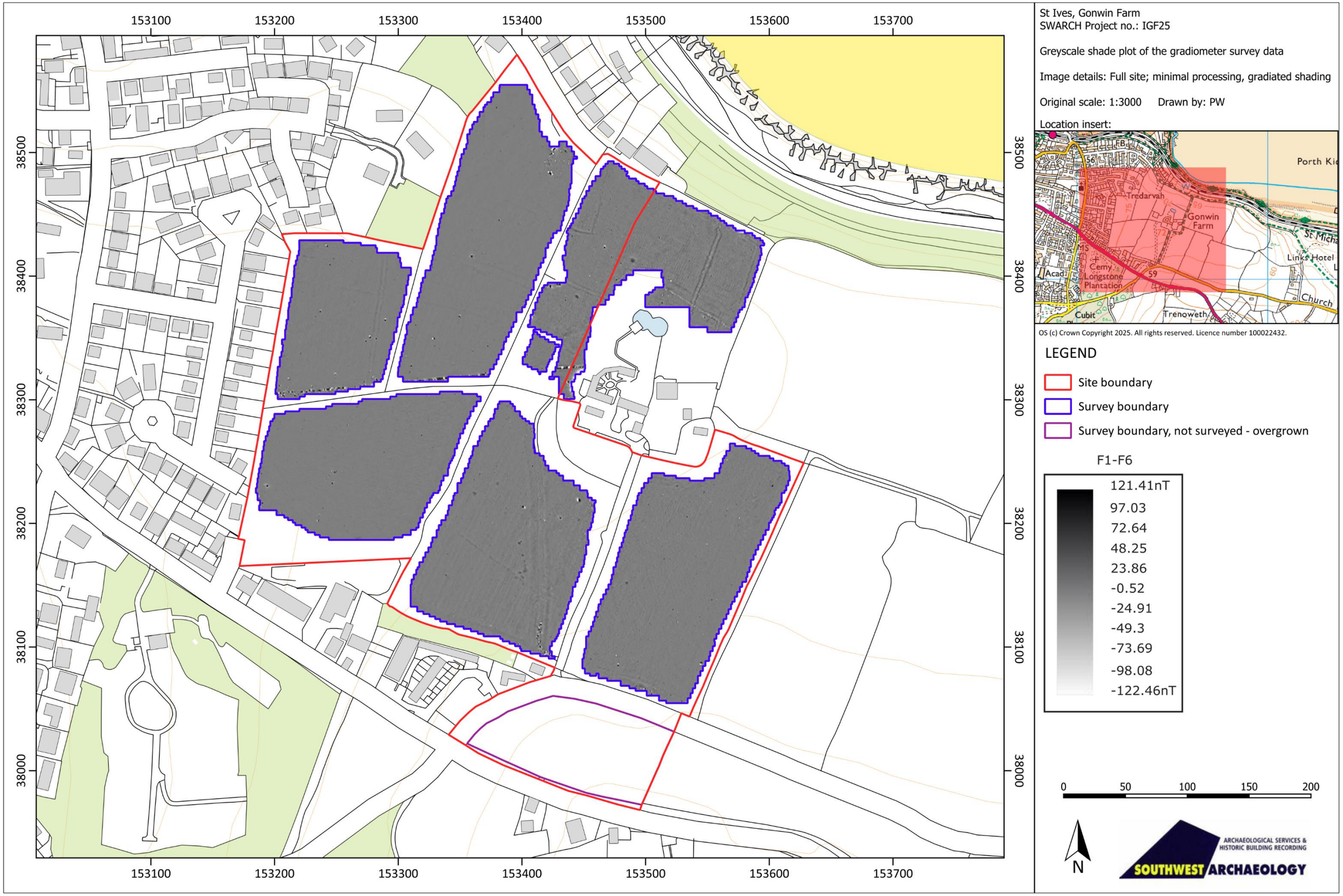


FIGURE 22: GREYSCALE SHADE PLOT OF THE GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

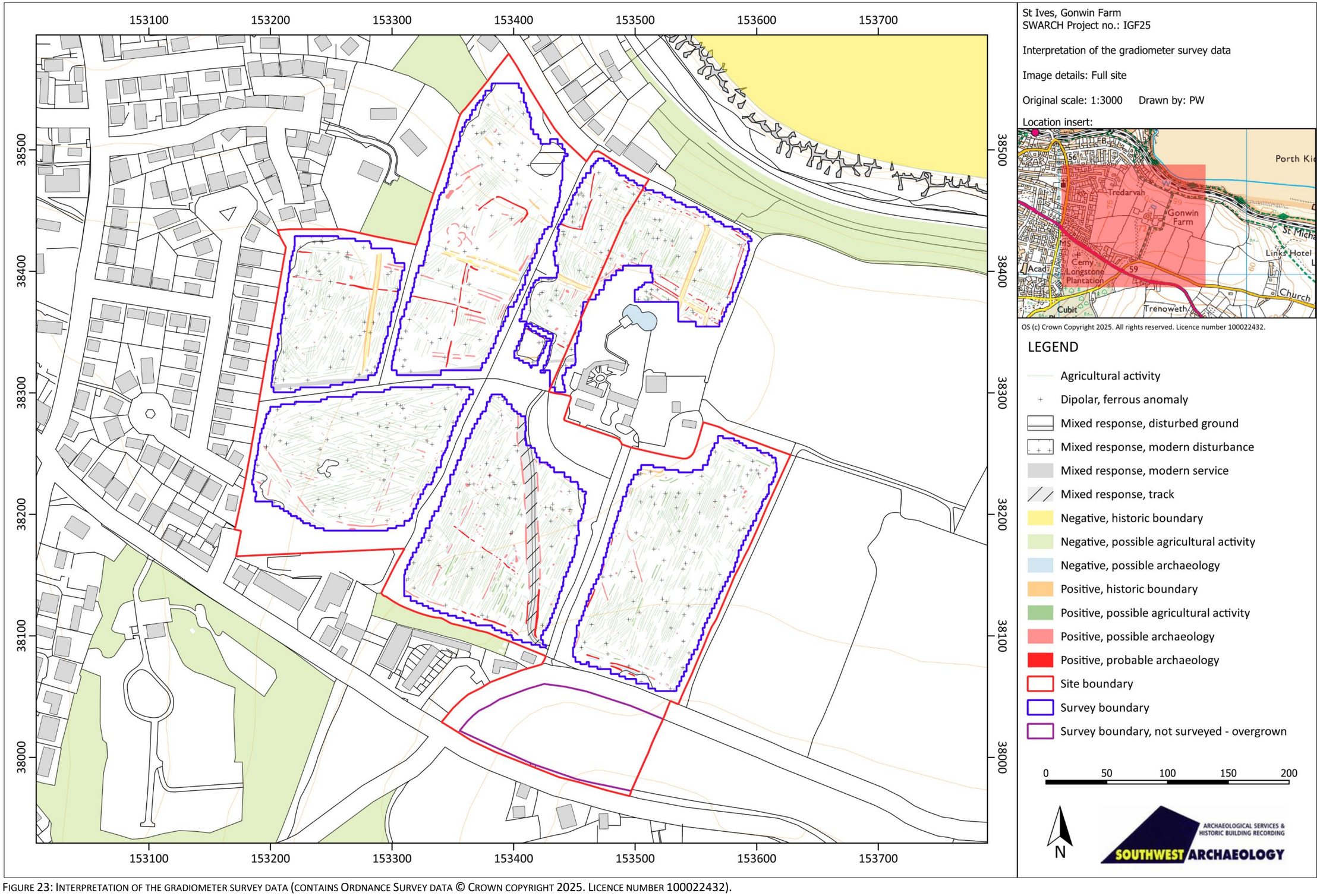


FIGURE 23: INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

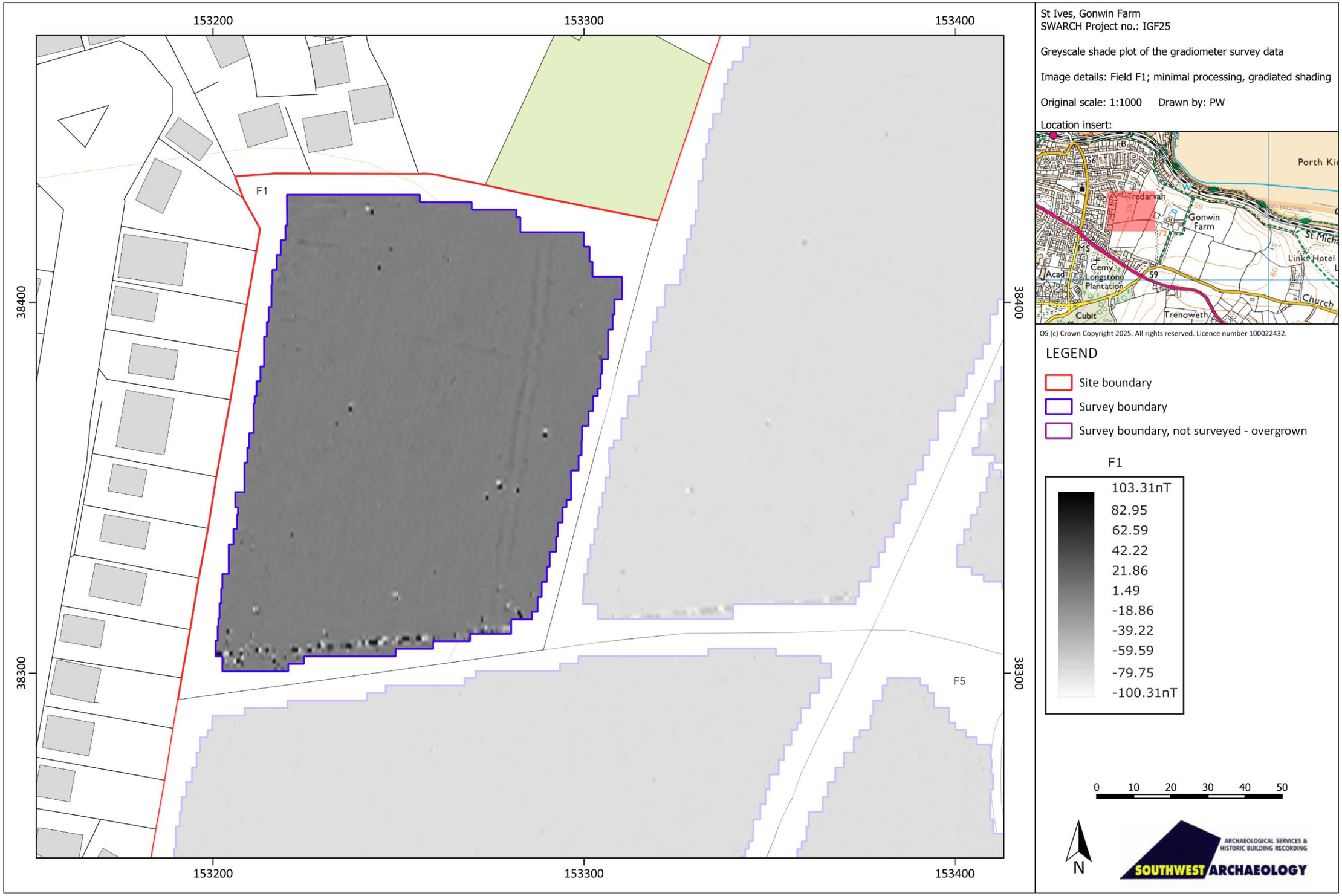


FIGURE 24: FIELD F1, GREYSCALE SHADE PLOT OF THE GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

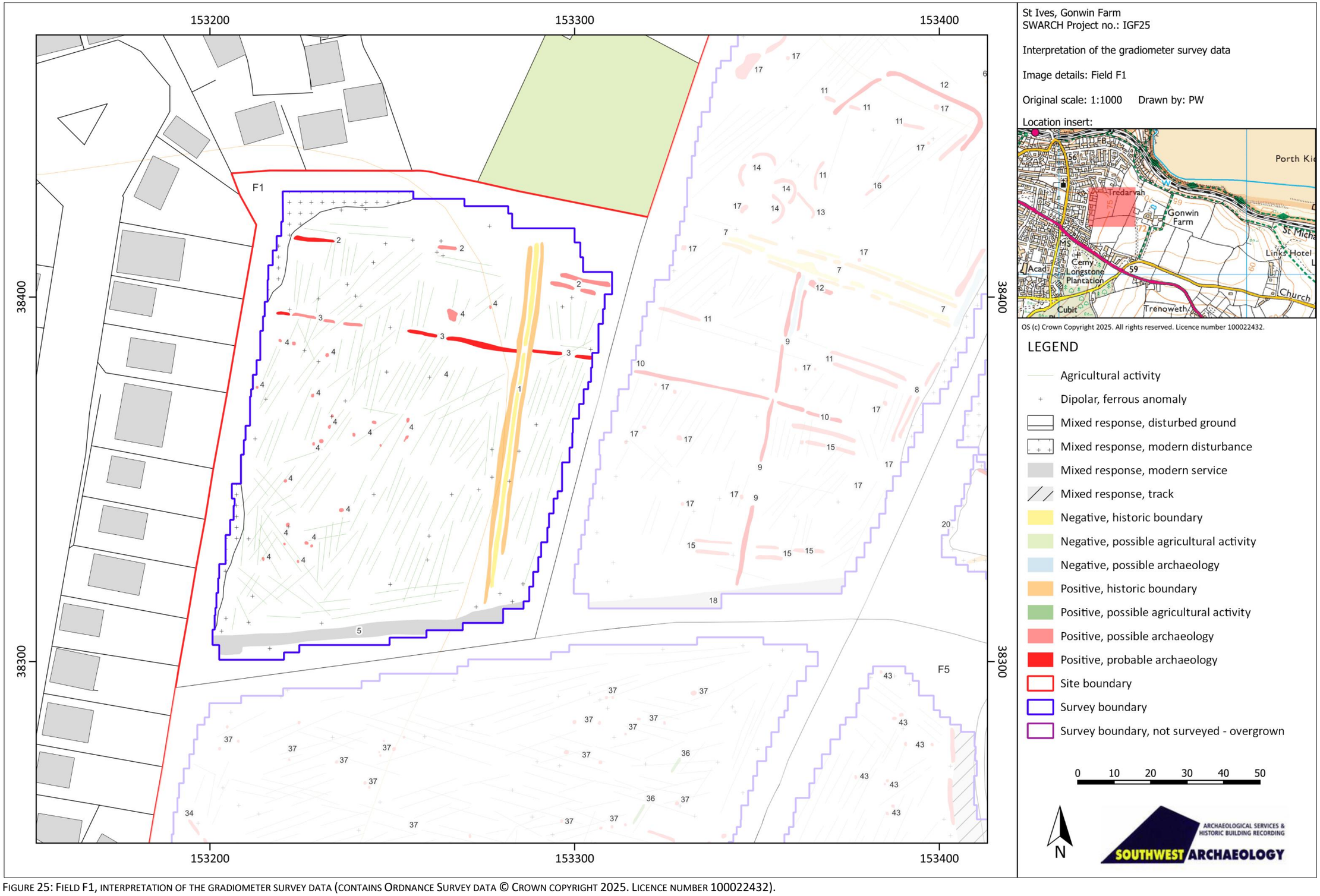


FIGURE 25: FIELD F1, INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

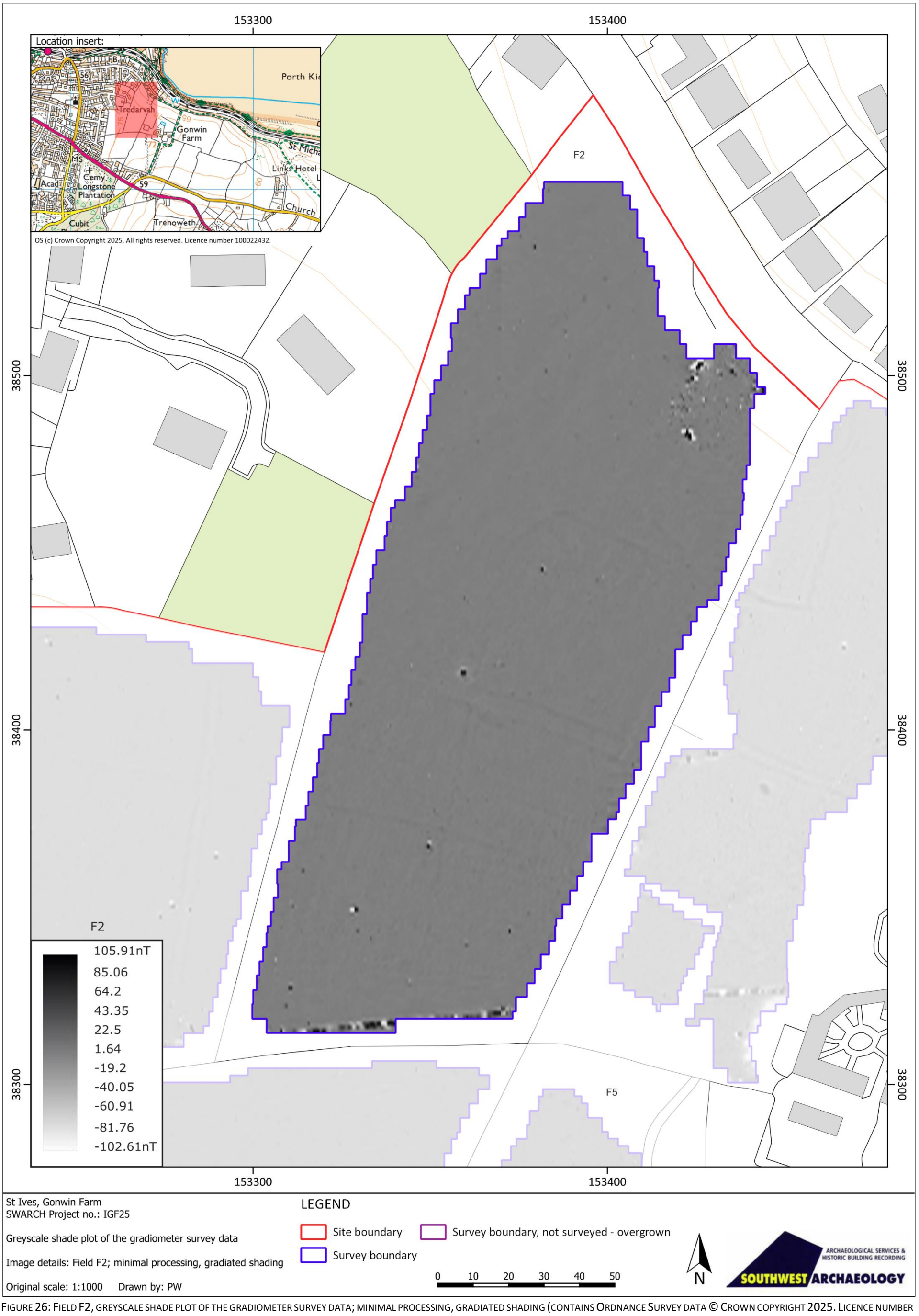
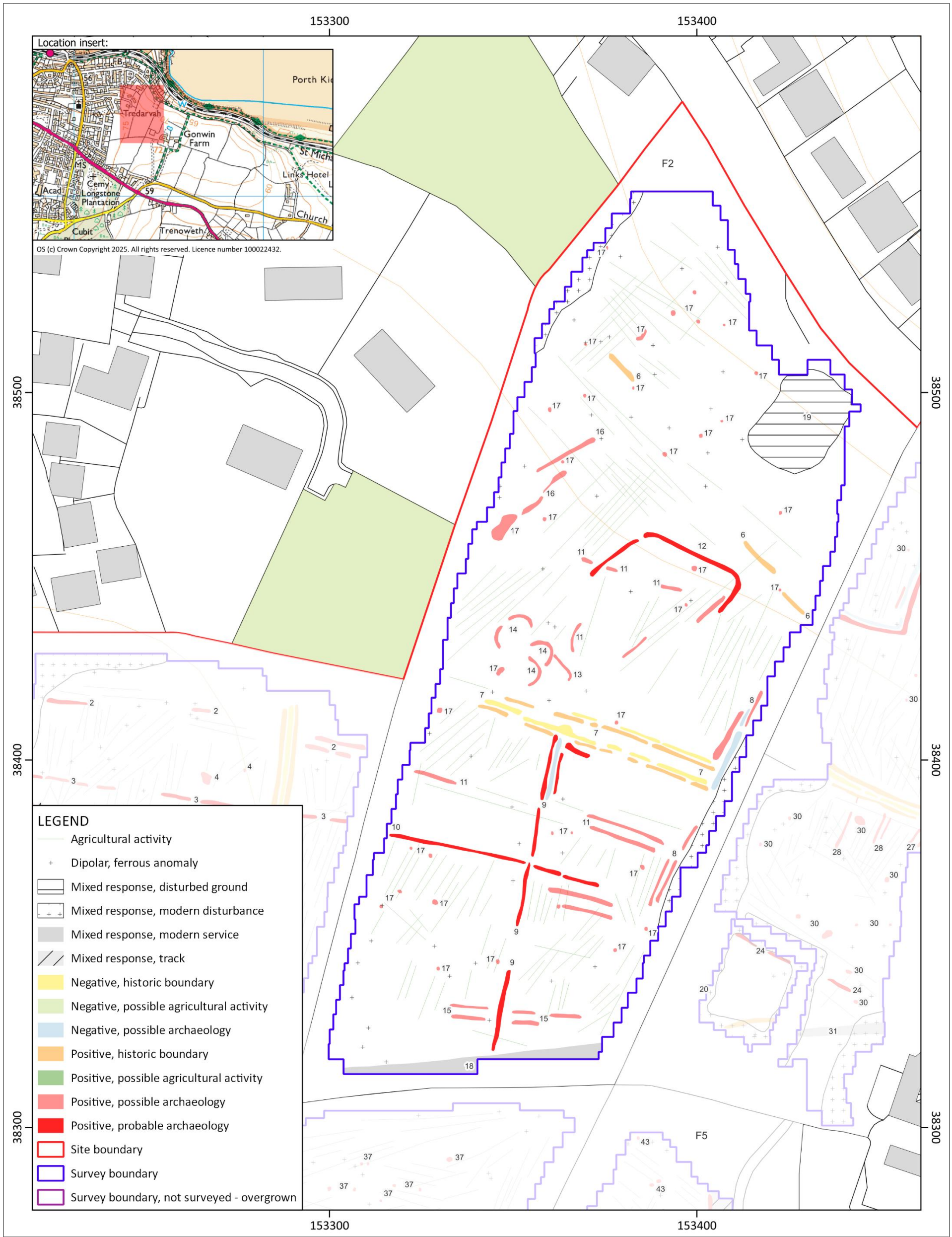


FIGURE 26: FIELD F2, GREYSCALE SHADE PLOT OF THE GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



St Ives, Gonwin Farm
SWARCH Project no.: IGF25

Interpretation of the gradiometer survey data

Image details: Field F2

Original scale: 1:1000 Drawn by: PW

FIGURE 27: FIELD F2, INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

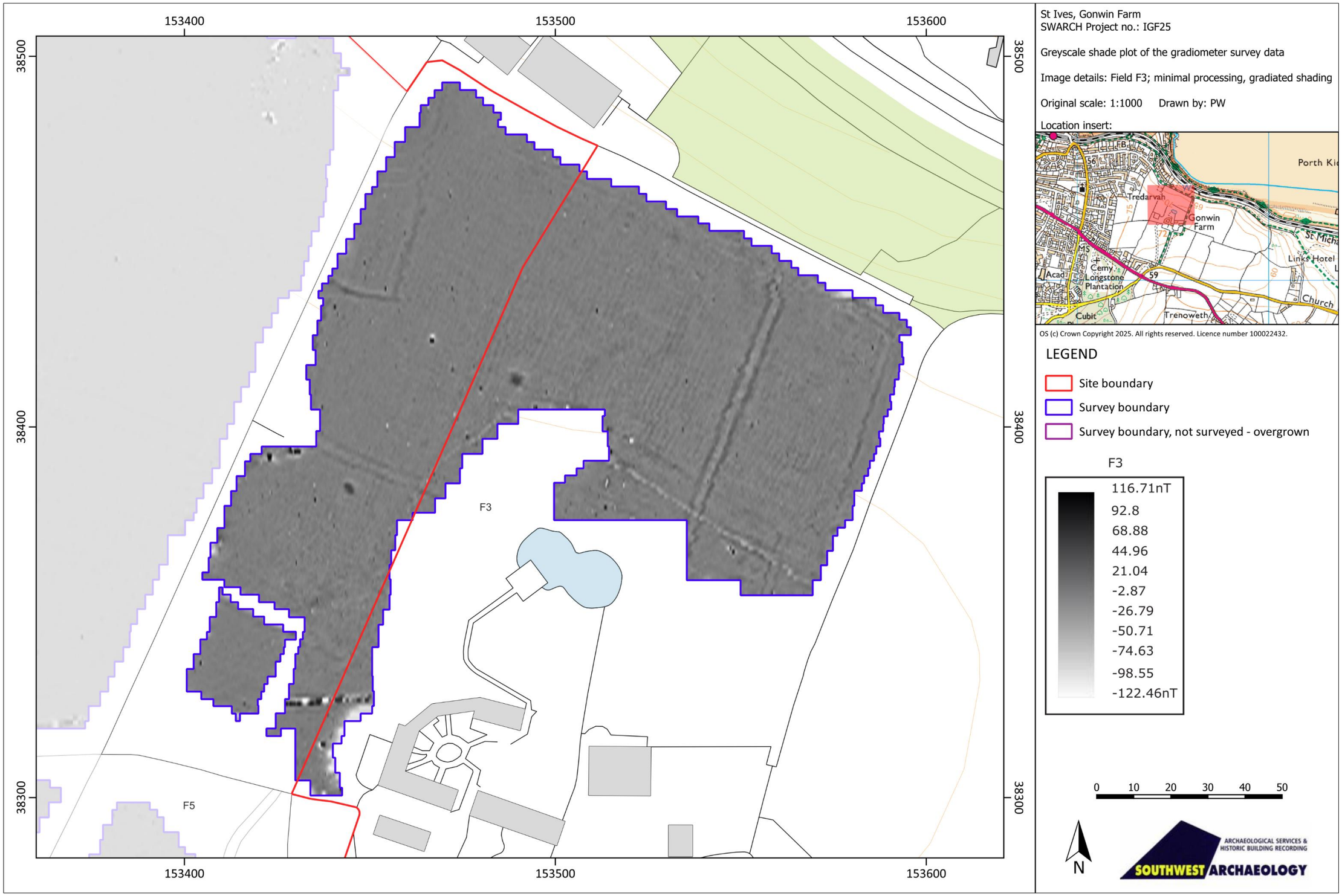


FIGURE 28: FIELD F3, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

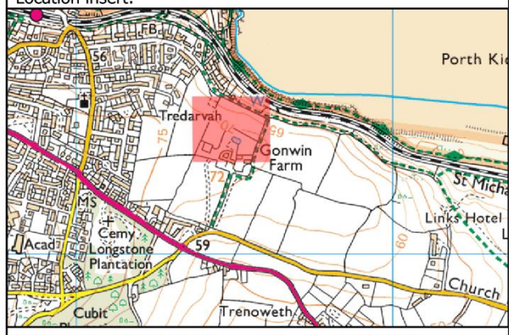
St Ives, Gonwin Farm
SWARCH Project no.: IGF25

Interpretation of the gradiometer survey data

Image details: Field F3

Original scale: 1:1000 Drawn by: PW

Location insert:



LEGEND

- Site boundary
- Survey boundary
- Survey boundary, not surveyed - overgrown
- Agricultural activity
- Dipolar, ferrous anomaly
- Mixed response, disturbed ground
- Mixed response, modern disturbance
- Mixed response, modern service
- Mixed response, track
- Negative, historic boundary
- Negative, possible agricultural activity
- Negative, possible archaeology
- Positive, possible agricultural activity
- Positive, historic boundary
- Positive, possible archaeology
- Positive, probable archaeology

0 10 20 30 40 50

N

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

FIGURE 29: FIELD F3, INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

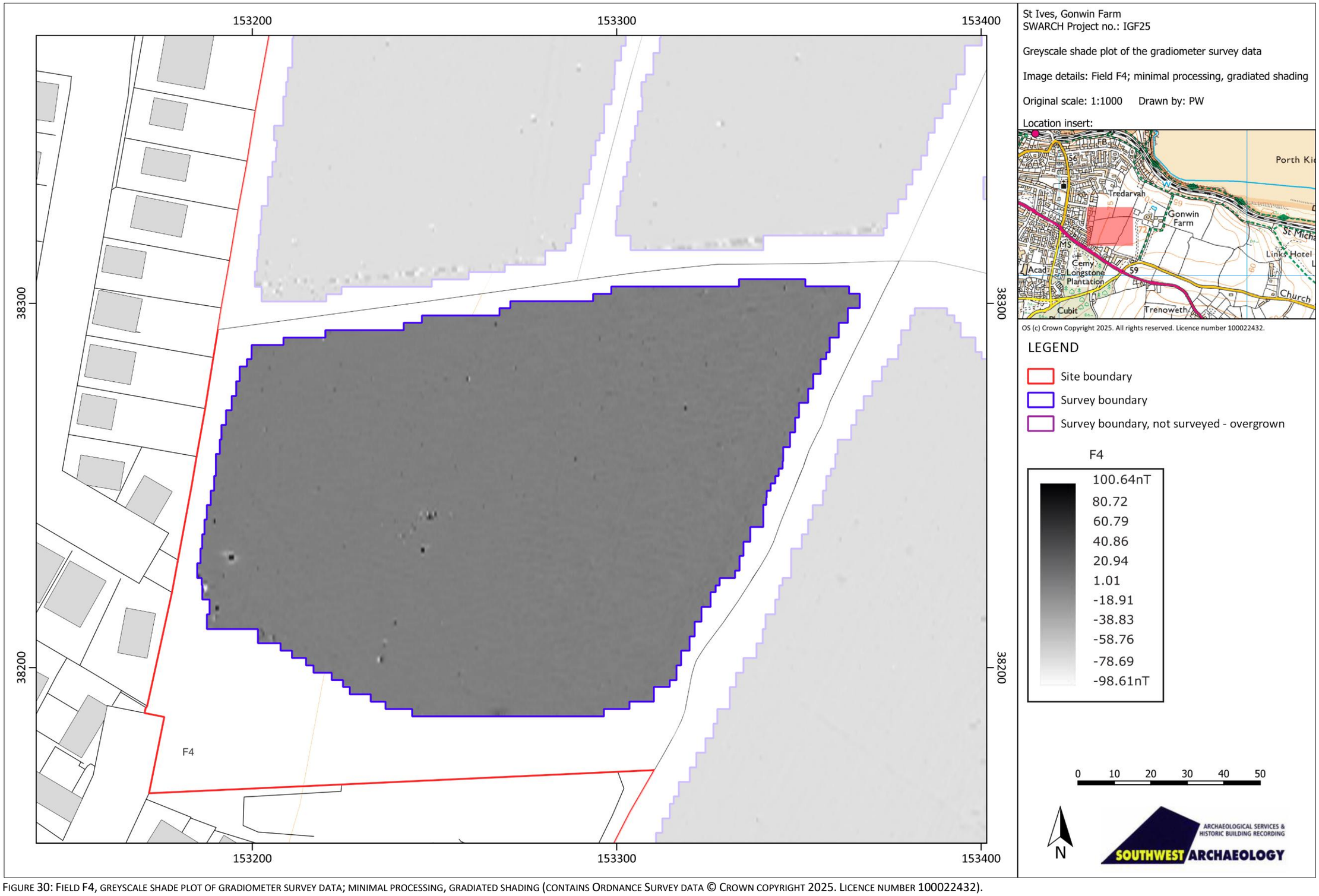


FIGURE 30: FIELD F4, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

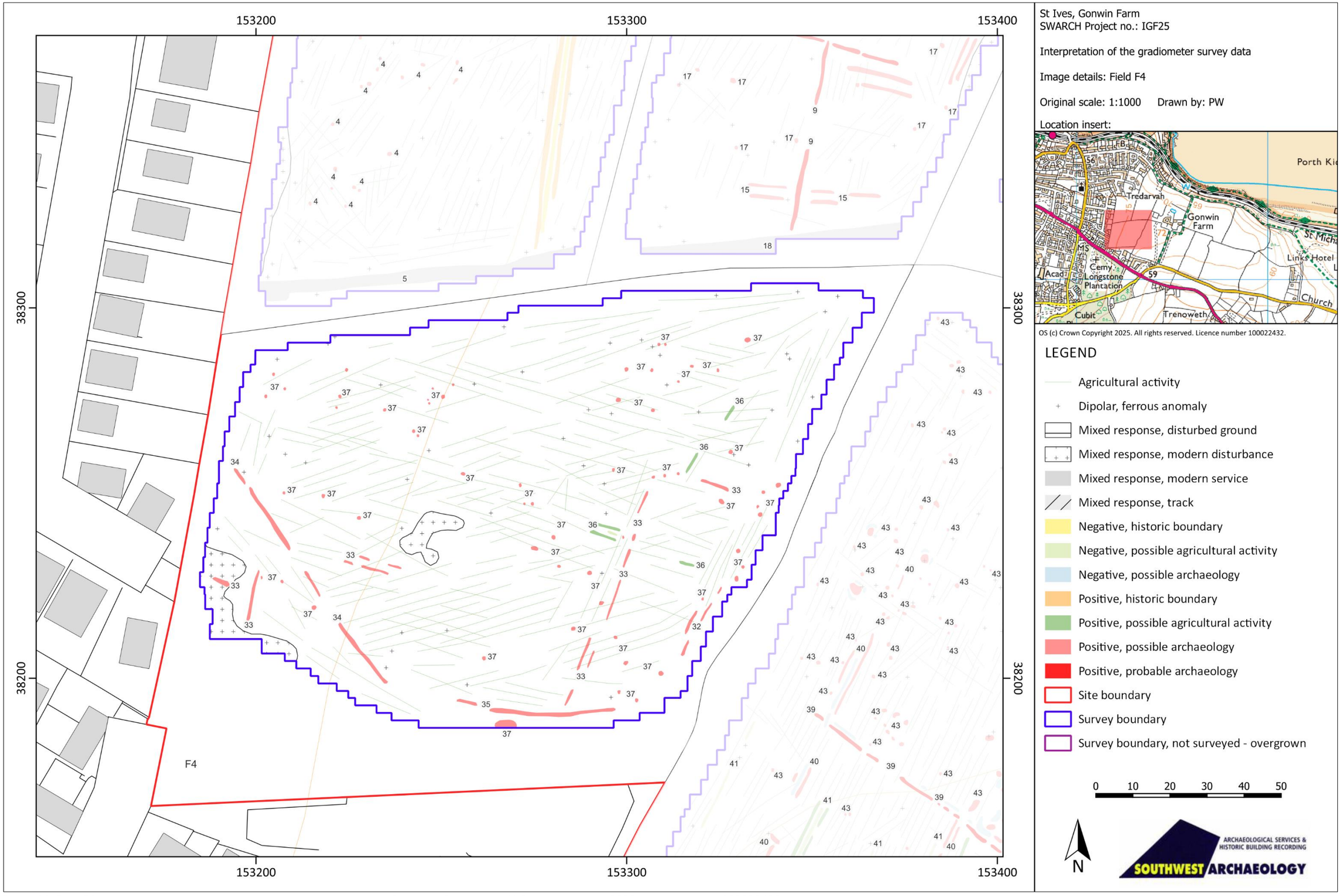


FIGURE 31: FIELD F4, INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

FIGURE 32: FIELD F5, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

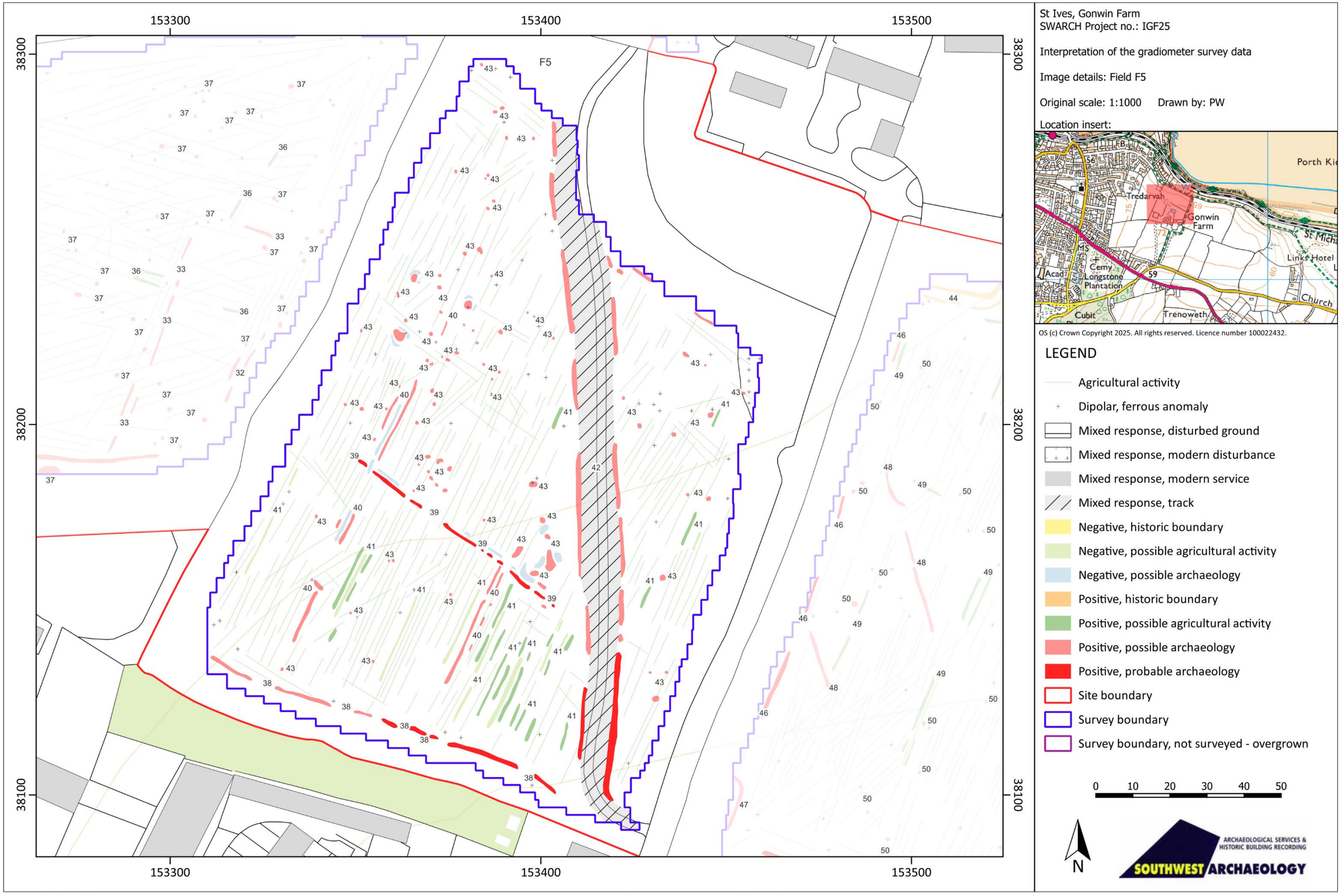


FIGURE 33: FIELD F5, INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

FIGURE 34: FIELD F6, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

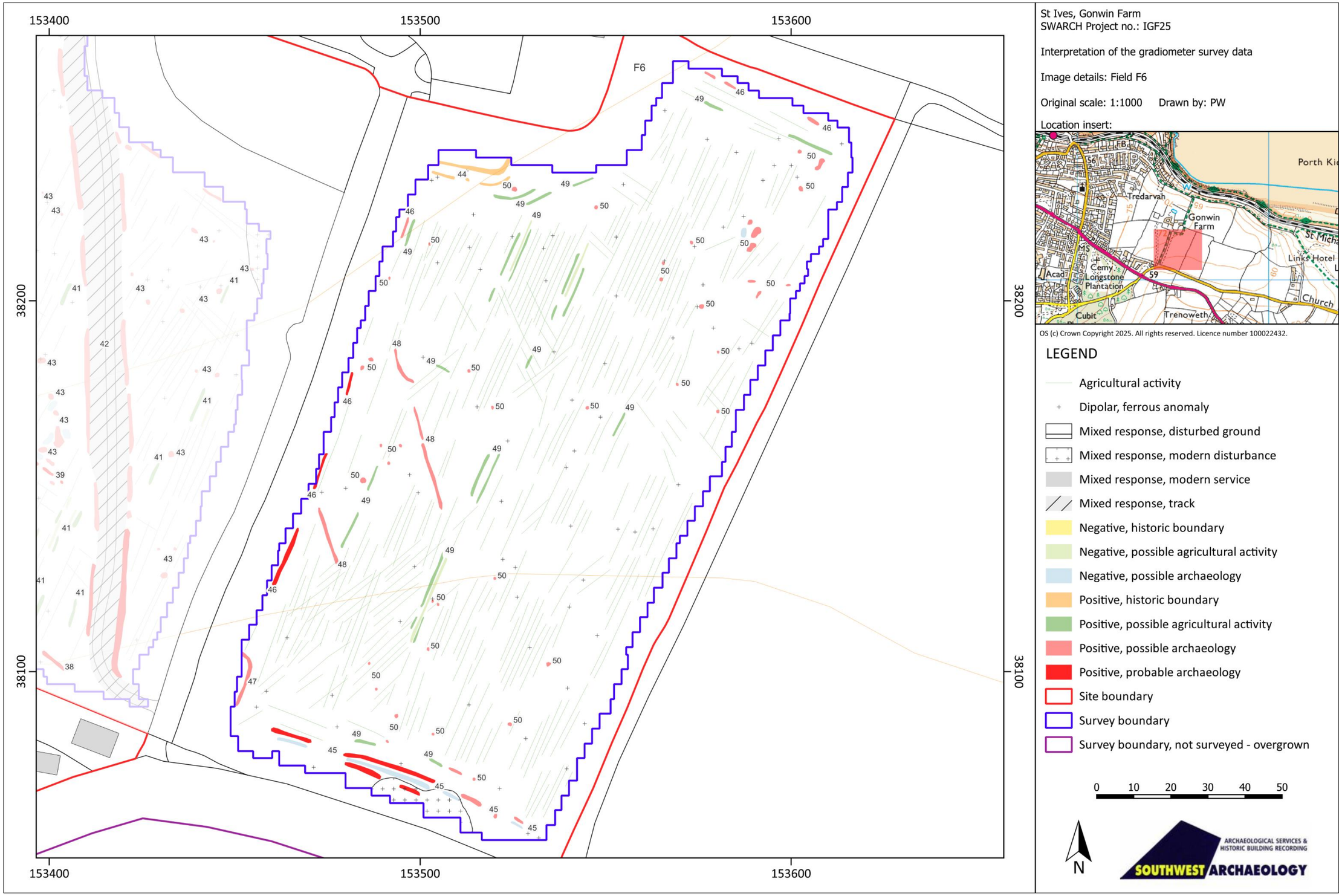


FIGURE 35: FIELD F6, INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

4.4 DISCUSSION

The geophysical survey identified 50 groups of anomalies comprising *c.*385 anomalies. These were a mix of linear ditch and/or bank features associated with phases of the existing and historic field-system, phases of possible prehistoric enclosure and settlement and modern service features. Possible pits and/or tree-throws, agricultural activity and anomalies associated with metallic debris and ground disturbance were also apparent.

The general response variation across the site was between +/-5nT with occasional clear background geological variation up to +/-10nT. Anomalies of a comparable strength may be natural/geological in origin. The response strength of probable archaeological features was moderate to strong (typically between +/-10nT to +/-25nT). The weaker responses of some of the anomalies may indicate that these are only likely to survive to a shallow depth.

The anomaly groups identified include: historic ditch and bank boundaries dating from at least the mid-19th century and removed during the 19th and 20th centuries; ditch and/or bank features associated with the pre- mid-19th century field layout; possible prehistoric enclosure and settlement with associated field-systems; and modern services and ground disturbance.

4.5 ARCHAEOLOGICAL POTENTIAL AND IMPACT SUMMARY

Whilst none of the identified features can at this stage be dated, some can be confidently identified as historic field-boundaries, several of the anomaly groups corresponding with boundaries depicted on the historic mapping (see above). In some instances these features were in use from at least the middle of the 19th century (as depicted on the tithe map), where they formed the boundaries of *Higher Shelter Field* (plot no.803) with *Shelter Field* (plot no.850); and *Venton Uny Cliff* (plot no. 839) with *New Downs* (plot no. 840) and *Calves Meadow* (plot no. 842) and were removed by the later part of the 19th century (Groups 1, 1 anomaly; 20, 3 anomalies). Others, including the boundaries of *Higher Cliff* (plot no. 827) with *Shelter Field* (plot no. 850); and *Park Darras* (plot no. 863) with *Orchard* (plot no. 848), were removed early in the 20th century (Groups 6, 1 anomaly; 44, 1 anomaly). A further mid-19th century boundary between *New Downs* (plot no. 840) and *Shelter Field* (plot no. 850) appears to have only been removed late in the 20th or early 21st century (Group 21, 1 anomaly). Other boundaries can be seen to have been created during the later 19th or early 20th century (as depicted on the 1908 Ordnance Survey map) and removed later in the same century (Group 7, 2 anomalies). The responses for some of these boundaries (particularly Group 6) are weak and it is possible that these features were particularly insubstantial, or have been subject to greater agricultural truncation.

The historic field-pattern of the site is classified as *post-medieval enclosed land*, formed in the 17th-19th centuries and typically creating straight-sided enclosures. It is possible that some of the other identified ditch and/or bank features (Groups 9, 1 anomaly; 22, 1 anomaly; 23, 2 anomalies; 24, 1 anomaly; 25, 2 anomalies; 32, 1 anomaly; 34, 1 anomaly; 39, 1 anomaly; 45, 1 anomaly; 46, 2 anomalies; 47, 1 anomaly) form part of these or earlier field-systems, having been removed by the mid-19th century. In most instances (where they appear to run parallel or perpendicular to elements of the mapped boundaries) these are likely to be from the immediately preceding layout, some forming continuations of the same boundary (Groups 2 and 11; 3, 10 and 24).

These field-systems are likely derived from earlier medieval fields, the boundaries of which are represented in the gently curving elements of the existing boundaries, with examples of further ditch and/or bank features (Groups 2, 1 anomaly; 3, 1 anomaly; 8, 1 anomaly; 10, 1 anomaly 11, 1 anomaly; 15, 2 anomalies; 35, 1 anomaly; 38, 1 anomaly) perhaps reflecting this activity. Other anomalies which may form a part of these fields (Group 27, 1 anomaly) may also reflect more recent activity associated with the landscaping of the gardens and the current field edge.

The roots of the medieval field-system lie within *Anciently Enclosed Land* (AEL), which is perceived to have a high potential for prehistoric and Romano-British remains. Towards the middle of field F2 (Group 12, 1 anomaly) and north-western corner of field F3 (Group 26, 1 anomaly) form what appear to be the elements of rectangular enclosures set on a slightly different alignments to the historic field-systems and may have earlier origins. Other features (Group 13, 1 anomaly; 16, 3 anomalies; Group 48, 2 anomalies) follow these alignments and may form elements of an associated field-system or possible smaller enclosures associated with possible settlement features (Group 14, 4 anomalies). These penannular features (measuring *c.*6.5-8m in diameter) are indicative of ring-ditch or drip-gullies associated with round-house construction of prehistoric date; typically these may be considered Iron Age in date. Where these features cluster or are grouped within enclosures it suggests a community or continued/repeated episodes of settlement as part of individual farmsteads. It is possible that some of the boundary features have origins within these periods. However, the weaker and more diffuse responses of some of these features suggests that some may be geological or agricultural in origin.

Linear striations of alternating positive and negative responses cover the entirety of the site and are indicative of the most recent episodes of ploughing activity, though some appear slightly larger/stronger (Group 29, 6 anomalies; 36, 2 anomalies; 41, 13 anomalies; 49, 9 anomalies) and may represent the shallow survival of boundary features. In contrast, the weak nature of some of the more regularly spaced possible boundary features (Groups 28, 6 anomalies; 33, 5 anomalies; 40, 3 anomalies) suggests that these may be examples of deeper-cut agricultural activity.

Discrete features (Groups 4, 25 anomalies; 17, 36 anomalies; 30, 43 anomalies; 37, 63 anomalies; 43, 83 anomalies; 50, 41 anomalies) spread across the site may represent pits, though the weak nature of many of the responses suggests that these may be natural in origin, the anomalies reflecting tree-throws or animal burrows; others having stronger responses which may include thermoremanent material.

A linear bipolar and mixed response (Groups 5, 1 anomaly; 18, 1 anomaly; 31, 1 anomaly) located along the southern boundaries of fields F1, F2 and F3 indicates the presence of a buried modern service which runs to/from Gonwin Manor.

At the north-eastern corner of field F2, an area of disturbed ground (Group 19, 1 anomaly) forms a rectangular area measuring *c.*30m × 20m is situated at the end of an area of stoned ground/hardcore towards an entrance to the field and is likely to have been used as a yard type area. Further modern activity/disturbance is reflected in the access route (Group 42, 1 anomaly) which crosses field F5.

Strong discrete dipolar responses spread across the site largely represent buried ferrous objects and metallic/thermoremanent debris and ground disturbance.

The degree of preservation of the identified features appears to be mixed. Whilst several of the anomaly responses are moderate to strong, others are weak and intermittent and barely discernible from the background geology. This suggests that whilst some of the identified features may survive to a good depth beneath the topsoil, others may only survive to a shallow depth, their intermittent nature suggesting only partial survival. This may be a result of historic episodes of ploughing; though may also reflect geological variation across the site. However, it is possible that additional, even more ephemeral features, are masked by the background geology and modern disturbances.

The direct *effect* of any development/change in use of the land would be the possible disturbance or destruction of archaeological features or deposits present; the *impact* of the development would depend on the presence and significance of archaeological deposits. Any disturbance or destruction would be permanent and irreversible.

The results of the geophysical survey would suggest that the archaeological potential for the site is *moderate*: many of the identified features are likely to relate to historic phases of field-system, some dating to the 20th century, others pre-dating the mid-19th century and tentatively suggested as being medieval and post-medieval in date. Some features, however, may relate to prehistoric settlement of the site. Other features, however, may still pre-date these and may be prehistoric in origin, associated with areas of prehistoric settlement and funerary activity present in the immediately surrounding landscape.

Any development of the site is likely to encounter and destroy the buried archaeological resource (should it be present), and further mitigation through, in the first instance, targeted evaluation trenching would validate and clarify the results of the geophysical survey.

5.0 CONCLUSION

The site is located at the edge of the settlement of Carbis Bay, overlooking the north Cornish coast at St Ives Bay. It comprises seven agricultural fields surrounding Gonwin Manor, a former medieval settlement/manor rebuilt as two post-medieval farms.

Prior to the 19th century the site and surrounding area had remained largely unchanged, the surrounding agricultural landscape divided into multiple smallholdings. Settlement began to expand during the post-medieval period. Significant change and growth at Carbis Bay only occurred following the construction of the St Ives branch of the Great Western Railway.

The site falls into an area that is classified in the Cornwall Historic Landscape Characterisation (HLC) as *post-medieval enclosed land*: 'land enclosed during the 17th, 18th and 19th centuries, usually from land that was previously upland rough ground and medieval commons'. This is bordered to the north and south by land designated *communications*, beyond which are *coastal rough ground* and *post-medieval enclosed land*; whilst *recreational* land and *medieval farmland* lie to the east and *20th century settlement* the west.

The geophysical survey identified 50 groups of anomalies comprising *c.*385 anomalies. These were a mix of linear ditch and/or bank features associated with phases of the existing and historic field-system, phases of possible prehistoric enclosure and settlement and modern service features. Possible pits and/or tree-throws, agricultural activity and anomalies associated with metallic debris and ground disturbance were also apparent.

The results of the geophysical survey would suggest that the archaeological potential for the site is *moderate to low*: many of the identified features are likely to relate to historic phases of field-system, some dating to the 20th century, others pre-dating the mid-19th century and tentatively suggested as being medieval and post-medieval in date. Other features, however, may still pre-date these and may be prehistoric in origin, associated with areas of prehistoric settlement and funerary activity present in the immediately surrounding landscape.

Any development of the site is likely to encounter and destroy the buried archaeological resource (should it be present), and further mitigation through, in the first instance, targeted evaluation trenching would validate and clarify the results of the geophysical survey.

6.0 BIBLIOGRAPHY & REFERENCES

Published Sources:

Archaeologiae Consilium 2016: *EAC Guidelines for the use of geophysics in Archaeology: Questions to Ask and Points to Consider, EAC guidelines 2*.

Chartered Institute of Field Archaeologists 2014 revised 2017 and 2020: *Standard and Guidance for Historic Environment Desk-based Assessment*.

Chartered Institute for Archaeologists 2014b revised 2020: *Standard and Guidance for Archaeological Geophysical Survey*.

DW Consulting 2016: *TerraSurveyor User Manual.*

English Heritage 2008a: *Geophysical Survey in Archaeological Field Evaluation.*

Lysons, S. and Lysons, D. 1814: *Magna Britannia Volume 3 Cornwall.* London: Cadell and Davies

Padel, O. 1985: *Cornish Place-Name Elements.* English Place-Name Society.

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.*

Un-published Sources:

Bampton, J. 2021: *Land at Polwithen Drive, Carbis Bay, St Ives, Cornwall: Results of Archaeological Monitoring and Recording.* SWARCH Report No.: 210128.

Bonvoisin, P. & Webb, P. 2019: *Land at Polwithen Drive, Carbis Bay, St Ives, Cornwall: Heritage Assessment and Geophysical Survey.* SWARCH Report No.: 191114.

Boyd, N. & Webb, P. 2023: *Land off Laity Land, Carbis Bay, St Ives, Cornwall: Results of a Desk-Based Assessment & Geophysical Survey.* SWARCH Report No.: 230714.

Dean, R. 2017: *Site at Tyringham Road, Lelant, Cornwall: An Archaeological Magnetometer Survey.* Substrata Report No.: 1705LEL-R-1.

Fleming, F. 2016: *Tyringham Road, Lelant, Cornwall: Archaeological Statement*. Cornwall Archaeological Unit Report No.: 2016R010.

Goacher, H. 2015: *Carninney, St Ives: Archaeological Assessment.* Cornwall Archaeological Unit Report No.: 2015R028.

Morris, B. 2021: *Carninney Rise, Carbis Bay, St Ives, Cornwall: Results of Archaeological Monitoring & Recording.* SWARCH Report No.:210304.

Websites:

British Geological Survey 2025: *Geology of Britain Viewer*. http://mapapps.bgs.ac.uk/geologyofbritain/home.html

The Genealogist 2025: *Tithe Apportionments.* https://www.thegenealogist.co.uk/

Appendix 1: Supporting photographs – Site Inspection

1. Field F1, view across the survey area; viewed from the south-east (no scale).

2. Field F1, view across the survey area; viewed from the north-east (no scale).

3. Field F1, view along the northern boundary; viewed from the west (no scale).

4. Field F1, detail of the northern boundary; viewed from the south-south-west (no scale).

5. FIELD F1, VIEW ALONG THE EASTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).

6. FIELD F1, DETAIL OF THE EASTERN BOUNDARY; VIEWED FROM THE WEST (NO SCALE).

7. FIELD F1, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE WEST-SOUTH-WEST (NO SCALE).

8. FIELD F1, DETAIL OF THE SOUTHERN BOUNDARY; VIEWED FROM THE NORTH (NO SCALE).

9. FIELD F1, VIEW ALONG THE WESTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

10. FIELD F1, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).

11. FIELD F2, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE SOUTH-WEST (NO SCALE).

12. FIELD F2, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH (NO SCALE).

13. FIELD F2, VIEW ALONG THE NORTHERN BOUNDARY; VIEWED FROM THE NORTH-WEST (NO SCALE).

14. FIELD F2, DETAIL OF THE STONED ACCESS FROM THE NORTHERN BOUNDARY; VIEWED FROM THE SOUTH-EAST (NO SCALE).

15. FIELD F2, VIEW ALONG THE EASTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

16. FIELD F2, DETAIL OF THE EASTERN BOUNDARY; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).

17. FIELD F2, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE WEST-SOUTH-WEST (NO SCALE).

18. FIELD F2, VIEW ALONG THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).

19. FIELD F2, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).

20. FIELD F3, VIEW OF GONWIN MANOR; VIEWED FROM THE NORTH-EAST (NO SCALE).

21. Field F3, view of Gonwin Manor; viewed from the south-west (no scale).

22. Field F3, view across the survey area; viewed from the north-west (no scale).

23. Field F3, view across the survey area; viewed from the north-east (no scale).

24. Field F3, view along the northern boundary; viewed from the west-north-west (no scale).

25. FIELD F3, VIEW ALONG THE EASTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

26. FIELD F3, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).

27. FIELD F3, VIEW ALONG THE WESTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

28. FIELD F3, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-EAST (NO SCALE).

29. FIELD F3, DETAIL OF THE DOG PADDOCK/ENCLOSURE IN THE SOUTH-WESTERN CORNER; VIEWED FROM THE SOUTH-EAST (NO SCALE).

30. FIELD F4, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-EAST (NO SCALE).

31. FIELD F4, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE SOUTH-WEST (NO SCALE).

32. FIELD F4, VIEW ALONG THE NORTHERN BOUNDARY; VIEWED FROM THE EAST-NORTH-EAST (NO SCALE).

33. FIELD F4, VIEW ALONG THE EASTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

34. FIELD F4, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE EAST (NO SCALE).

35. FIELD F4, DETAIL OF THE SOUTHERN BOUNDARY, SHOWING POSSIBLE INFILLED INTERNAL DITCH; VIEWED FROM THE WEST (NO SCALE).

36. FIELD F4, VIEW ALONG THE WESTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

37. FIELD F4, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-EAST (NO SCALE).

38. FIELD F5, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH (NO SCALE).

39. FIELD F5, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-EAST (NO SCALE).

40. FIELD F5, VIEW ALONG THE TRACK RUNNING ACROSS THE MIDDLE OF THE SURVEY AREA; VIEWED FROM THE NORTH (NO SCALE).

41. FIELD F5, VIEW ALONG THE NORTHERN BOUNDARY; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).

42. FIELD F5, DETAIL OF THE NORTHERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).

43. FIELD F5, VIEW ALONG THE EASTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

44. FIELD F5, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).

45. FIELD F5, VIEW ALONG THE WESTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

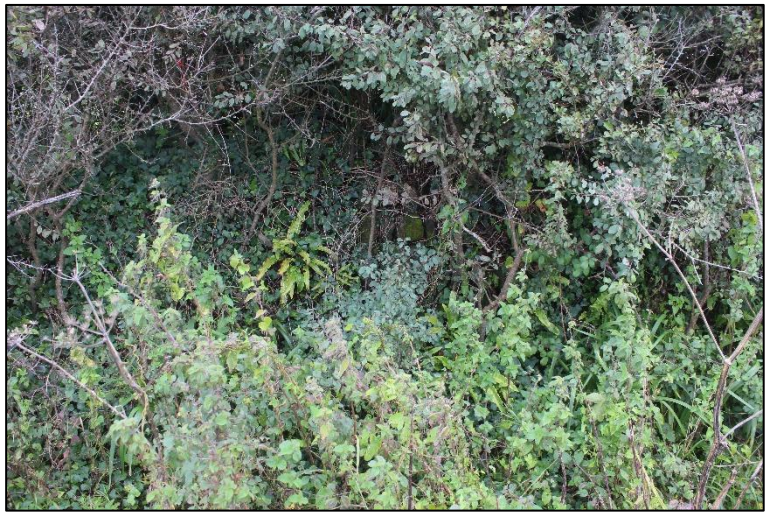
46. FIELD F6, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE SOUTH-WEST (NO SCALE).

47. FIELD F6, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-EAST (NO SCALE).

48. FIELD F6, VIEW ALONG THE NORTHERN BOUNDARY; VIEWED FROM THE SOUTH-EAST (NO SCALE).

49. FIELD F6, DETAIL OF THE NORTHERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).

50. FIELD F6, VIEW ALONG THE EASTERN BOUNDARY; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).



51. FIELD F1, DETAIL OF THE EASTERN BOUNDARY; VIEWED FROM THE NORTH-WEST (NO SCALE).

52. FIELD F6, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).

53. FIELD F6, VIEW ALONG THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).

54. FIELD F6, VIEW ALONG THE WESTERN BOUNDARY, NORTH END; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

55. FIELD F6, VIEW ALONG THE FOOTPATH ALONG THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).

56. FIELD F7, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE WEST (NO SCALE).

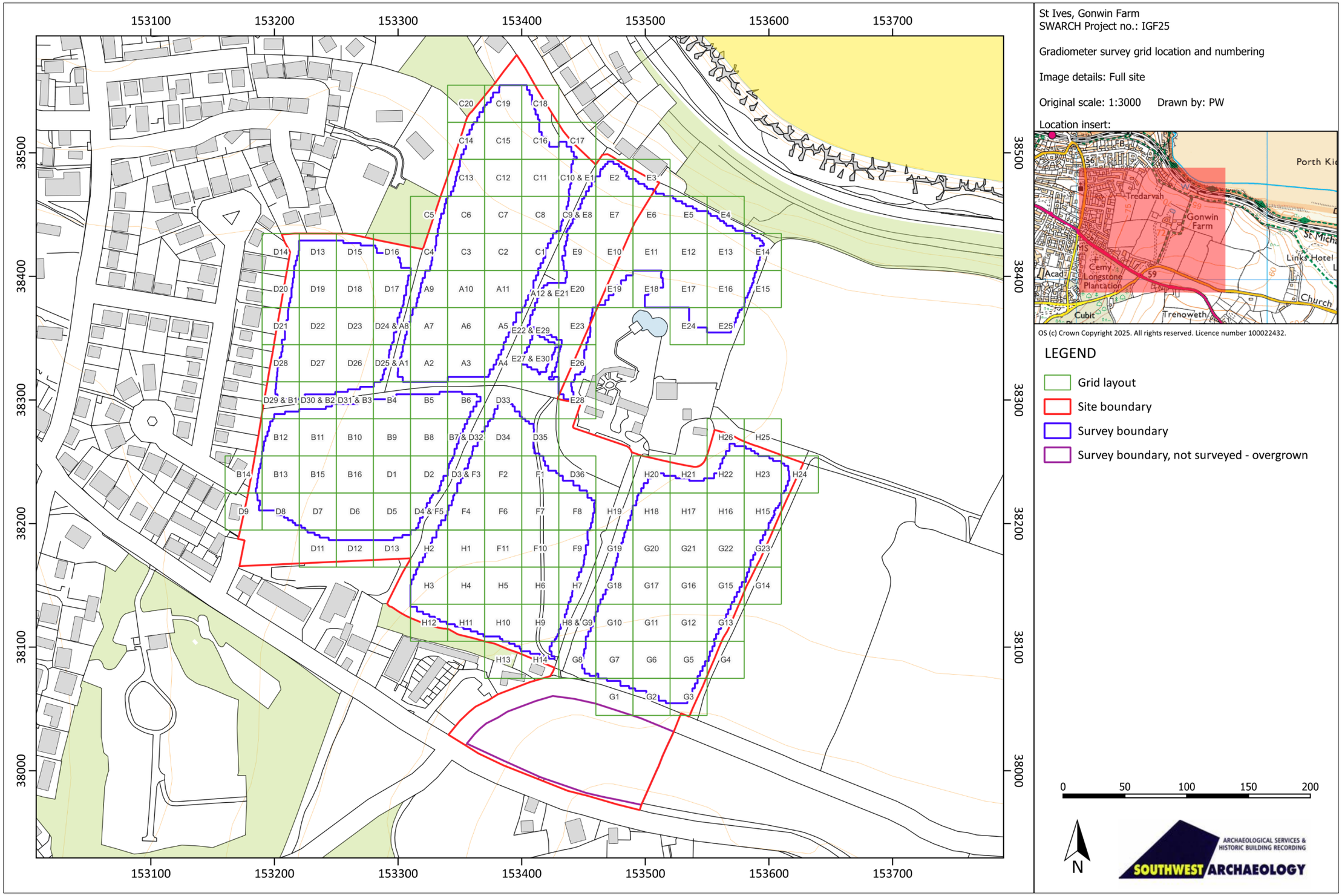
57. FIELD F7, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE NORTH-NORTH-EAST (NO SCALE).

APPENDIX 2: METADATA FOR GEOPHYSICAL SURVEY PROCESSING

TECHNICAL SUMMARY OF MAGNETOMETRY SURVEY METHOD AND METADATA.

SWARCH Ref.	**Site Name**		**Site Type**	**Period**			
IGF25	St Ives, Gonwin Farm		-	-			
Survey Type:	Magnetometry						
Equipment:	Twin sensor fluxgate gradiometer (Bartington Grad601)						
Software:	TerraSurveyor64 - Version 4.1.13.0						
Instrument Settings / Parameters:	Survey Mode:	Grid Mode					
	Range:	100nT					
	Threshold:	2nT					
	Sensors:	2					
	Reject:	50 Hz					
Collection parameters:	Sample Intervals:	0.25m					
	Traverse Intervals:	1m					
	Traverse Pattern:	Zigzag					
	Traverse Direction:	East / 90°					
	Adjustment frequency:	0.5-1ha					
Survey Size Metadata:	Individual Grid Size	30m x 30m					
	Composite Area:	24.48ha / 510m x 480m					
	Area Surveyed:	9.8979ha					
Raw Response Metadata:	Area:	**Full site**	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
	Max:	98.63nT	97.96nT	98.63nT	97.90nT	97.92nT	98.59nT	98.60nT
	Min.:	-100.00nT	-100.00nT	-100.00nT	-100.00nT	-100.00nT	-100.00nT	-100.00nT
	Standard Deviation:	6.52nT	6.77nT	5.81nT	10.52nT	3.21nT	6.11nT	4.54nT
	Mean:	0.49nT	-0.13nT	0.90nT	-1.14nT	1.43nT	0.89nT	0.63nT
	Median:	0.63nT	-0.15nT	0.71nT	-0.92nT	1.38nT	0.86nT	0.50nT
Processed Response Metadata: pre-clipping	Max.:	121.42nT	103.32nT	105.91nT	116.72nT	100.65nT	121.42nT	98.50nT
	Min.:	-122.47nT	-100.32nT	-102.62nT	-122.47nT	-98.62nT	-101.78nT	-101.47nT
	Standard Deviation:	5.98nT	6.73nT	5.52nT	9.41nT	3.06nT	5.57nT	4.42nT
	Mean:	0.08nT	0.14nT	0.09nT	-0.02nT	0.08nT	0.07nT	0.14nT
	Median:	0.00nT	0.00nT	0.00nT	0.00nT	0.00nT	0.00nT	0.00nT
Processed Response Metadata: post-clipping	Max.:	6.06nT	6.87nT	5.61nT	9.39nT	3.14nT	5.64nT	4.56nT
	Min.:	-5.91nT	-6.58nT	-5.43nT	-9.42nT	-2.98nT	-5.50nT	-4.27nT
	Standard Deviation:	2.62nT	2.14nT	1.57nT	4.69nT	1.41nT	2.84nT	0.05nT
	Mean:	0.03nT	0.04nT	0.03nT	0.09nT	0.03nT	0.00nT	0.05nT
	Median:	0.00nT	0.00nT	0.00nT	0.00nT	0.00nT	0.00nT	0.00nT

Processes:	DeStripe all traverses, median
	DeStagger all grids, 0.25m
	DeStagger all grids, 0.25m
	DeStagger Grids A8&D24, D16, D17, -0.25m
	DeStagger Gridss A1&D25, D26, -0.25m
	DeStagger Grid D16, -0.25m
	DeStagger Grid D17, 0.25m
	DeStagger Grid F7, 0.25m
	DeStagger Grid F10, 0.50m
	DeStagger Grid F10, 0.25m
	DeStagger Grid E15, -0.50m
	DeStagger Grid E14, -0.50m
	DeStagger Grid E17, -0.25m
	DeStagger Grid D17, -0.25m
	DeStagger Grid F7, -0.50m
	DeStagger Grid F10, -0.50m
	DeStagger Grid F10, -0.25m
	DeStagger Grid H6, -0.50m
	DeStagger Grid E2, -0.50m
	DeStagger Grid E2, -0.50m
	DeStagger Grid E2, -0.25m
	DeStagger Grid E35, -0.50m
	DeStagger Grid F6, 0.25m
	Clip from Min -5.91nT to Max 6.06nT (1 Standard Deviation)



St Ives, Gonwin Farm
SWARCH Project no.: IGF25

Gradiometer survey grid location and numbering

Image details: Full site

Original scale: 1:3000 Drawn by: PW

Location insert:

LEGEND

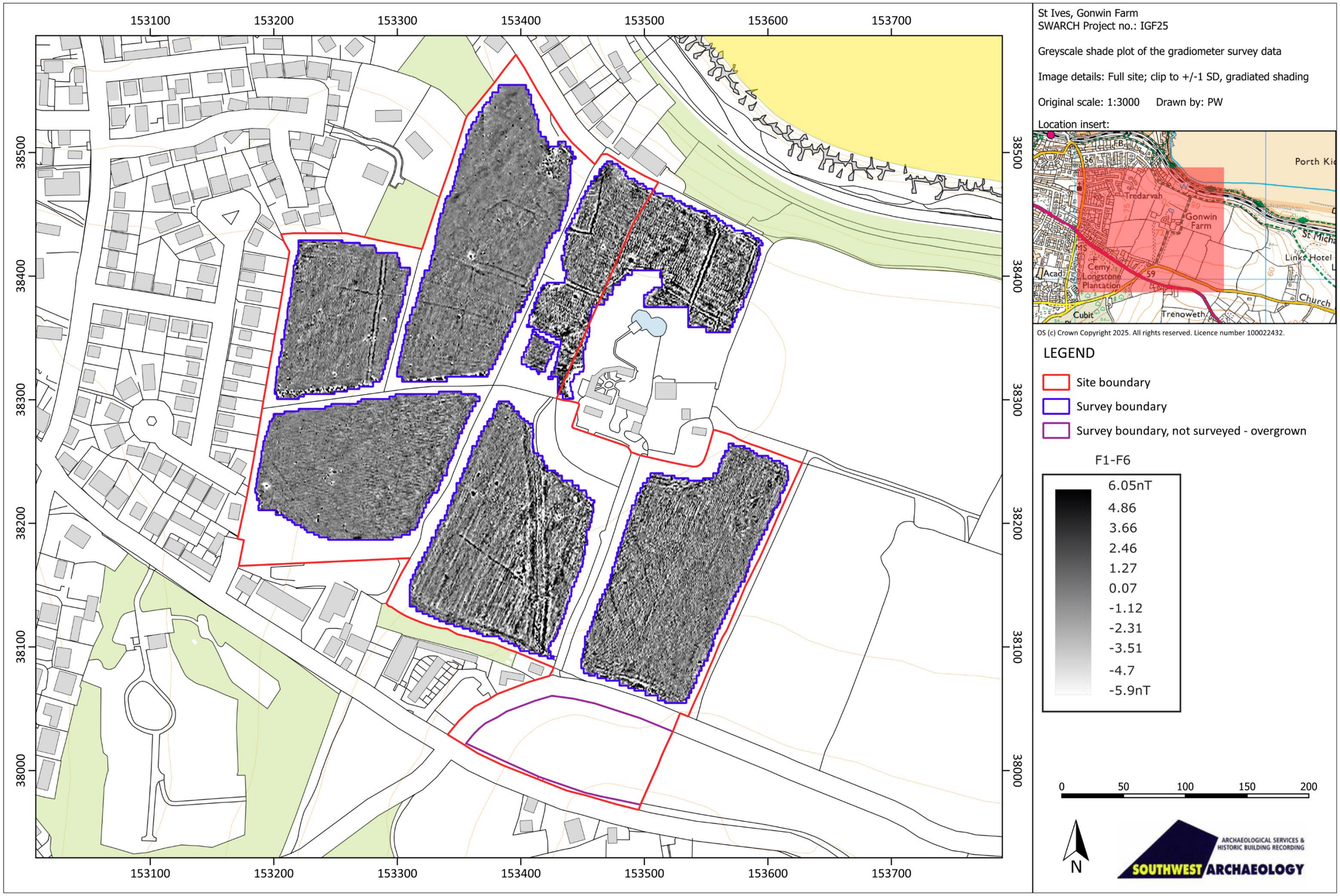
- Grid layout
- Site boundary
- Survey boundary
- Survey boundary, not surveyed - overgrown

0 50 100 150 200

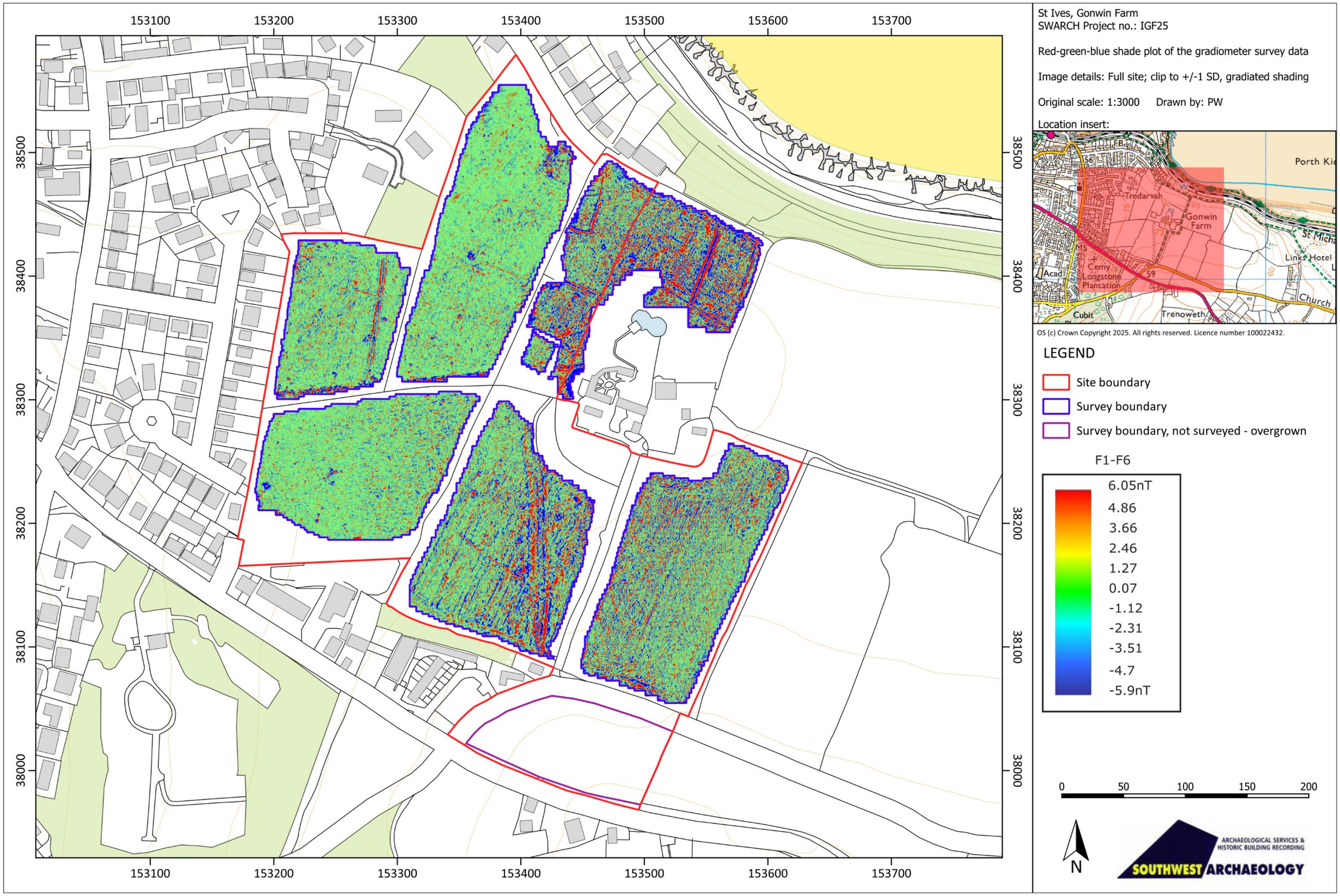
N

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

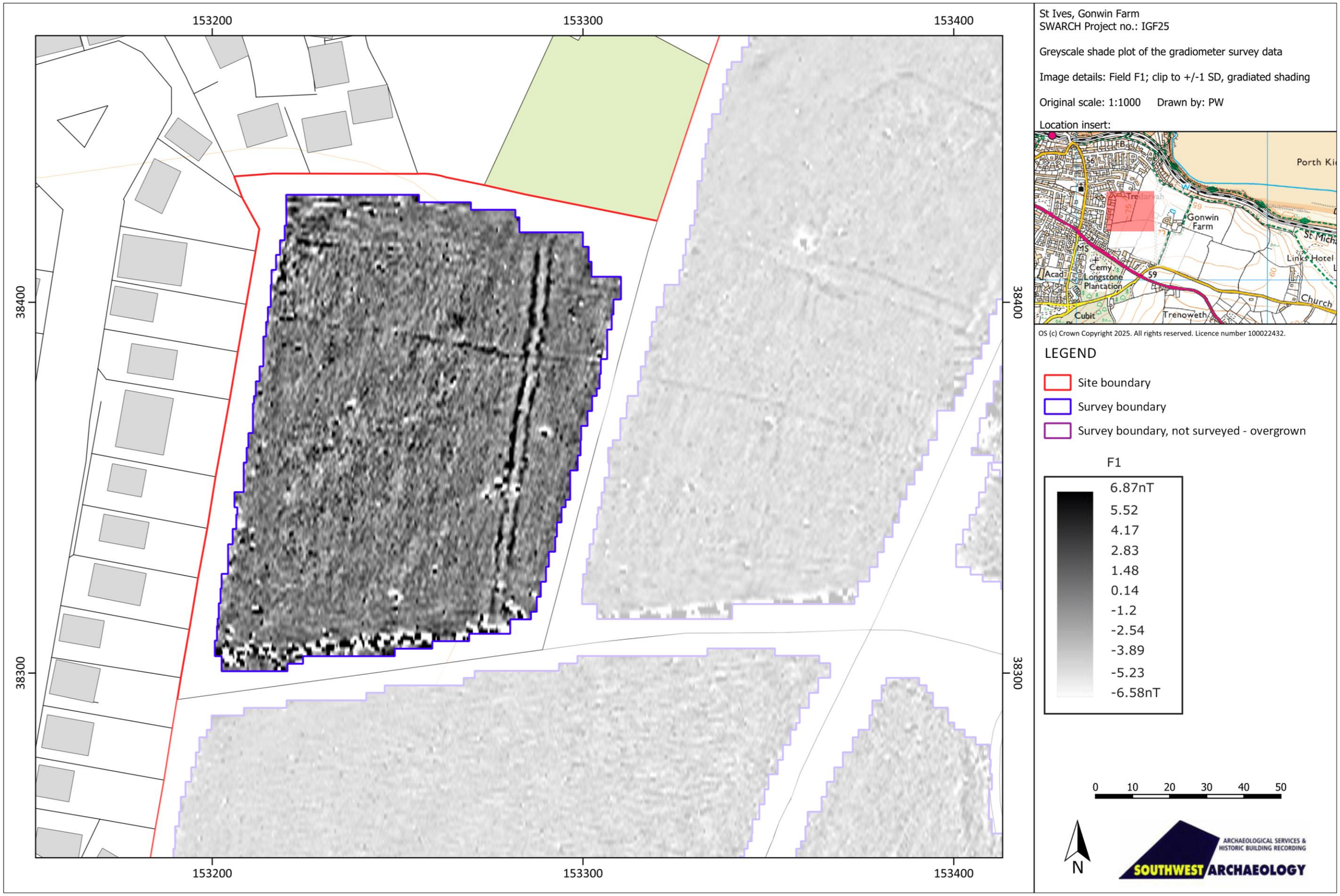
1. GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



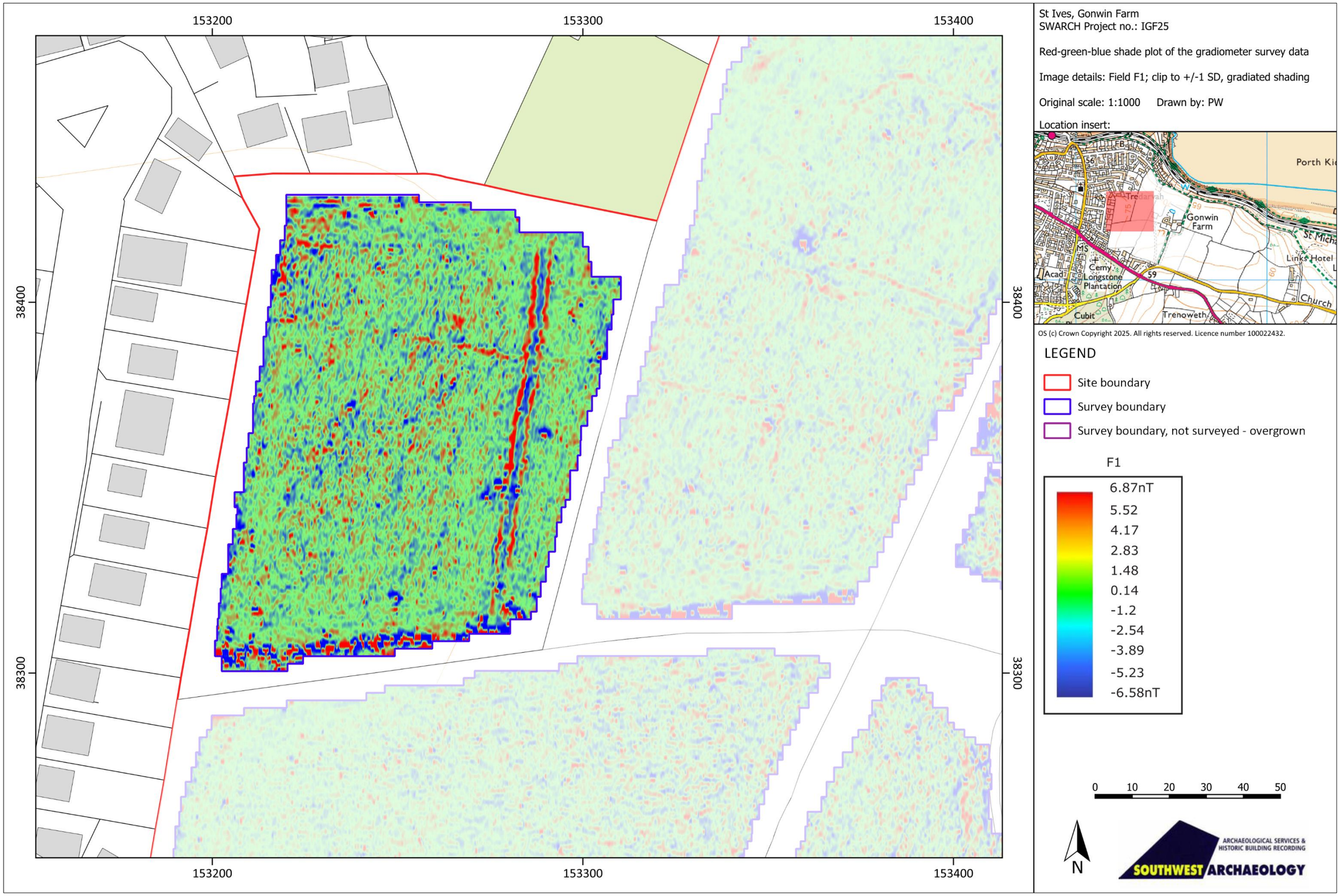
2. FULL SITE, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



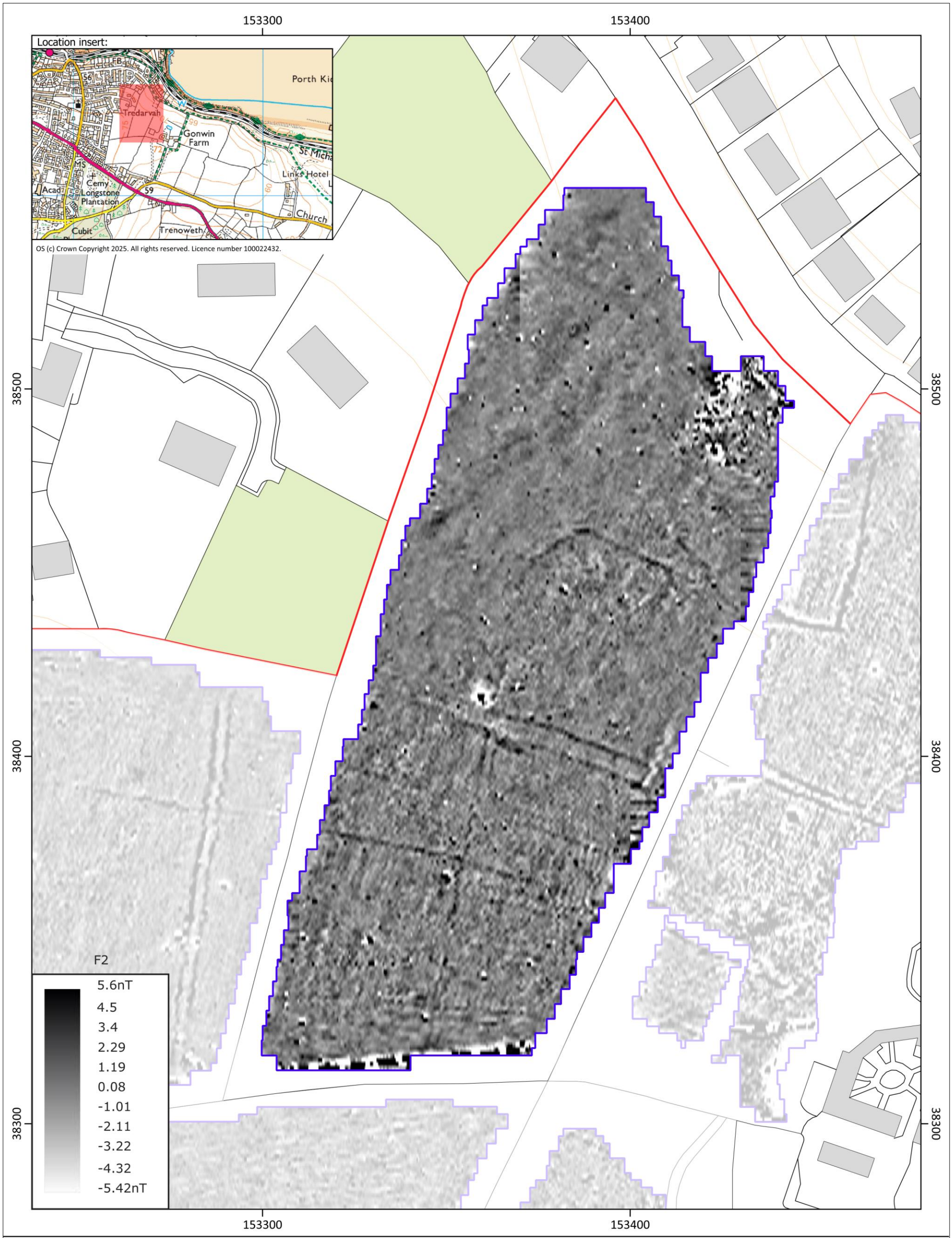
3. FULL SITE, RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1 SD, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



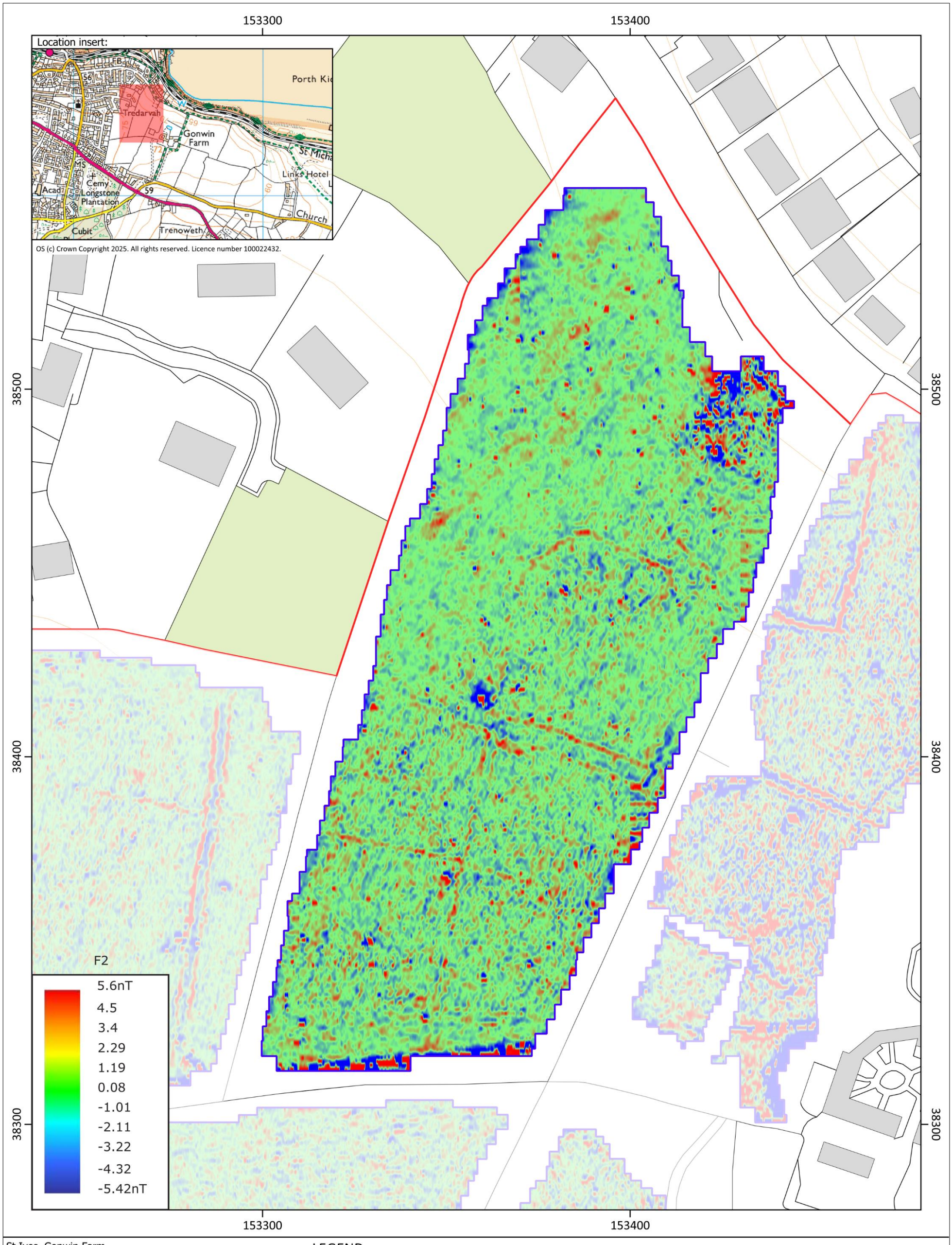
4. FIELD F1, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



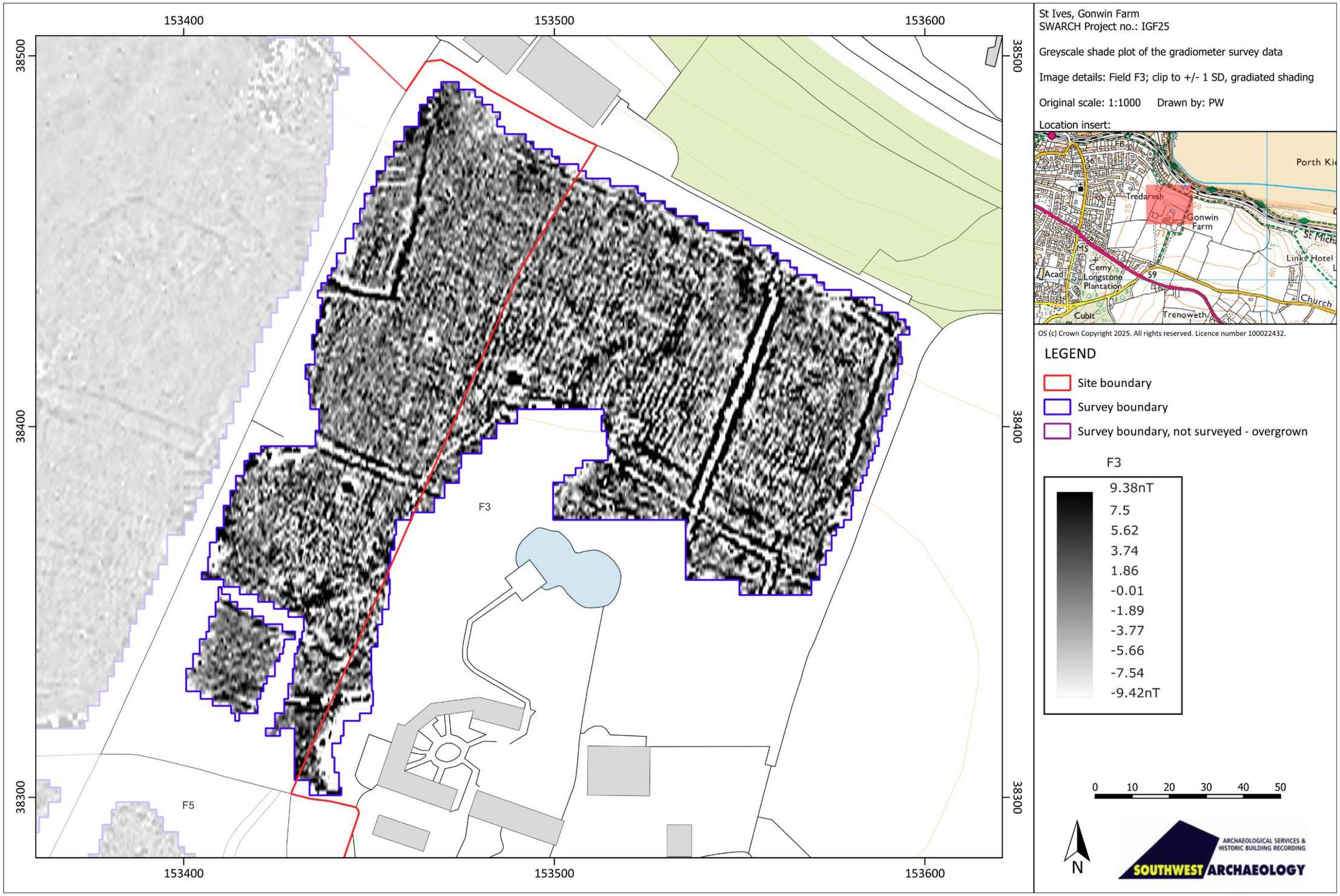
5. FIELD F1, RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1 SD, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



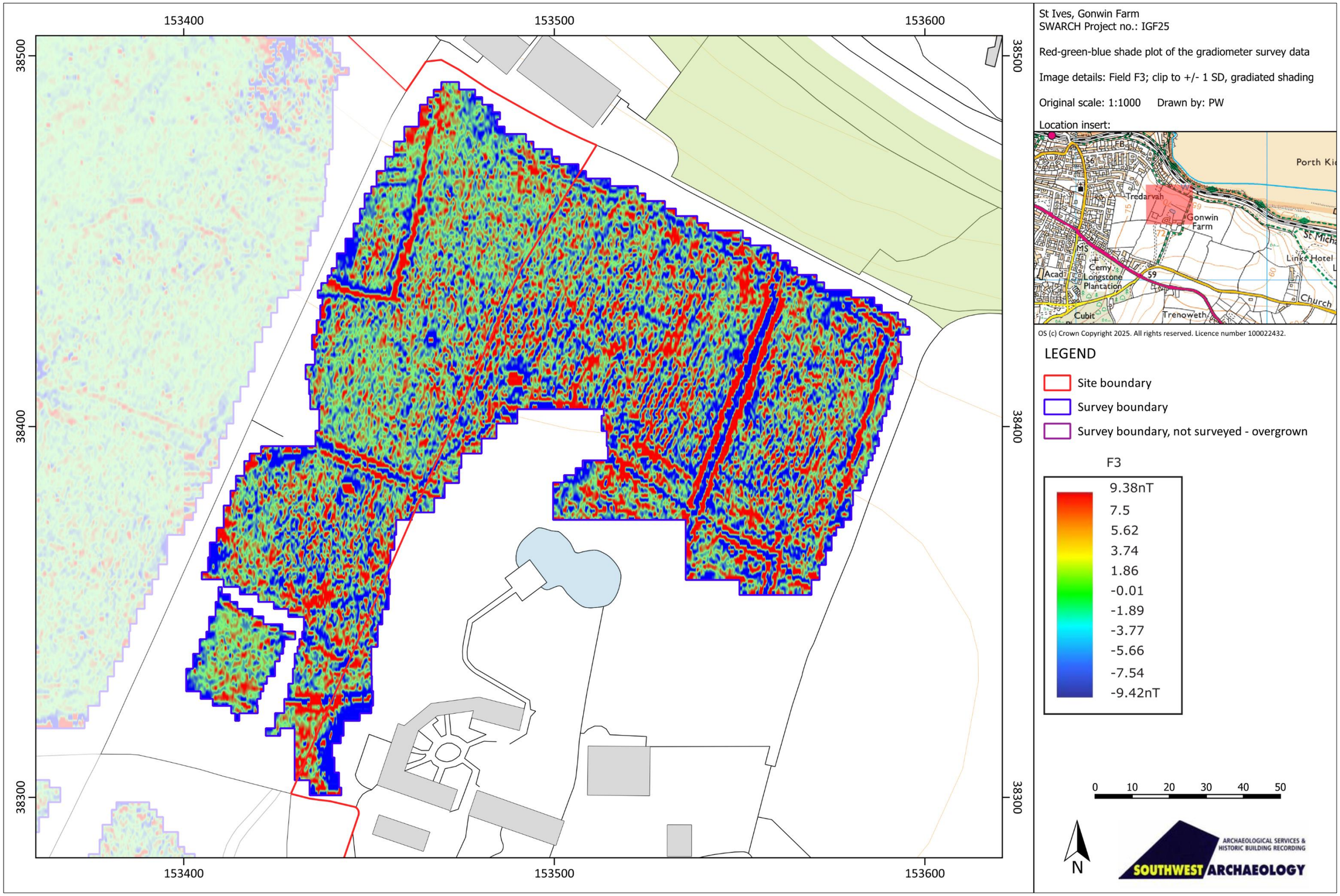
6. Field F2, greyscale shade plot of gradiometer survey data; clip to +/-1 SD, gradiated shading. (contains Ordnance Survey data © Crown copyright 2025. Licence number 100022432).



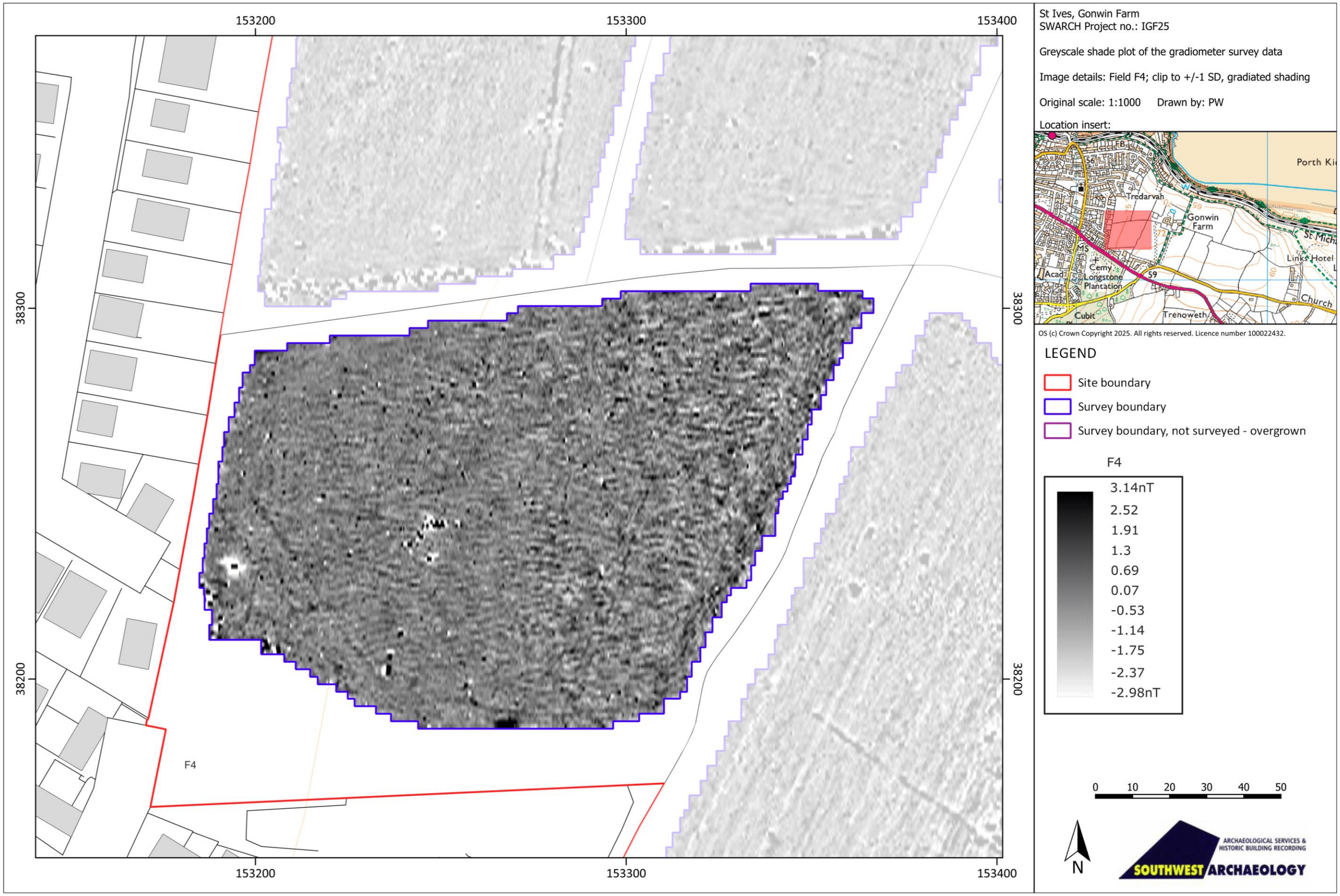
7. FIELD F2, RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1 SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



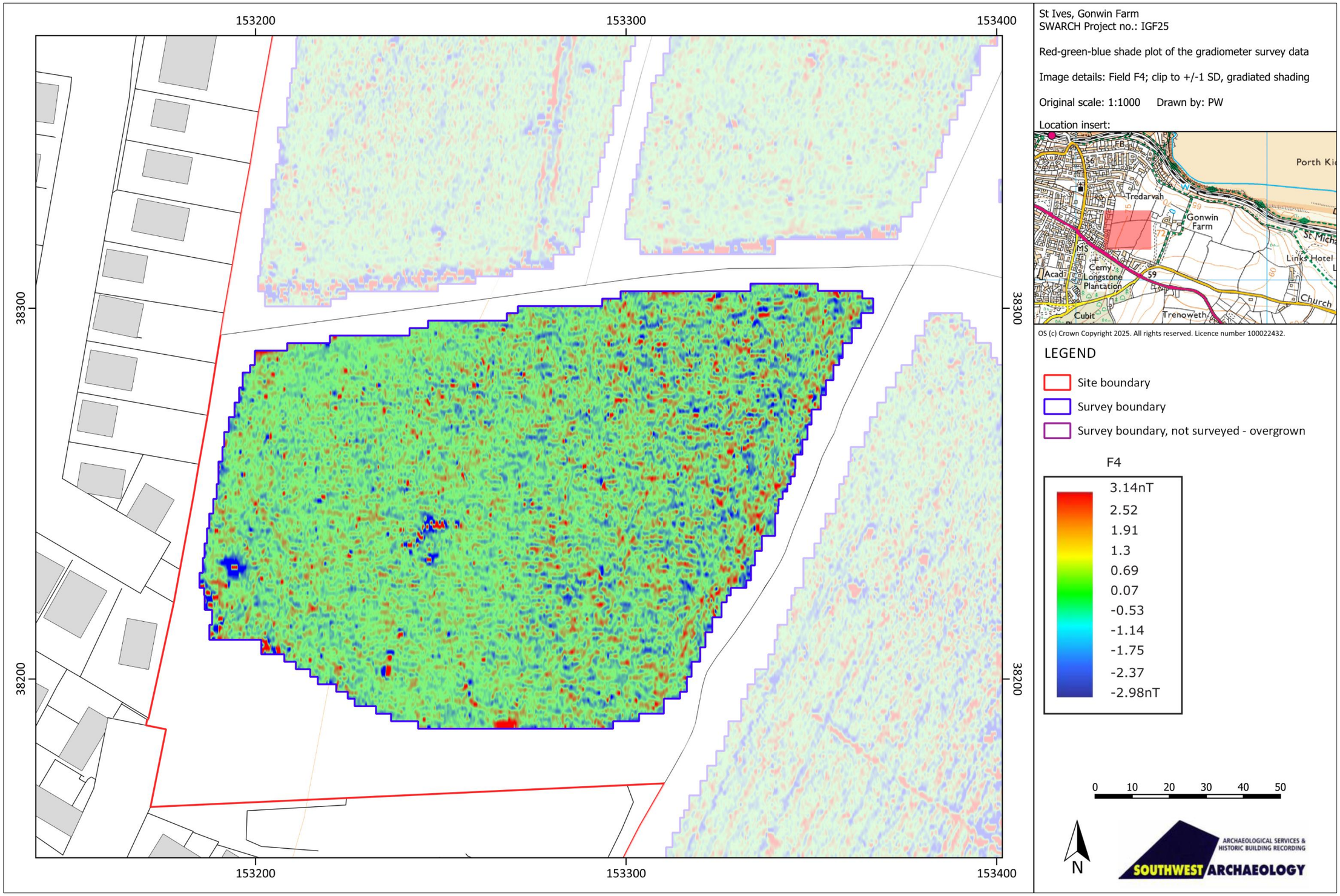
8. FIELD F3, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



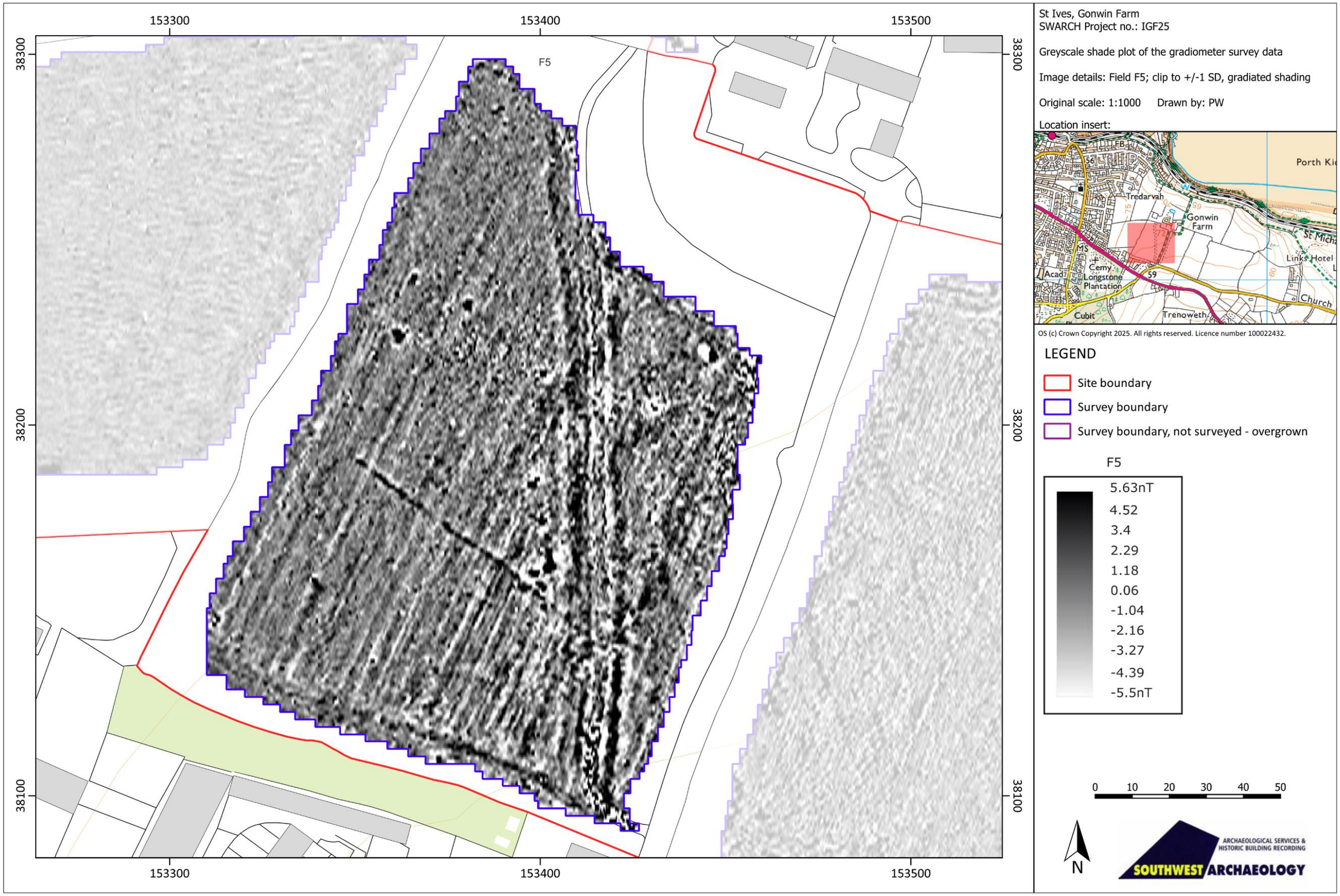
9. Field F3, red-green-blue shade plot of gradiometer survey data; clip to +/-1 SD, gradiated shading (contains Ordnance Survey data © Crown copyright 2025. Licence number 100022432).



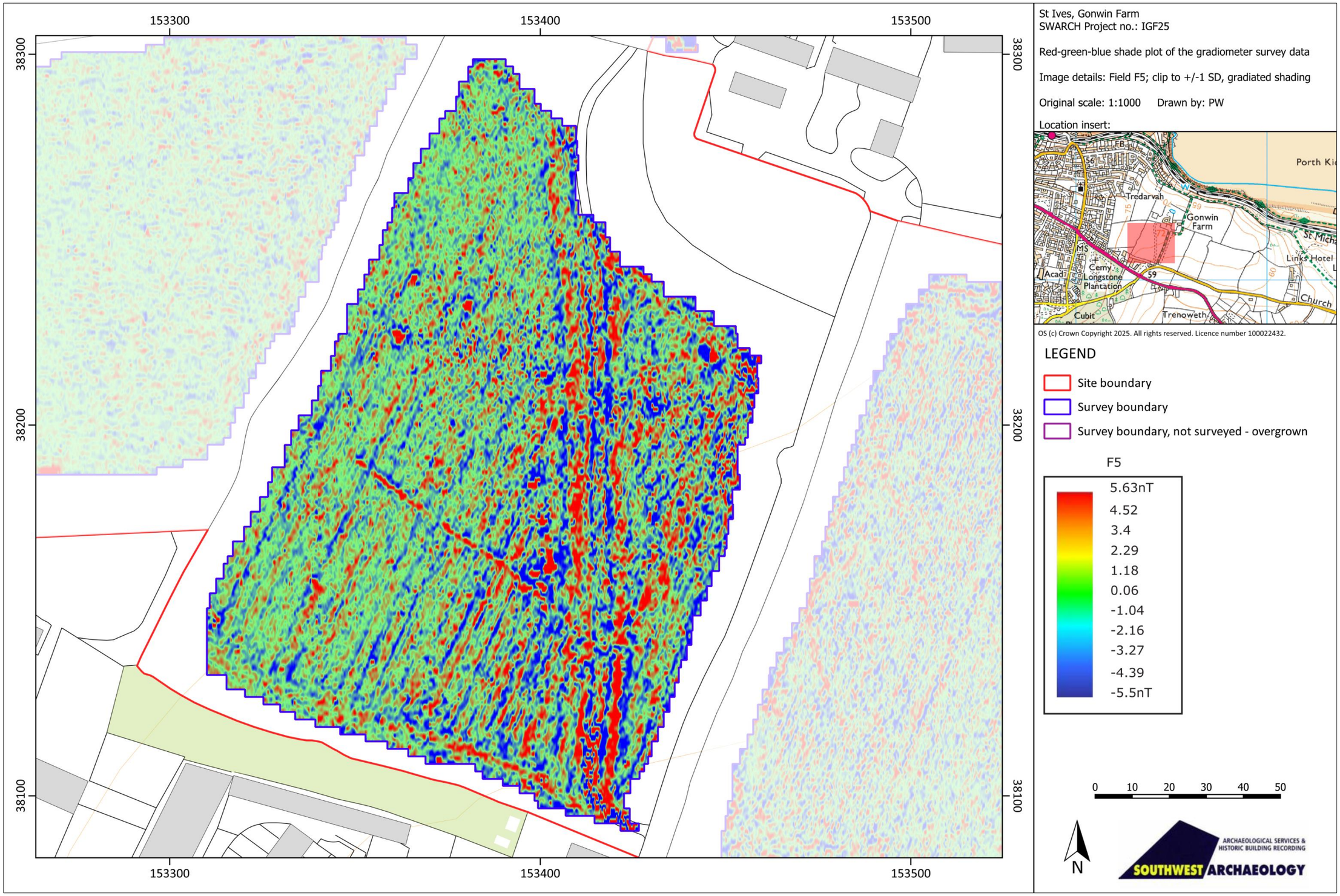
10. FIELD F4, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



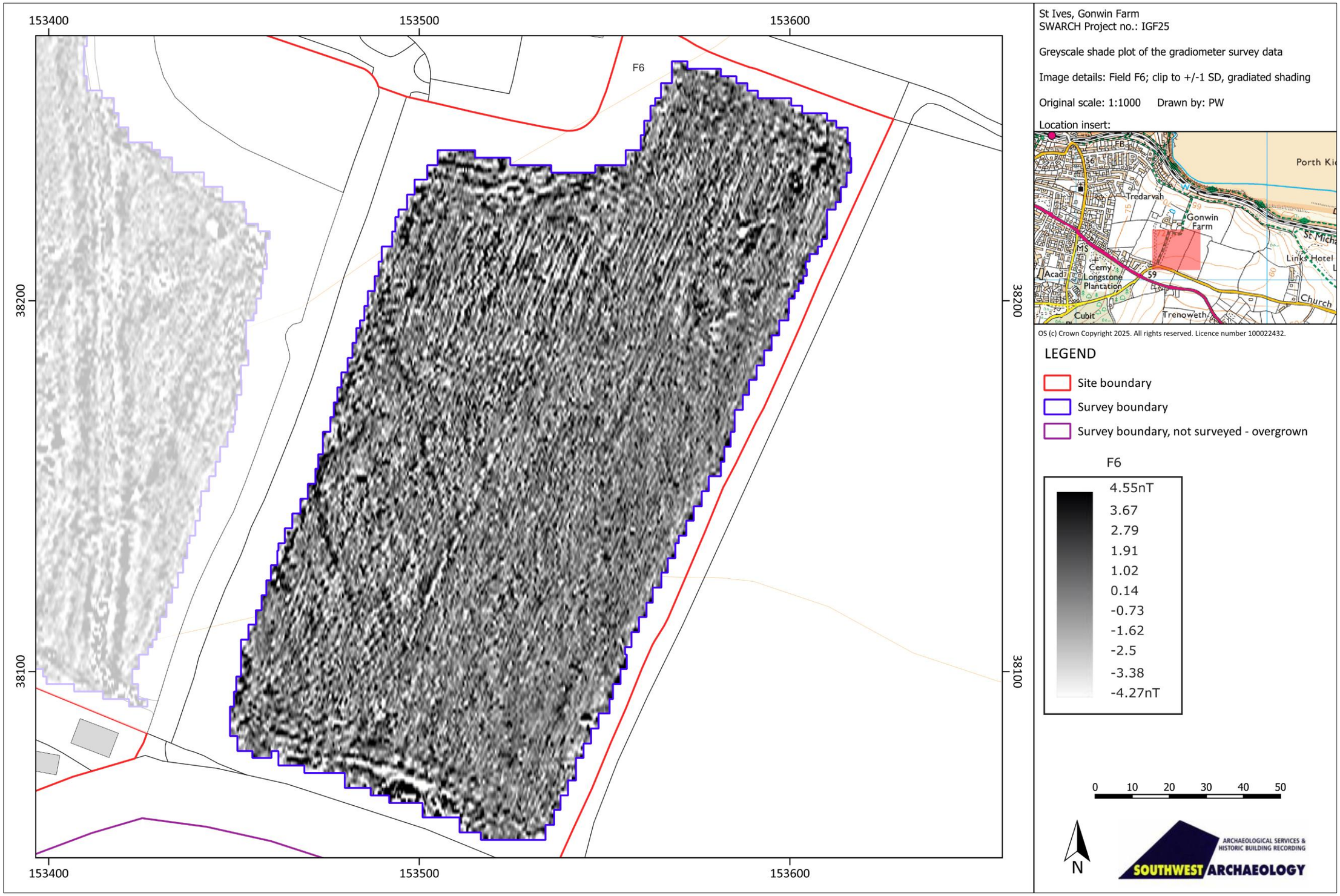
11. FIELD F4, RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1 SD, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



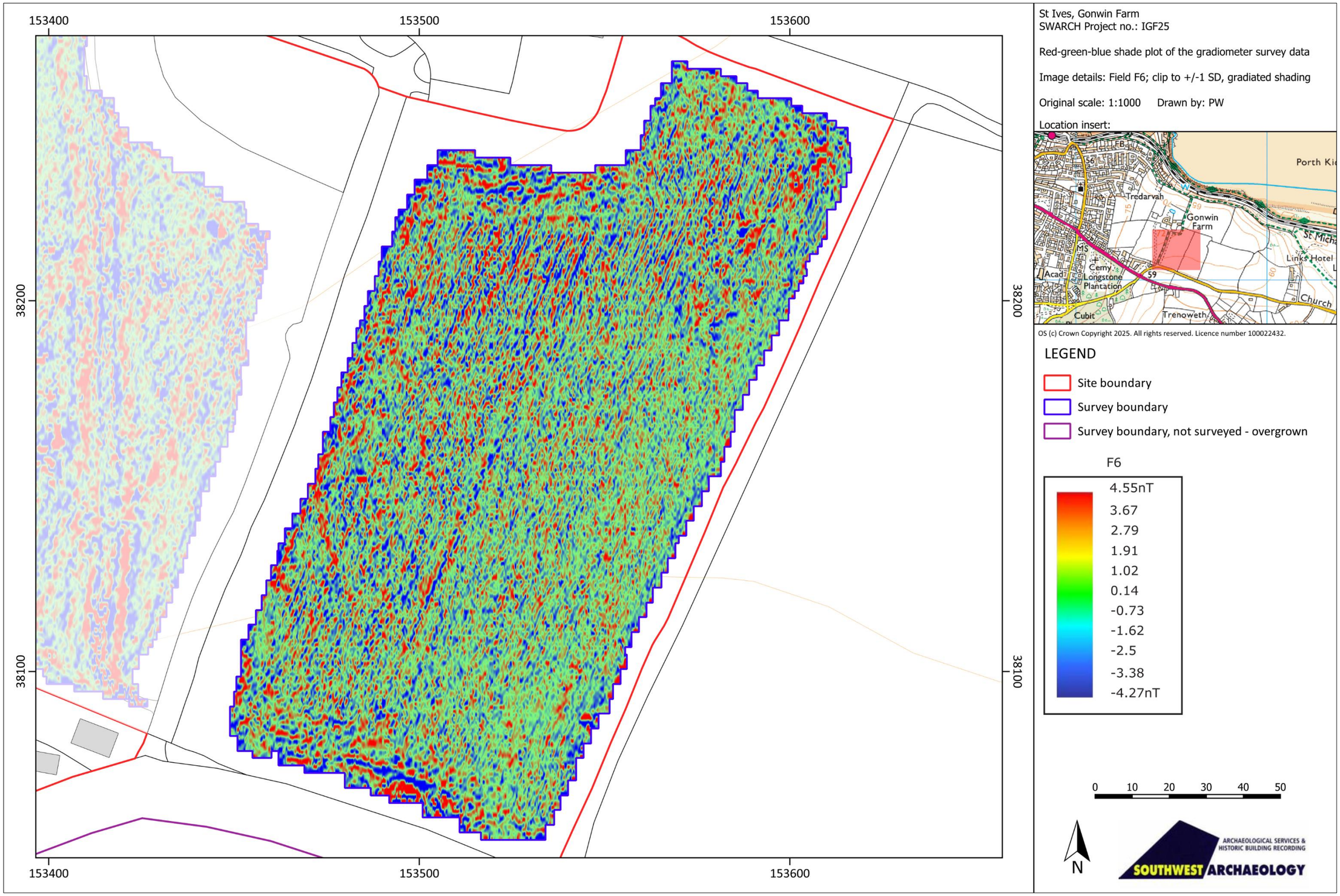
12. FIELD F5, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



13. FIELD F5, RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1 SD, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



14. FIELD F6, GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1SD, GRADIATED SHADING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).



15. FIELD F6, RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIP TO +/-1 SD, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2025. LICENCE NUMBER 100022432).

THE OLD DAIRY
HACCHE LANE BUSINESS PARK
PATHFIELDS BUSINESS PARK
SOUTH MOLTON
DEVON
EX36 3LH

01769 573555
01872 223164
MAIL@SWARCH.NET