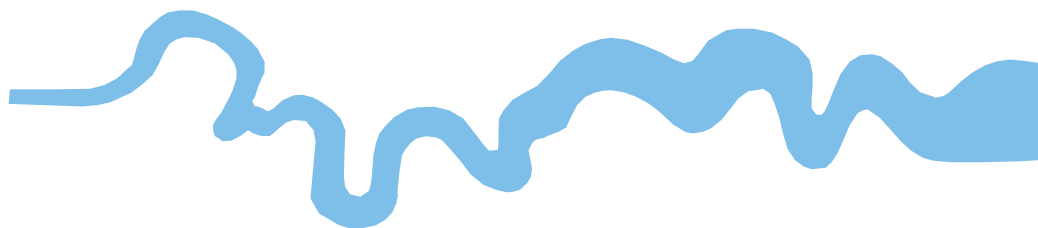


T V A S



SOUTH

**Mowbray Land 3, North Horsham,
West Sussex**

Geophysical Survey (Magnetic)

by Kyle Beaverstock

Site Code: MNH 23/181

(TQ 2025 3379)

Mowbray Land 3, North Horsham, West Sussex

Geophysical Survey (Magnetic) Report For Legal and General Strategic Land

by Kyle Beaverstock

TVAS South

Site Code MNH 23/181

October 2023

Summary

Site name: Mowbray Land 3, North Horsham, West Sussex

Grid reference: TQ 2025 3379

Site activity: Magnetometer survey

Date and duration of project: 18 – 22 September 2023

Project coordinator: Tim Dawson

Site supervisor: Kyle Beaverstock

Site code: MNH23-181

Area of site: c. 17ha

Summary of results: The geophysical survey identified a wide range of magnetic anomalies across the survey area. A number of these are potential archaeological features and possibly indicate the presence of a prehistoric agricultural field system.

Location of archive: The archive is presently held at Thames Valley Archaeological Services, Reading in accordance with TVAS digital archiving policies.

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Report edited/checked by: Steve Ford✓ 23.10.23 Tim Dawson✓ 23.10.23
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Mowbray Land 3, North Horsham, West Sussex A Geophysical Survey (Magnetic)

by Kyle Beaverstock

Report 23/181a

Introduction

This report documents the results of a geophysical survey (magnetic) carried out at Bensons Farm, Mowbray, North Horsham, West Sussex (TQ 2025 3379) (Fig. 1). The work was commissioned by Charlie Ward of Legal and General Strategic Land, The Dorking Business Park, Station Road, Dorking, RH4 1HJ.

Planning permission (DC/16/1677) has been granted by Horsham District Council for a major development to the north of Horsham for residential and commercial purposes. The planning permission is subject to a standard archaeological condition (22). This document is to assist the process of discharging condition 22. This is in accordance with the *National Planning Policy Framework* (NPPF 2021), and the District's policies on archaeology. The fieldwork was undertaken by Kyle Beaverstock and Paul Greenslade between the 18th and 22nd of September 2023 and the site code is MNH 23/181.

The archive is presently held at Thames Valley Archaeological Services, Reading in accordance with TVAS digital archiving policies.

Location, topography and geology

The site is located 4.3km to the north-east of Horsham and 7.4km to the south-west of Crawley (Fig. 1). It is bounded by Channells Brook to the south, Wimland Road to the east and farmland to the north and west and is currently being utilised for pastoral and arable farming. The site gently undulates from 62m above Ordnance Survey (aOD) in the north to 60m aOD in the south. The underlying geology is stated as Horsham Stone with bands of Clay and Ironstone (BGS 1972).

Site history and archaeological background

The archaeological potential of the overall development site had been considered in a desk-based assessment, (ASE 2014, 2015) geophysical survey and fieldwalking (ASE 2016), trench evaluation (WA 2020) with some follow-up fieldwork (Attard 2021; Attard 2023). In summary, the site lies within the Sussex Weald, until recently an area considered to contain few sites of archaeological interest prior to the medieval period (Rudling 2003). The exceptions to this were iron production sites in Iron Age, Roman and Saxon times (Cleere and

Crossley, 1995) and Mesolithic sites on the fringes of the Weald in north east Hampshire and south west Surrey (Rankine 1954). However, recent fieldwork has located several sites of different periods in the Horsham area and beyond (e.g. McNicoll et al 2017;). Horsham is also known for sites which area a variation of typical sites of Mesolithic date and which might represent a middle Mesolithic with a distinct microlith form- a Horsham Point (Clarke 1934; Jacobi 1976). Most Mesolithic sites in the arable lands of southern England comprise no more than clusters of lithic artefacts now usually found only within topsoil/ploughsoil contexts. Below ground cut features are extremely infrequently encountered.

Recent evaluation of parts of the overall North Horsham development has revealed little of archaeological interest except for small scatters of struck flintwork indicative of further Mesolithic occupation (WA 2020; 2021) and charcoal rich pits of medieval date which are possibly charcoal clamps. Follow-up fieldwork has examined one of these Mesolithic flint scatters (Attard 2021) and further investigation adjacent to Moathouse Farm also recorded areas of medieval and post-medieval deposits in addition to a Middle Iron Age hearth or forge thought to be associated with iron production (Attard 2023). The southern half of the Mowbray Land (1) site has been subject to geophysical survey, (ASE 2016; Beaverstock and Cicu 2022), fieldwalking (ASE 2015) and some trenching (Rouard 2023) but little of interest has been recorded. Further geophysical survey has been undertaken at Mowbray Land 2 (Beaverstock 2023), c.300m to the north-east of the current site, which identified several magnetic anomalies of archaeological interest that are likely to represent previous field boundaries and trackways.

Methodology

Sample interval

Data collection involved the traversing of the survey area along straight and parallel lines using two cart-mounted Bartington Grad601-2 fluxgate gradiometers. Even coverage was achieved with the use of regularly spaced markers at the ends of traverses and the real-time positional trace plot. Readings were taken at 0.13m intervals along traverses 1m apart, providing an appropriate methodology balancing cost and time with resolution. Traverses were walked at an alternating zig-zag pattern along a north-west to south-east orientation across the northern and central areas and north to south orientation in the east of the survey area. A number of obstructions were encountered during the survey including fencing, buildings and vegetation which prevented surveying of some areas. Conditions were mostly dry and bright.

The Grad 601-2 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. Under normal operating conditions it can be expected to identify buried features >0.5m in diameter. Features which can be detected include disturbed soil, such as the fill of a ditch, structures that have been heated to high temperatures (magnetic thermoremnance) and objects made from ferro-magnetic materials. The strength of the magnetic field is measured in nano Tesla (nT), equivalent to 10^{-9} Tesla, the SI unit of magnetic flux density.

Equipment

The purpose of the survey was to identify geophysical anomalies that may be archaeological in origin in order to inform a targeted archaeological investigation of the site prior to development. The survey and report generally follow the recommendations and standards set out by both European Archaeological Council (EAC 2015) and the Chartered Institute for Archaeologists (2002, 2020).

Magnetometry was chosen as a survey method as it offers the most rapid ground coverage and responds to a wide range of anomalies caused by past human activity. These properties make it ideal for the fast yet detailed surveying of an area.

The detailed magnetometry survey was carried out using two dual sensor Bartington Instruments Grad 601-2 fluxgate gradiometers mounted upon a Bartington non-magnetic cart. A two-wheeled lightweight structure pushed by hand, the cart consisted a bank of four vertically-mounted Bartington Grad601-2 magnetic sensor tubes at 1m apart and a Trimble R2 Receiver, centimetre edition GPS. Readings were collected by two Bartington Grad601-2 loggers and collated using MLgrad601 software on a Geo 10 tablet running Windows 11 mounted at the rear of the cart. This enables readings to be taken of both the general background magnetic field and any localised anomalies with the difference being plotted as either positive or negative buried features. All sensors are calibrated to cancel out the local magnetic field and react only to anomalies above or below this base line. On this basis, strong magnetic anomalies such as burnt features (kilns and hearths) will give a high response as will buried ferrous objects. More subtle anomalies such as pits and ditches can be seen from their infilling soils containing higher proportions of humic material, rich in ferrous oxides, compared to the undisturbed subsoil. This will stand out in relation to the background magnetic readings and appear in plan following the course of a linear feature or within a discrete area.

The Trimble R2 Receiver, centimetre edition GPS system with centimetre real-time accuracy was used to tie the cart traverses into the Ordnance Survey national grid. This unit offers both real-time correction and post-

survey processing; enabling a high level of accuracy to be obtained both in the field and in the final post-processed data.

Data gathered in the field was processed using the TerraSurveyor64 software package. This allows the survey data to be collated and manipulated to enhance the visibility of anomalies, particularly those likely to be of archaeological origin. The table below lists the processes applied to this survey, full survey and data information is recorded in Appendix 1.

Process	Effect
Clip from -1.37 to 1.37 nT	Enhance the contrast of the image to improve the appearance of possible archaeological anomalies.
De-stripe: median, all sensors	Removes the striping effect caused by differences in sensor calibration, enhancing the visibility of potential archaeological anomalies.
De-spike: threshold 1, window size 3×3	Compresses outlying magnetic points caused by interference of metal objects within the survey area.
De-stagger: all grids, both by -1 intervals	Cancels out effects of site's topography on irregularities in the traverse speed.

The raw data plot is presented as a greyscale plot shown in relation to the site (Fig. 2) with the processed data then presented as a second figure (Fig. 3), followed by a third plan to present the abstraction and interpretation of the magnetic anomalies (Fig. 4). Anomalies are shown as colour-coded lines, points and polygons.

The greyscale plot of the processed data is exported from TerraSurveyor64 in a georeferenced portable network graphics (.PNG) format, a raster image format chosen for its lossless data compression and support for transparent pixels, enabling it to easily be overlaid onto an existing site plan. The data plot is combined with grid and site plans in QGIS 3.32.2 and exported again in .PNG format in order to present them in figure templates in Adobe InDesign CS5.5, creating .INDD file formats. Once the figures are finalised they are exported in .PDF format for inclusion within the finished report.

Results

A significant number of magnetic anomalies were detected by the geophysical survey across the site (Figs. 2, 3, 5-10). These represent a range of possible features, both buried and on the surface, several of which are likely to be archaeological in origin (Fig. 4).

Around the edges of the fields and paddocks are a series of areas of magnetic disturbance [Figs. 11-13: 1] characterised by high bipolar and dipolar positive and negative responses and are likely the result of ferromagnetic material in the fencing bordering these areas. Across the northern and central fields are two linear

areas of magnetic disturbance [2], these are characterised by high bipolar positive and negative responses and likely represent buried services such as pipes or cables. Also scattered across the site, particularly in the northern field, are a series of dipolar point anomalies [3]. These are visible as a discrete strong positive anomaly with an associated strong negative response, these have a very strong responses and are likely caused by ferromagnetic objects such as fragments of farm machinery buried in the topsoil. In the central and southern areas are two weak linear background variations [4] characterised by irregular positive anomalies with low responses which likely represent natural variations in the underlying geology.

In the far north of the survey area is an L-shaped weak positive linear anomaly, running from the north-east to the south-west for c.33m before turning to the south-east for c.46m. To the south is another L-shaped weak positive linear anomaly [8] running from the north-western end of positive linear anomaly [10] to the north for c.18m before tuning to the south-west for c.61m. Further to the south is a third L-shaped weak positive linear anomaly [9], running from the south-west to the north-east for c.13m before turning to the south-east for c.29m. These may represent ditches at corners of fields within an agricultural field system however the low responses suggest they may also represent weak background variations or geological features.

In the north of the northern field are two parallel positive linear anomalies [6] 31m and 34m long, c.2.5m apart and orientated from the north-west to the south-east most likely represent a short length of trackway. Cutting through this is a weak positive linear anomaly [7], orientated south-west to north-east and measuring c.146m this most likely represents a ditch, possibly related part of a former field boundary. To the south-east are a series of positive linear anomalies [10], [11] and [12]. The most northerly is an L-shaped positive linear anomaly [10] that runs from the south-west to the north-east for c.36m before turning to the south-east for c.42m. From the south-eastern end of positive linear anomaly [10] is a weak positive linear anomaly [11] orientated north-west to south east and measuring c.55m in length where it terminates on the northern side of positive linear anomaly [12] which is orientated south-west to north-east and measures c.67m long. These linear anomalies together form part of what appears to be the boundary ditches of a field system.

On the western side of the northern field is another set of positive linear anomalies [13], [14] and [15]. In the north is an L-shaped weak positive linear anomaly running from west to east for c.59m before tuning to the south-west for c.14m, south-west of this is a positive linear anomaly [14] orientated south-west to north-east and measuring c.173m long and running parallel to the east is positive linear anomaly [15], which measures c.50m long. Together these may represent fragments of boundary ditches of a long, narrow rectangular field. To the east are positive linear anomalies [16] and [17] which have a slightly irregular form with positive linear anomaly

[16] running in a roughly L-shaped pattern along the southern boundary of the northern field and measuring *c.*111m in total. To the north-east is positive linear anomaly [17] which primarily runs from the north-west to the south-east for *c.*74m with a small length spurring out towards the south-west for *c.*16m, then turns top the east for *c.*41m before turning to the north-east for *c.*16m. These positive linear anomalies appear to form the outline of a field enclosure that may be related to positive linear anomalies [21] and [22], however their irregular pattern within this geological context raises the possibility they may be geological in origin.

In the east of the central field is a short length of positive linear anomaly [18] orientated north-west to south-east, measuring *c.*24m long and likely representing a buried ditch-type feature. To the south-west is a negative linear anomaly [19]. Orientated north-west to south-east and measuring *c.*50m in length, this linear anomaly may represent a negative feature such as an earthen bank or a soil build up relative to the background readings, it could also be caused by agricultural activity such as ploughing. In the north of the small western paddock is an L-shaped weak positive linear anomaly [20], runs from the north-west to the south-east for *c.*18m before turning to the north-east for *c.*17m. This may represent the corner of a linear feature such as a boundary ditch, perhaps contemporary with positive linear anomalies [13], [14] and [15] to the north or it may be a weak background variation caused by natural geological changes.

In the north-west of the southern field are two positive linear anomalies. A large L-shaped linear anomaly [22] which measures *c.*89m along a north-east to south-west orientation and turns to the north-west for a further *c.*129m. Towards the north-western end another positive linear anomaly [21] orientated south-west to the north-east and measuring *c.*76m. Together [21] and [22] appear to form part of a field boundary system. In the south-east corner of positive linear anomaly [22] is a short length of weak positive linear anomaly [23], this is orientated north-east to south-west and measures *c.*25m long. This most likely represents a linear feature such as a ditch but may also represent an earlier phase of positive linear anomaly [22].

Across the south of the central field are two positive linear anomalies [24] and [25] in an elongated rectangular pattern. They are generally orientated north-east to the south-west with the western ends of positive linear anomaly [24] curving up towards the north-west. Together [24] and [25] cover an area *c.*180m by 10m wide and *c.*154m long and 6m wide respectively with a small *c.*3m wide entrance separating the two. These appear to be field boundary ditches possibly surrounding a strip that may have contained a bank or hedge. Within the western part of positive linear anomaly [24] is an area of scattered magnetic debris [26], this is characterised by numerous dipolar responses in an irregular pattern covering an area. It is likely caused by buried magnetically enhanced material possibly indicating the remains of a small rubble-built embankment. Similarly

these responses can be seen in areas of the small paddocks in the north-east of the survey area although these are likely related to more general ferromagnetic and thermomagnetic debris. Parallel to and to the north of positive linear anomaly [25] is positive linear anomaly [27]. This measures *c.*70m long and is orientated south-west to north-east and likely represents a linear feature such as a ditch possibly contemporary with positive linear anomaly [25].

Conclusion

The geophysical survey of the site was successfully completed and a number of magnetic anomalies were detected across the area covered. While some of these are caused by magnetic interference from ferromagnetic materials and geological variation a number may be of archaeological interest. The majority of these take the form of positive linear anomalies and likely represent the ditches of various agricultural field systems with potentially a number of phases. A small number of the anomalies can be matched to field boundaries plotted on early edition Ordnance Survey mapping (ASE 2014). These include those along the southern boundary of the northern field at [16] and the parallel anomalies in the southern field at [24] and [25], which correspond to a boundary and bridleway visible on the historic mapping. The irregular forms of some of the enclosed areas suggest that these may be earlier in date, however it may suggest that the anomalies are instead caused by local geological variation than human activity. In some areas of the survey, particularly those within smaller fields or paddocks, the strong magnetic disturbance caused by ferrous material within the surrounding fencing may obscure weaker magnetic anomalies of possible archaeological origin.

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Appendix 1. Survey and data information

Programme:

Name: TerraSurveyor64
Version: 4.0.18.1

Raw data

Name: MNH23-181_01 RAW
Desc: Imported as Composite from: MNH23-181_01.xyz
InstDesig: MLGrad Import
SurveyDate: 18/09/23
AssembleDate: 04/10/23
ProcessDate: 04/10/23
Units:
Surveyed Area: 5.9608 ha
Survey Extent: 8.4754 ha
GPS Datum: WGS-84
Map Coordinate System: DDD
Survey Type: GPS
Average point interval : 1.43m
Interval & Radius : 0.13m 1m
Source GPS totals: Trackgroups:1 Tracks:1672, Points:172064

Base layer Stats

Max: 96.70
Min: -99.90
Std Dev: 7.53
Mean: -0.32
Median: -0.40

Name: MNH23-181_02 RAW
Desc: Imported as Composite from: MNH23-181_02.xyz
InstDesig: MLGrad Import
SurveyDate: 19/09/23
AssembleDate: 04/10/23
ProcessDate: 04/10/23
Units:
Surveyed Area: 1.147 ha
Survey Extent: 2.1903 ha
GPS Datum: WGS-84
Map Coordinate System: DDD
Survey Type: GPS
Average point interval : 1.41m
Interval & Radius : 0.13m 1m
Source GPS totals: Trackgroups:1 Tracks:512, Points:33280

Base layer Stats

Max: 95.30
Min: -99.90
Std Dev: 3.17
Mean: -0.09
Median: 0.00

Name: MNH23-181_03 RAW
Desc: Imported as Composite from: MNH23-181_03.xyz
InstDesig: MLGrad Import
SurveyDate: 19/09/23
AssembleDate: 04/10/23
ProcessDate: 04/10/23
Units:
Surveyed Area: 0.49111 ha
Survey Extent: 0.88814 ha
GPS Datum: WGS-84
Map Coordinate System: DDD
Survey Type: GPS
Average point interval : 1.35m
Interval & Radius : 0.13m 1m
Source GPS totals: Trackgroups:1 Tracks:304, Points:14760

Base layer Stats

Max: 96.40
Min: -99.90
Std Dev: 10.91
Mean: -1.29

Median: -0.50

Name: MNH23-181_04 RAW
Desc: Imported as Composite from: MNH23-181_04.xyz
InstDesig: MLGrad Import
SurveyDate: 19/09/23
AssembleDate: 04/09/23
ProcessDate: 04/09/23
Units:
Surveyed Area: 0.23086 ha
Survey Extent: 0.37112 ha
GPS Datum: WGS-84
Map Coordinate System: DDD
Survey Type: GPS
Average point interval : 1.36m
Interval & Radius : 0.13m 1m
Source GPS totals: Trackgroups:1 Tracks:192, Points:6640

Base layer Stats

Max: 96.70
Min: -99.90
Std Dev: 19.70
Mean: 6.67
Median: 0.90

Name: MNH23-181_05 RAW
Desc: Imported as Composite from: MNH23-181_05.xyz
InstDesig: MLGrad Import
SurveyDate: 19/09/23
AssembleDate: 04/10/23
ProcessDate: 04/10/23
Units:
Surveyed Area: 0.19725 ha
Survey Extent: 0.46647 ha
GPS Datum: WGS-84
Map Coordinate System: DDD
Survey Type: GPS
Average point interval : 1.48m
Interval & Radius : 0.13m 1m
Source GPS totals: Trackgroups:1 Tracks:256, Points:5552

Base layer Stats

Max: 81.40
Min: -99.90
Std Dev: 7.68
Mean: -0.82
Median: 0.00

Name: MNH23-181_06 RAW
Desc: Imported as Composite from: MNH23-181_06.xyz
InstDesig: MLGrad Import
SurveyDate: 20/09/23
AssembleDate: 04/10/23
ProcessDate: 04/10/23
Units:
Surveyed Area: 0.47224 ha
Survey Extent: 3.029 ha
GPS Datum: WGS-84
Map Coordinate System: DDD
Survey Type: GPS
Average point interval : 1.45m
Interval & Radius : 0.13m 1m
Source GPS totals: Trackgroups:1 Tracks:192, Points:13112

Base layer Stats

Max: 96.60
Min: -99.90
Std Dev: 10.19
Mean: -0.57
Median: -0.30

Name: MNH23-181_07
Desc: Imported as Composite from: MNH23-181_07.xyz

InstDesig: MLGrad Import
 SurveyDate: 20/10/23
 AssembleDate: 04/10/23
 ProcessDate: 04/10/23
 Units:
 Surveyed Area: 2.8202 ha
 Survey Extent: 5.6409 ha
 GPS Datum: WGS-84
 Map Coordinate System: DDD
 Survey Type: GPS
 Average point interval : 1.41m
 Interval & Radius : 0.13m 1m
 Source GPS totals: Trackgroups:1 Tracks:1376, Points:85000

Base layer Stats
 Max: 96.60
 Min: -99.90
 Std Dev: 6.88
 Mean: -0.36
 Median: 0.00

Name: MNH23-181_08 RAW
 Desc: Imported as Composite from: MNH23-181_08.xyz
 InstDesig: MLGrad Import
 SurveyDate: 21/10/23
 AssembleDate: 04/10/23
 ProcessDate: 04/10/23
 Surveyors:
 Assemblers:
 Comments:
 Units:
 Surveyed Area: 2.0767 ha
 Survey Extent: 4.3605 ha
 GPS Datum: WGS-84
 Map Coordinate System: DDD
 Survey Type: GPS
 Average point interval : 1.30m
 Interval & Radius : 0.13m 1m
 Source GPS totals: Trackgroups:1 Tracks:920, Points:64712

Base layer Stats
 Max: 96.90
 Min: -99.90
 Std Dev: 6.53
 Mean: -0.79
 Median: -0.60

Name: MNH23-181_09 RAW
 Desc: Imported as Composite from: MNH23-181_09.xyz
 InstDesig: MLGrad Import
 SurveyDate: 21/09/23
 AssembleDate: 04/10/23
 ProcessDate: 04/10/23
 Units:
 Surveyed Area: 0.71285 ha
 Survey Extent: 1.3889 ha
 GPS Datum: WGS-84
 Map Coordinate System: DDD
 Survey Type: GPS
 Average point interval : 1.38m
 Interval & Radius : 0.13m 1m
 Source GPS totals: Trackgroups:1 Tracks:432, Points:21288

Base layer Stats
 Max: 96.20
 Min: -99.90
 Std Dev: 13.32
 Mean: -2.34
 Median: -0.10

Name: MNH23-181_10 RAW
 Desc: Imported as Composite from: MNH23-181_10.xyz
 InstDesig: MLGrad Import
 SurveyDate: 21/09/23
 AssembleDate: 04/09/23
 ProcessDate: 04/09/23

Units:
 Surveyed Area: 0.21458 ha
 Survey Extent: 0.32238 ha
 GPS Datum: WGS-84
 Map Coordinate System: DDD
 Survey Type: GPS
 Average point interval : 1.36m
 Interval & Radius : 0.13m 1m
 Source GPS totals: Trackgroups:1 Tracks:240, Points:6600

Base layer Stats
 Max: 96.80
 Min: -99.90
 Std Dev: 22.43
 Mean: -2.33
 Median: -1.00

Name: MNH23-181_11 RAW
 Desc: Imported as Composite from: MNH23-181_11.xyz
 InstDesig: MLGrad Import
 SurveyDate: 21/09/23
 AssembleDate: 04/09/23
 ProcessDate: 04/09/23
 Units:
 Surveyed Area: 0.05158 ha
 Survey Extent: 0.071329 ha
 GPS Datum: WGS-84
 Map Coordinate System: DDD
 Survey Type: GPS
 Average point interval : 1.46m
 Interval & Radius : 0.13m 1m
 Source GPS totals: Trackgroups:1 Tracks:96, Points:1496

Base layer Stats
 Max: 96.10
 Min: -99.90
 Std Dev: 25.80
 Mean: -9.12
 Median: -4.15

Name: MNH23-181_12 RAW
 Desc: Imported as Composite from: MNH23-181_12.xyz
 InstDesig: MLGrad Import
 SurveyDate: 22/09/23
 AssembleDate: 04/10/23
 ProcessDate: 04/10/23
 Units:
 Surveyed Area: 0.98557 ha
 Survey Extent: 3.6571 ha
 GPS Datum: WGS-84
 Map Coordinate System: DDD
 Survey Type: GPS
 Average point interval : 1.32m
 Interval & Radius : 0.13m 1m
 Source GPS totals: Trackgroups:1 Tracks:344, Points:30048

Base layer Stats
 Max: 96.80
 Min: -99.90
 Std Dev: 6.78
 Mean: -0.13
 Median: -0.15

Processed data

Name: MNH23-181_01
 Top layer Stats
 Max: 1.37
 Min: -1.37
 Std Dev: 0.69
 Mean: 0.01
 Median: 0.01

Base
 CutTurnAngle 0.00
 CutTurnThreshold 0
 CutTurnLength 0.00

BreakOnJumpDistance 0.00
 DiscardOverlapThreshold -1.00
 DiscardOverlapMinTrack 0
 DiscardOverlapMethod DelNew
 PointReduction 0.00

DeStripe
 Mode Track
 Method Median
 Orientation Along
 MaintainMean ✖
 ThresholdType None
 ThresholdMin 2.00
 ThresholdMax 2.00
 Sectors 5
 WindowLength 101

Clip
 Min -10.00
 Max 10.00
 SelectSD 0.00

Clip
 Min -5.00
 Max 5.00
 SelectSD 0.00

Compress
 Mode ArcTangent
 Scale 1.00
 Contrast 1.00
 Offset 1.00

DeStag
 Mode MoveValue
 Distance 0.20

DeStag
 Mode MoveValue
 Distance 0.20

DeStag
 Mode MoveValue
 Distance 0.20

Name: MNH23-181_02
 Top layer Stats
 Max: 1.37
 Min: -1.37
 Std Dev: 0.67
 Mean: 0.02
 Median: 0.01

Base
 CutTurnAngle 0.00
 CutTurnThreshold 0
 CutTurnLength 0.00
 BreakOnJumpDistance 0.00
 DiscardOverlapThreshold -1.00
 DiscardOverlapMinTrack 0
 DiscardOverlapMethod DelNew
 PointReduction 0.00

DeStripe
 Mode Track
 Method Median
 Orientation Along
 MaintainMean ✖
 ThresholdType None
 ThresholdMin 2.00
 ThresholdMax 2.00
 Sectors 5
 WindowLength 101

Clip
 Min -10.00

Max 10.00
 SelectSD 0.00

Clip
 Min -5.00
 Max 5.00
 SelectSD 0.00

Compress
 Mode ArcTangent
 Scale 1.00
 Contrast 1.00
 Offset 1.00

DeStag
 Mode MoveValue
 Distance 0.20

Name: MNH23-181_03
 Top layer Stats
 Max: 1.37
 Min: -1.37
 Std Dev: 0.70
 Mean: -0.05
 Median: 0.00

Base
 CutTurnAngle 0.00
 CutTurnThreshold 0
 CutTurnLength 0.00
 BreakOnJumpDistance 0.00
 DiscardOverlapThreshold -1.00
 DiscardOverlapMinTrack 0
 DiscardOverlapMethod DelNew
 PointReduction 0.00

DeStripe
 Mode Track
 Method Median
 Orientation Along
 MaintainMean ✖
 ThresholdType None
 ThresholdMin 2.00
 ThresholdMax 2.00
 Sectors 5
 WindowLength 101

Clip
 Min -10.00
 Max 10.00
 SelectSD 0.00

Clip
 Min -5.00
 Max 5.00
 SelectSD 0.00

Compress
 Mode ArcTangent
 Scale 1.00
 Contrast 1.00
 Offset 1.00

Name: MNH23-181_04
 Top layer Stats
 Max: 5.00
 Min: -5.00
 Std Dev: 2.83
 Mean: 0.59
 Median: 0.00

Base
 CutTurnAngle 0.00
 CutTurnThreshold 0
 CutTurnLength 0.00
 BreakOnJumpDistance 0.00

DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along
MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00
Max 5.00
SelectSD 0.00

Name: MNH23-181_05
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 0.66
Mean: -0.01
Median: 0.00

Base
CutTurnAngle 0.00
CutTurnThreshold 0
CutTurnLength 0.00
BreakOnJumpDistance 0.00
DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along
MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00
Max 5.00
SelectSD 0.00

Compress
Mode ArcTangent
Scale 1.00
Contrast 1.00
Offset 1.00

Name: MNH23-181_06
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 0.82

Mean: 0.01
Median: 0.00

Base
CutTurnAngle 0.00
CutTurnThreshold 0
CutTurnLength 0.00
BreakOnJumpDistance 0.00
DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along
MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00
Max 5.00
SelectSD 0.00

Compress
Mode ArcTangent
Scale 1.00
Contrast 1.00
Offset 1.00

Name: MNH23-181_07
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 0.68
Mean: 0.00
Median: 0.00

Base
CutTurnAngle 0.00
CutTurnThreshold 0
CutTurnLength 0.00
BreakOnJumpDistance 0.00
DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along
MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00

Max 5.00
SelectSD 0.00

Compress
Mode ArcTangent
Scale 1.00
Contrast 1.00
Offset 1.00

Name: MNH23-181_08
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 0.56
Mean: 0.01
Median: 0.00

Base
CutTurnAngle 0.00
CutTurnThreshold 0
CutTurnLength 0.00
BreakOnJumpDistance 0.00
DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along
MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00
Max 5.00
SelectSD 0.00

Compress
Mode ArcTangent
Scale 1.00
Contrast 1.00
Offset 1.00

Name: MNH23-181_09
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 0.85
Mean: 0.00
Median: 0.00

Base
CutTurnAngle 0.00
CutTurnThreshold 0
CutTurnLength 0.00
BreakOnJumpDistance 0.00
DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along

MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00
Max 5.00
SelectSD 0.00

Compress
Mode ArcTangent
Scale 1.00
Contrast 1.00
Offset 1.00
Name: MNH23-181_10
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 1.05
Mean: -0.01
Median: 0.00

Base
CutTurnAngle 0.00
CutTurnThreshold 0
CutTurnLength 0.00
BreakOnJumpDistance 0.00
DiscardOverlapThreshold -1.00
DiscardOverlapMinTrack 0
DiscardOverlapMethod DelNew
PointReduction 0.00

DeStripe
Mode Track
Method Median
Orientation Along
MaintainMean ✖
ThresholdType None
ThresholdMin 2.00
ThresholdMax 2.00
Sectors 5
WindowLength 101

Clip
Min -10.00
Max 10.00
SelectSD 0.00

Clip
Min -5.00
Max 5.00
SelectSD 0.00

Compress
Mode ArcTangent
Scale 1.00
Contrast 1.00
Offset 1.00
Name: MNH23-181_11
Top layer Stats
Max: 1.37
Min: -1.37
Std Dev: 1.18
Mean: 0.00
Median: 0.00

Base			Compress	
CutTurnAngle	0.00		Mode	ArcTangent
CutTurnThreshold	0		Scale	1.00
CutTurnLength	0.00		Contrast	1.00
BreakOnJumpDistance	0.00		Offset	1.00
DiscardOverlapThreshold	-1.00			
DiscardOverlapMinTrack	0			
DiscardOverlapMethod	DelNew			
PointReduction	0.00			

DeStripe		
Mode	Track	
Method	Median	
Orientation	Along	
MaintainMean	✖	
ThresholdType	None	
ThresholdMin	2.00	
ThresholdMax	2.00	
Sectors	5	
WindowLength	101	

Clip	
Min	-10.00
Max	10.00
SelectSD	0.00

Clip	
Min	-5.00
Max	5.00
SelectSD	0.00

Compress	
Mode	ArcTangent
Scale	1.00
Contrast	1.00
Offset	1.00

Name: MNH23-181_12

Top layer Stats

Max: 1.37

Min: -1.37

Std Dev: 0.77

Mean: 0.02

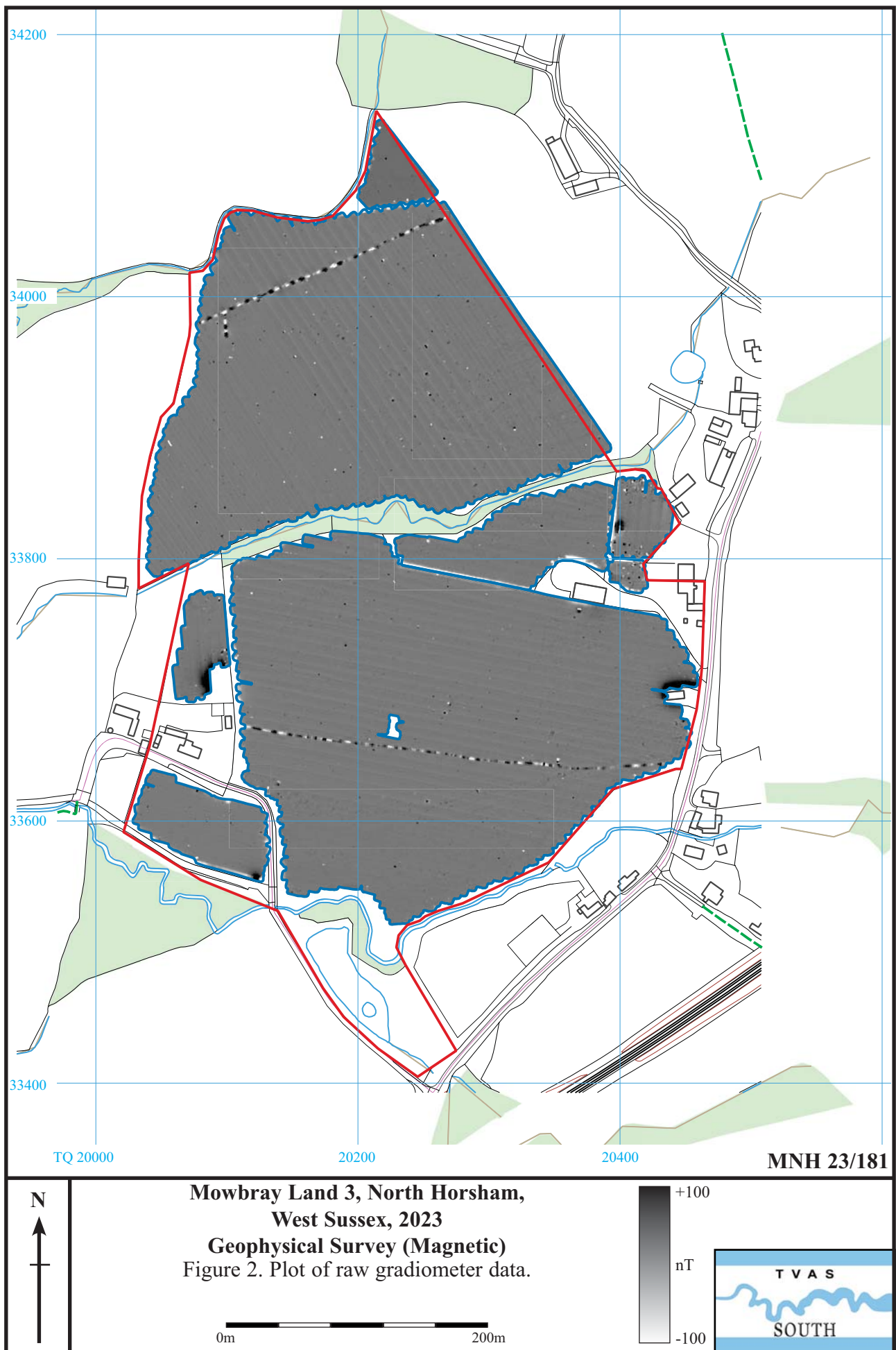
Median: 0.00

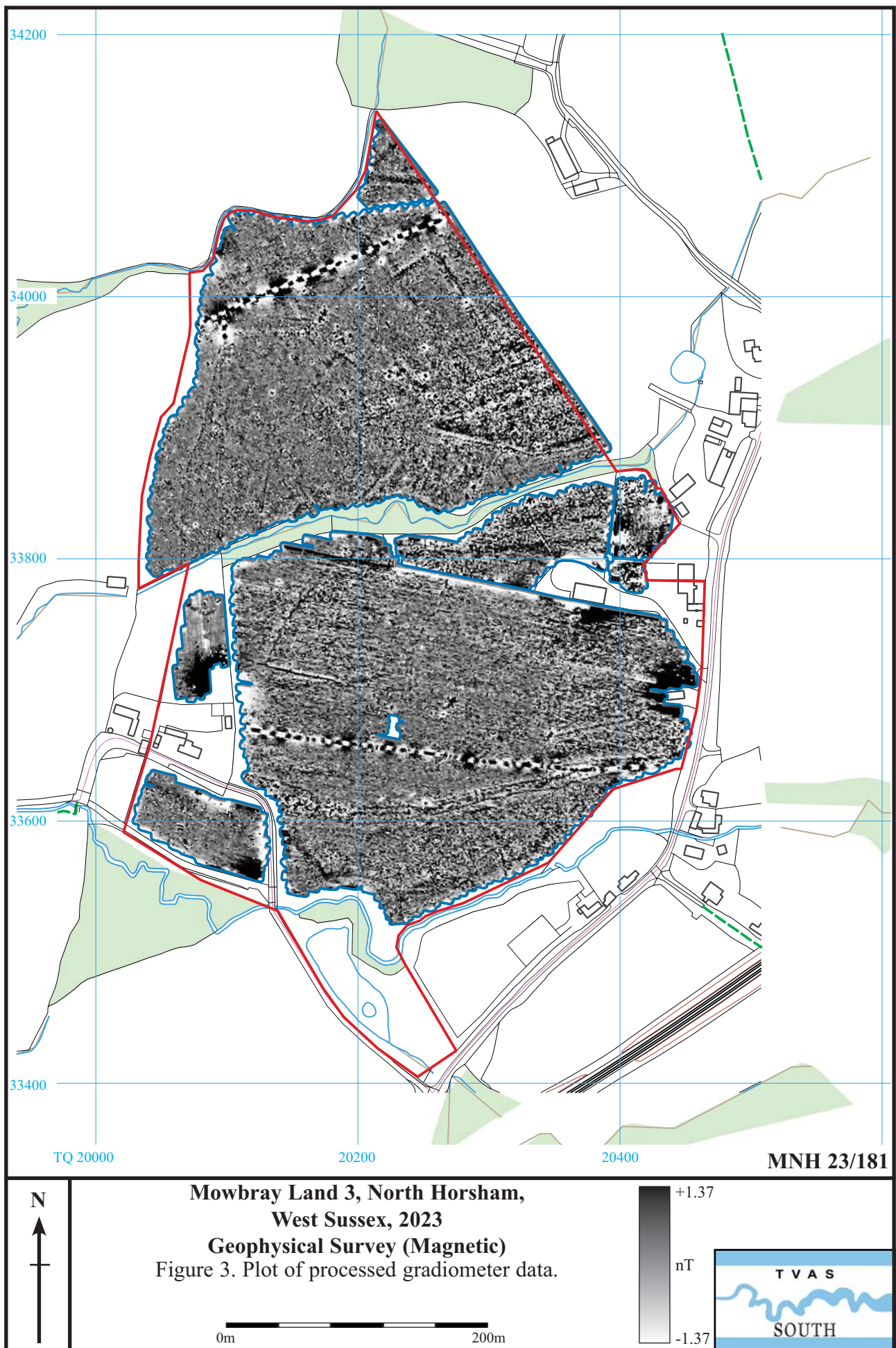
Base		
CutTurnAngle	0.00	
CutTurnThreshold	0	
CutTurnLength	0.00	
BreakOnJumpDistance	0.00	
DiscardOverlapThreshold	-1.00	
DiscardOverlapMinTrack	0	
DiscardOverlapMethod	DelNew	
PointReduction	0.00	

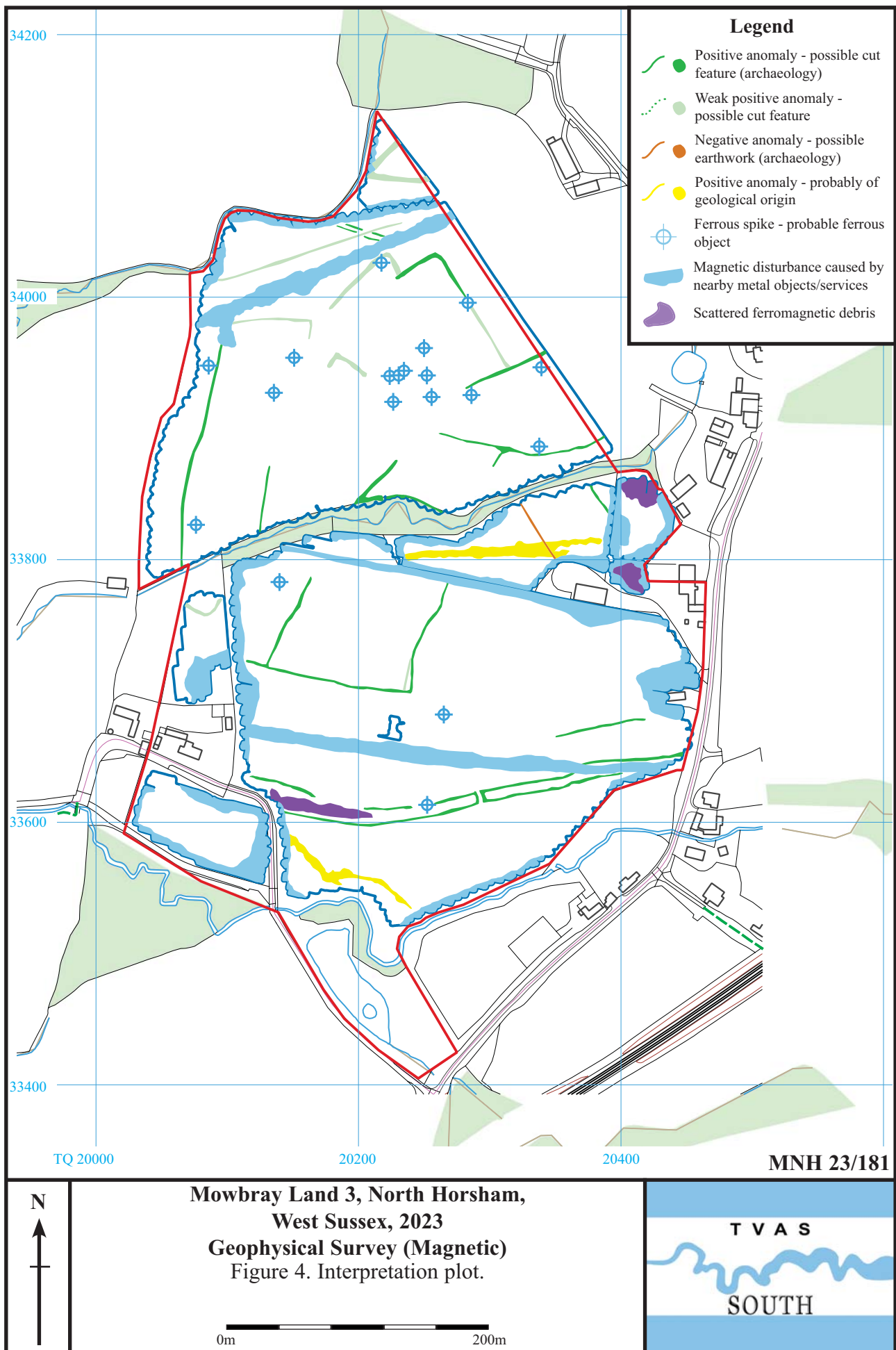
DeStripe		
Mode	Track	
Method	Median	
Orientation	Along	
MaintainMean	✖	
ThresholdType	None	
ThresholdMin	2.00	
ThresholdMax	2.00	
Sectors	5	
WindowLength	101	

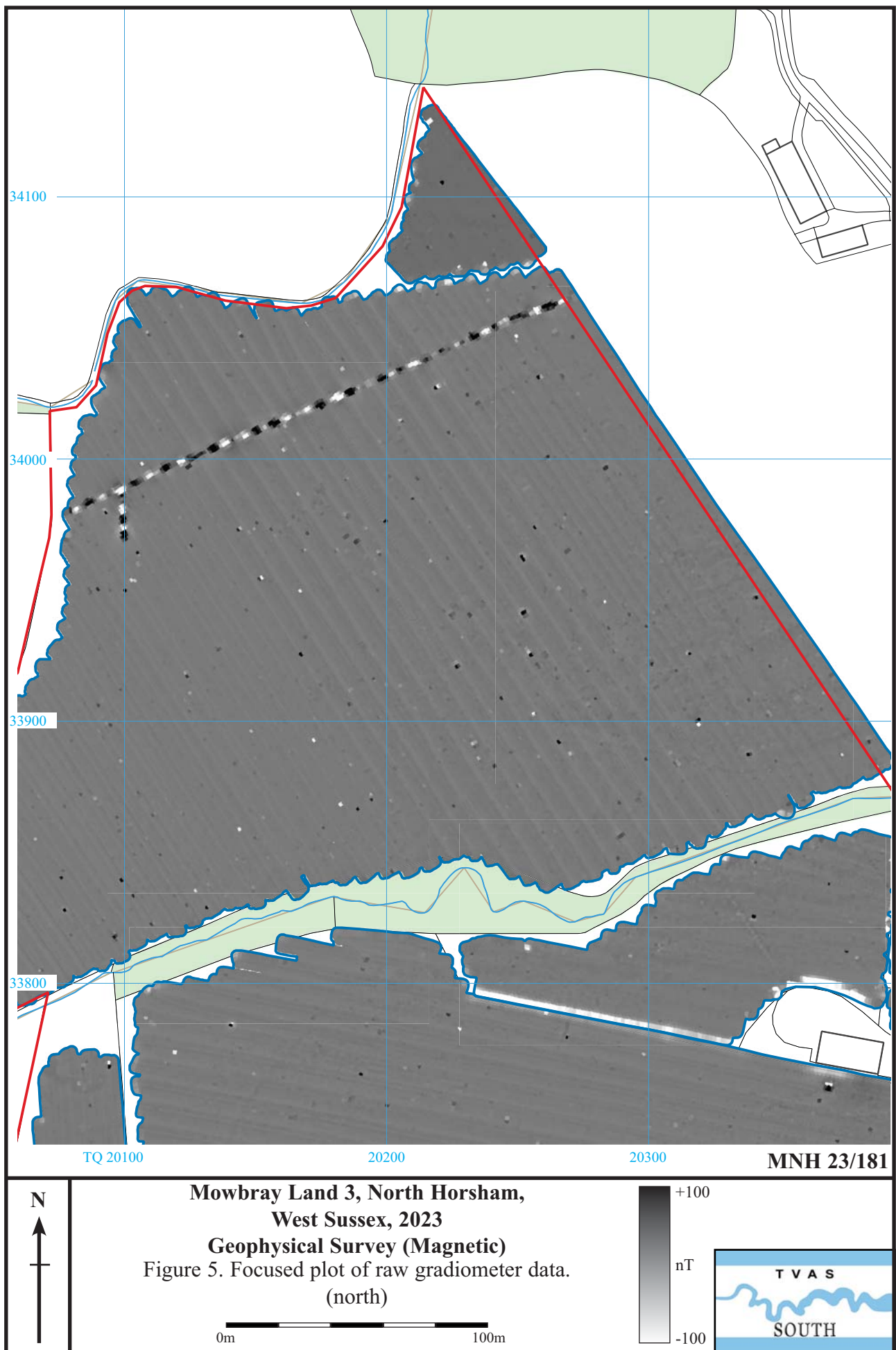
Clip	
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SelectSD	0.00

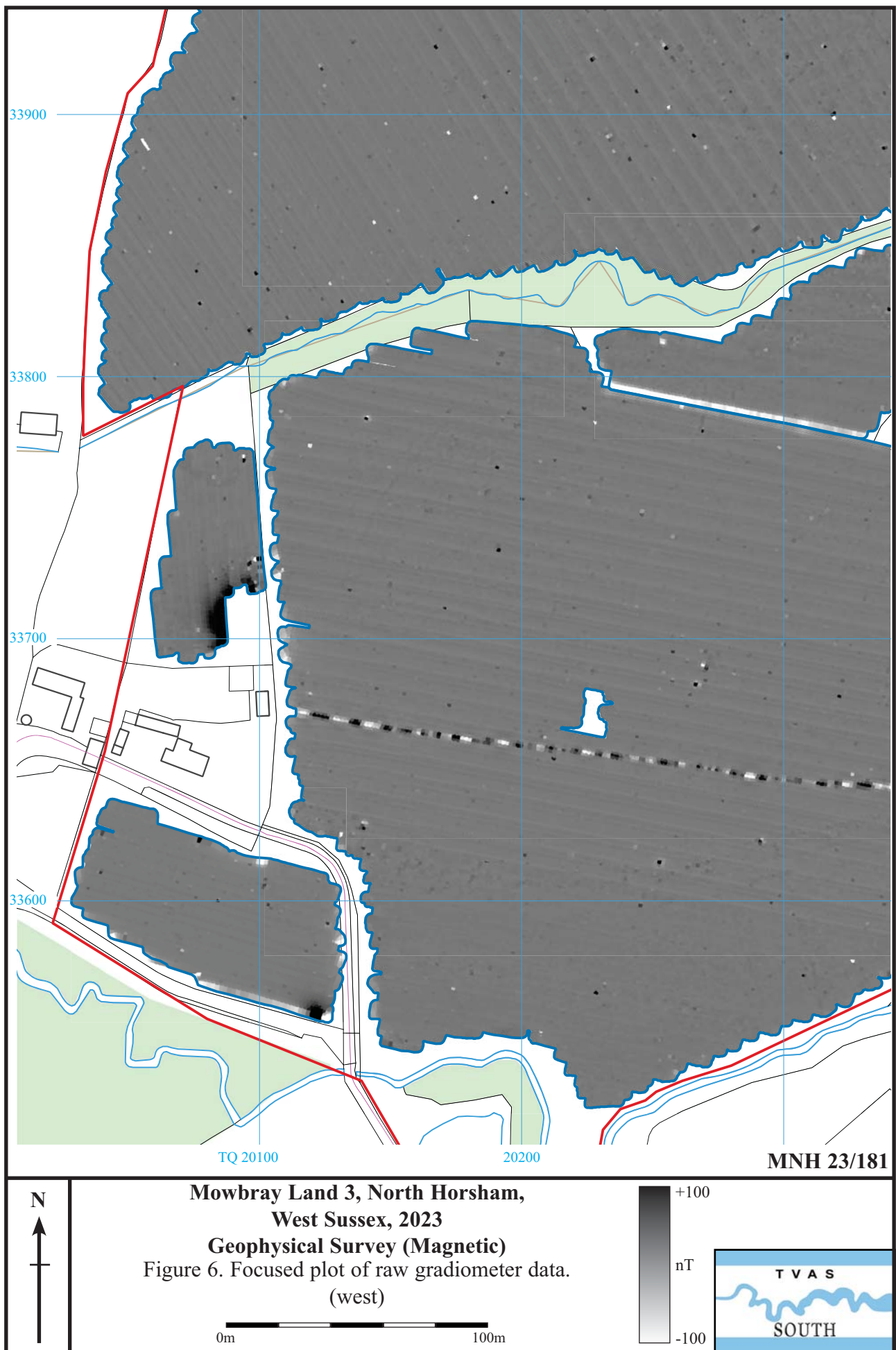
Clip	
Min	-5.00
Max	5.00
SelectSD	0.00

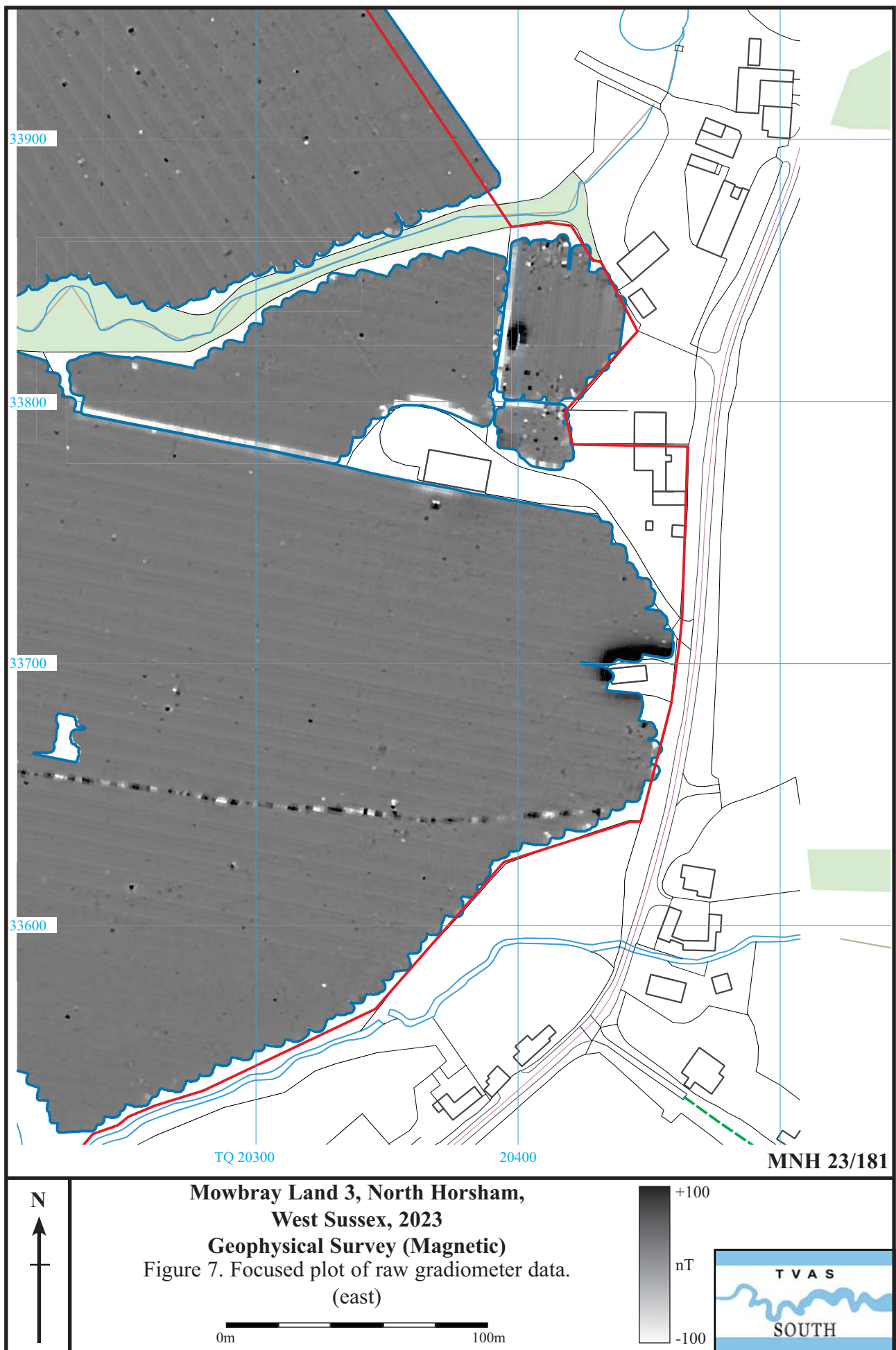


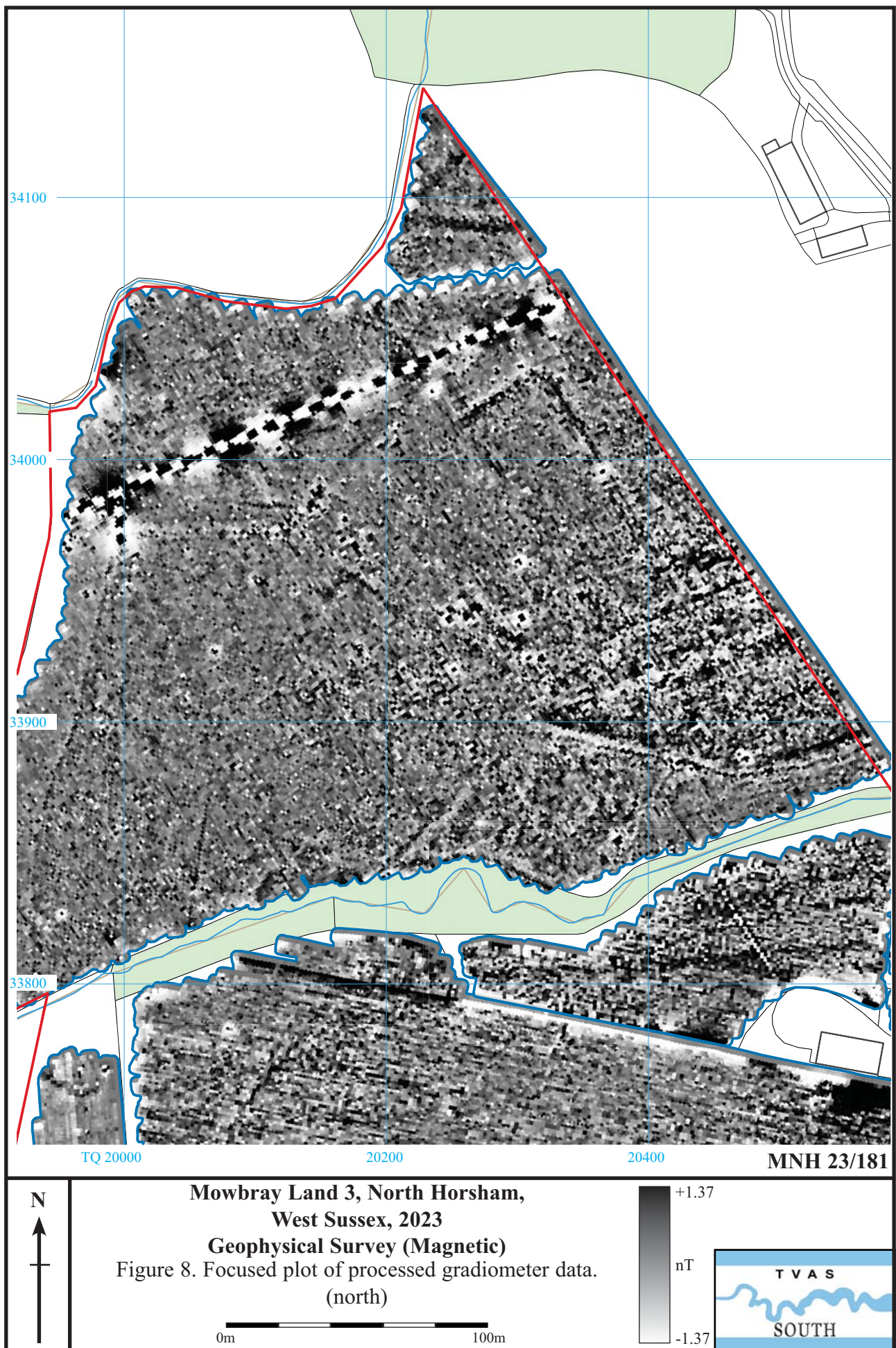




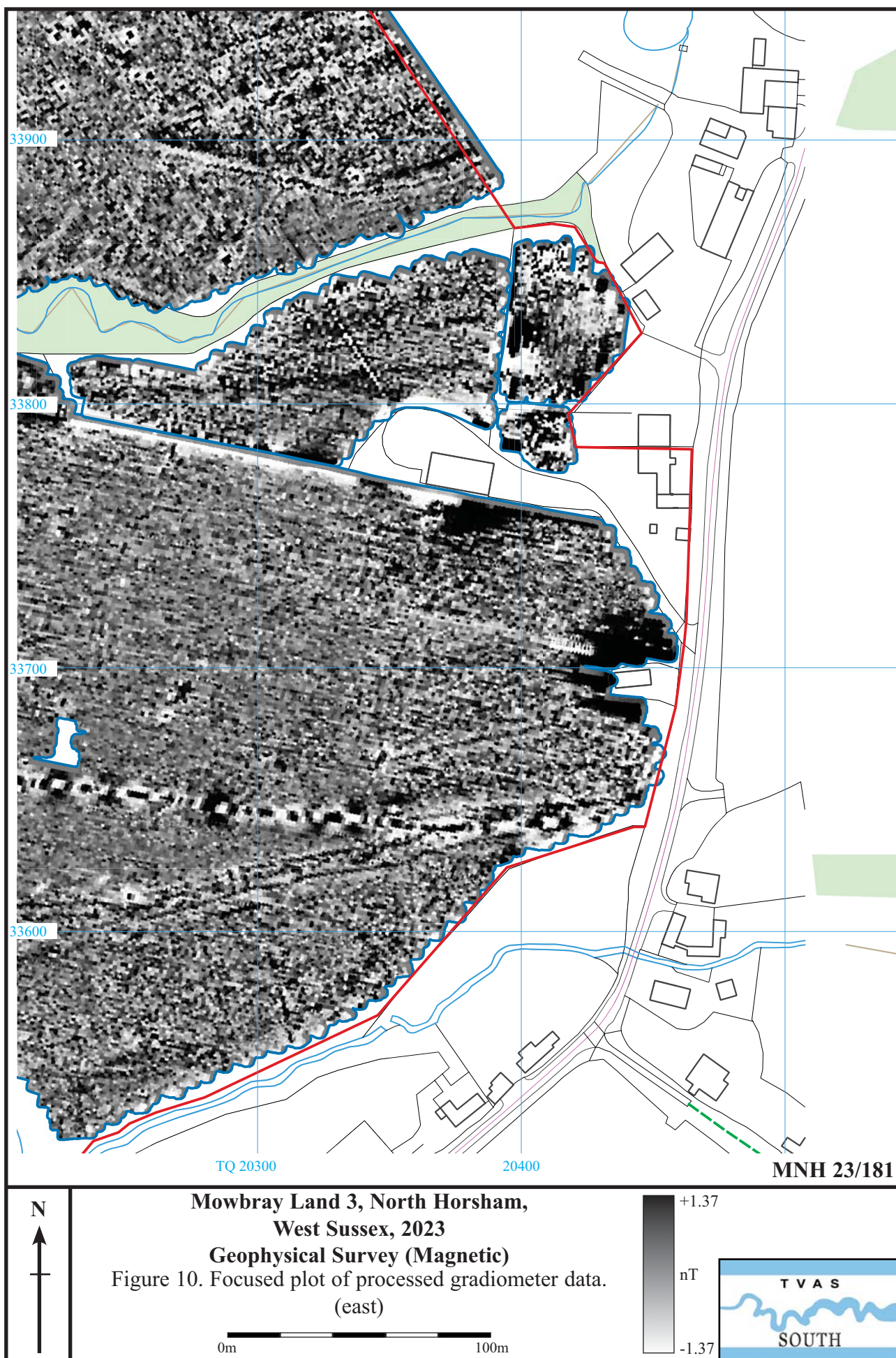


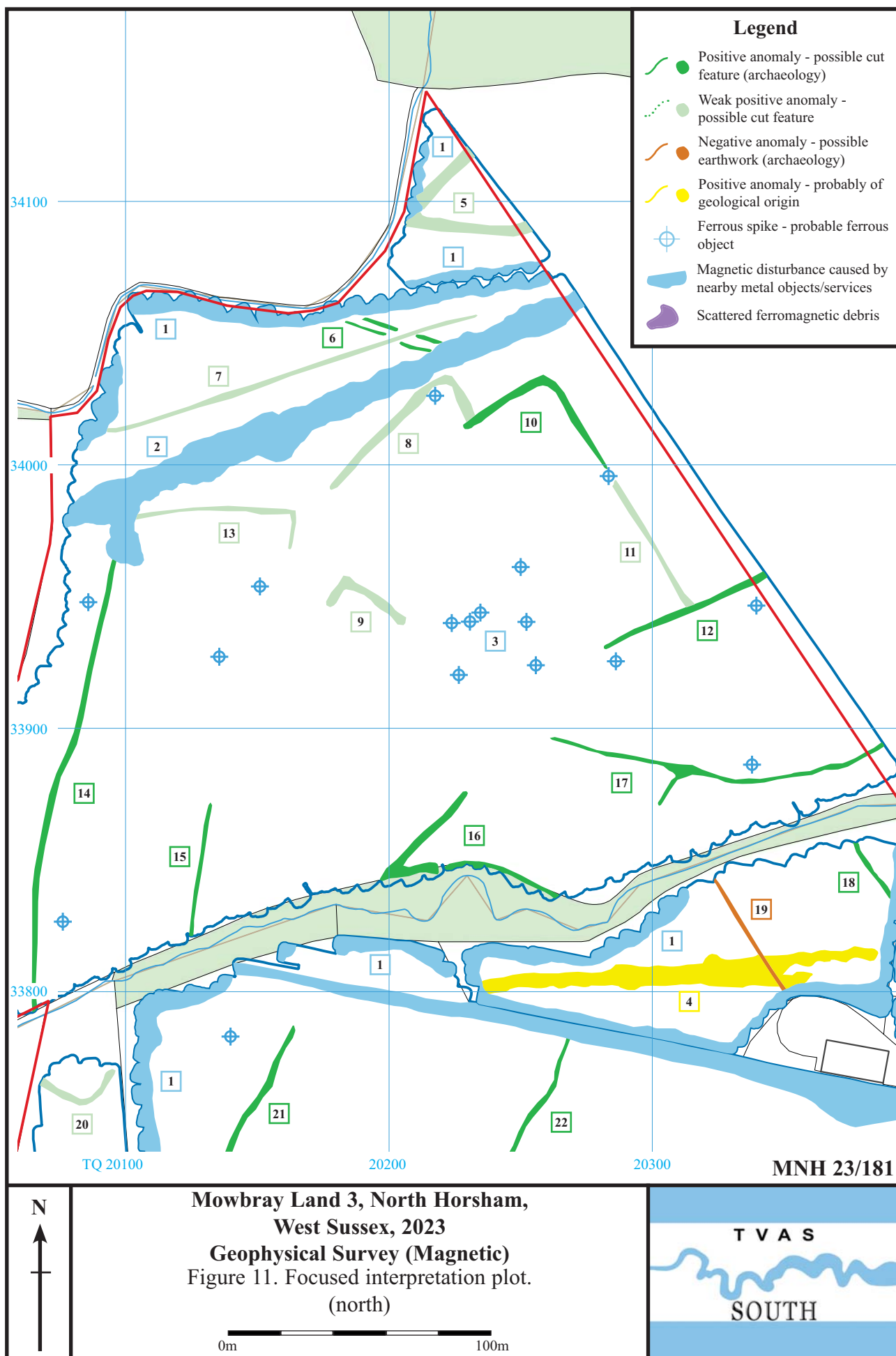


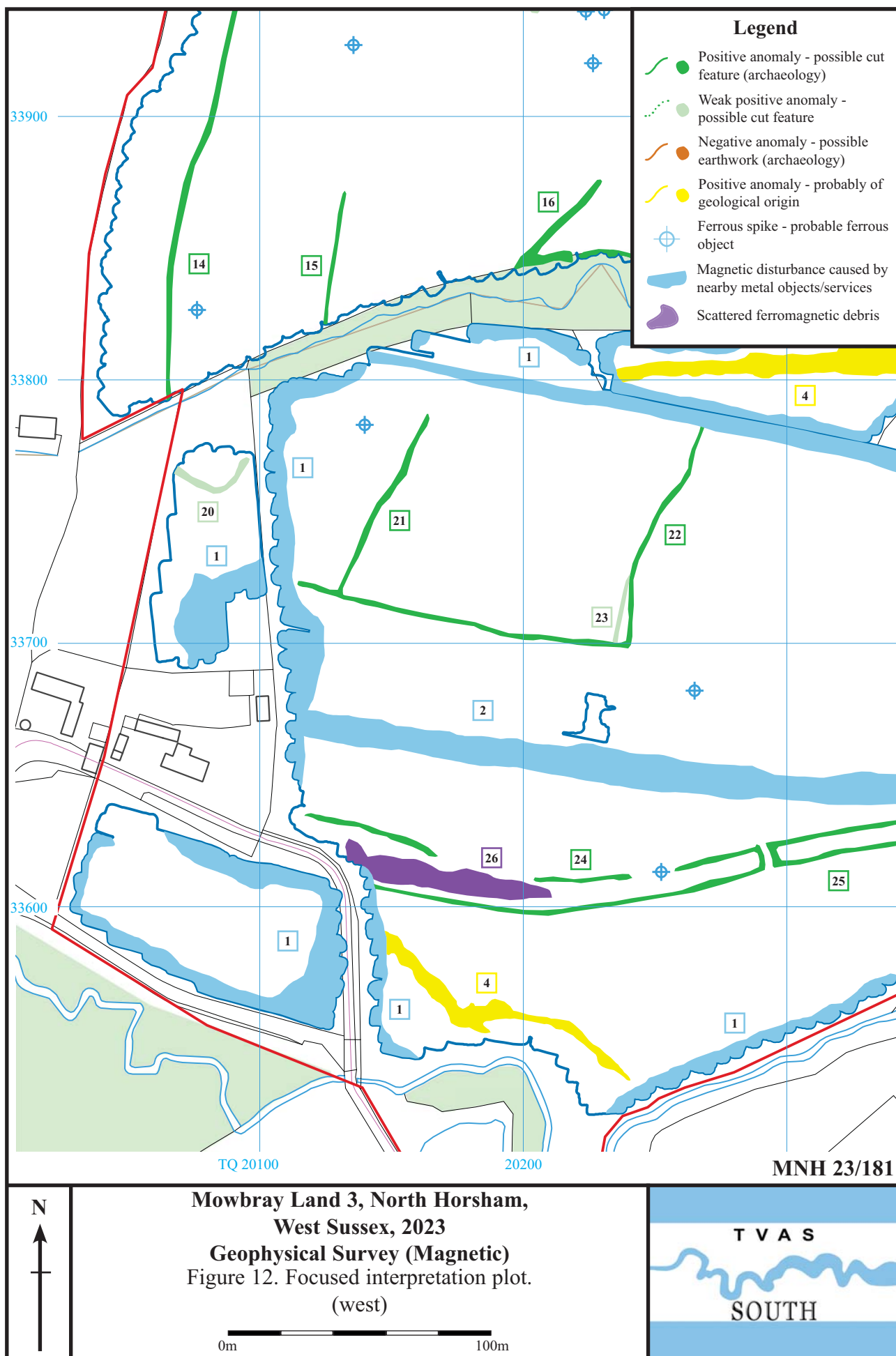












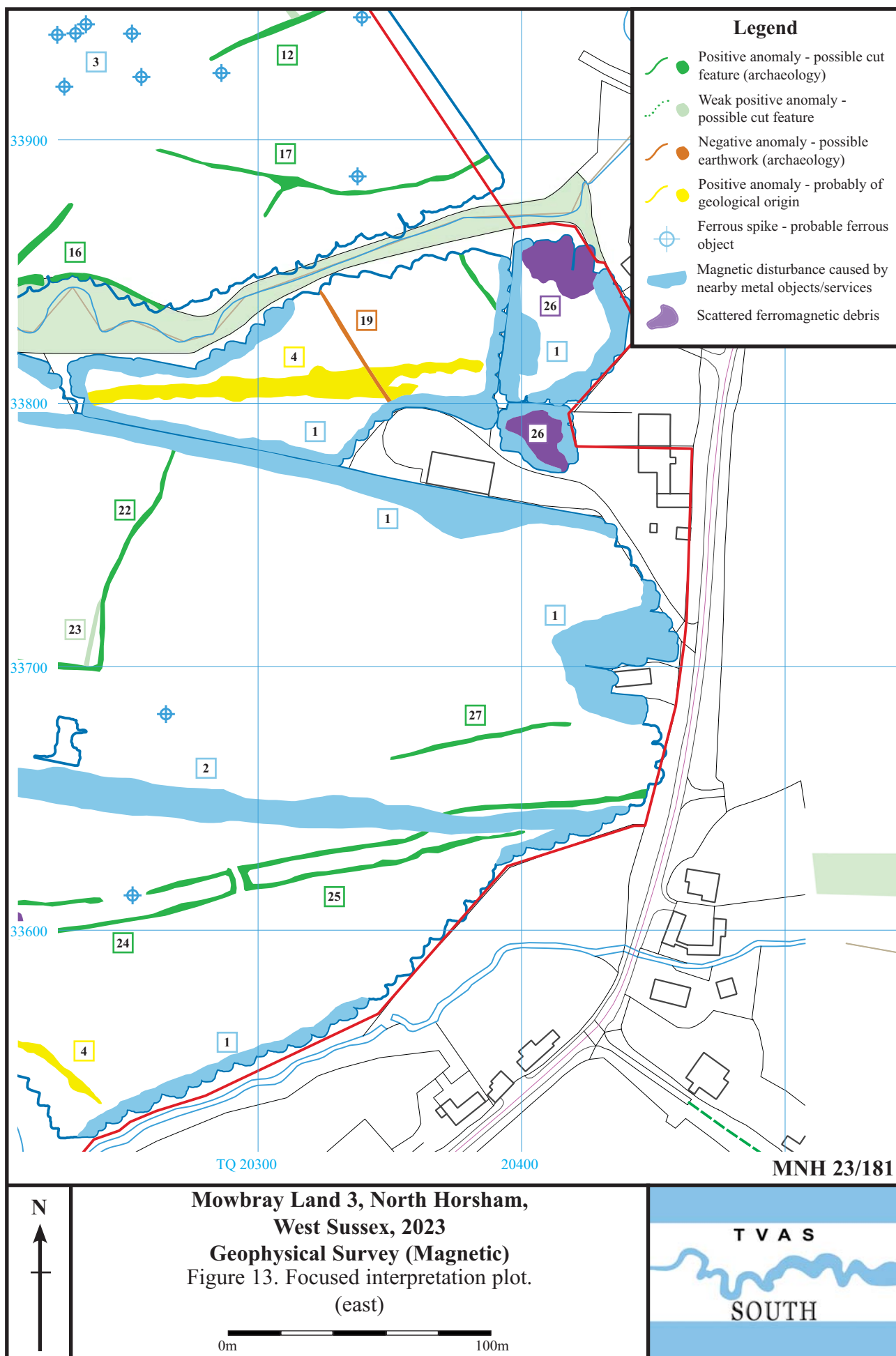




Plate 1. Central field looking north-west.



Plate 2. Small south-western field looking west.



Plate 3. Small western field looking north.



Plate 4. Northern field looking west.

MNH 23/181

**Mowbray Land 3, North Horsham,
West Sussex, 2023
Geophysical Survey (magnetic)
Plates 1 - 4.**

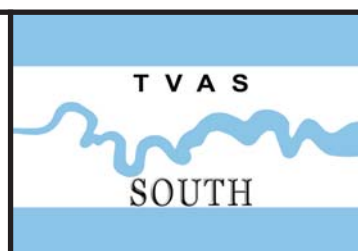




Plate 5. Northern field looking south-west



Plate 6. Small paddock in the far north of survey area looking north-west



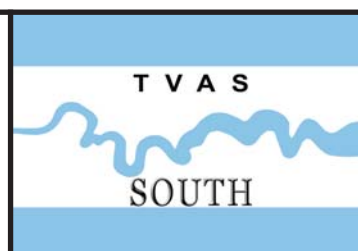
Plate 7. Small paddock to the north-east of the central field looking north



Plate 8. Small paddock to the north-east of central field looking west

MNH 23/181

**Mowbray Land 3, North Horsham,
West Sussex, 2023**
Geophysical Survey (magnetic)
Plates 5 - 8.

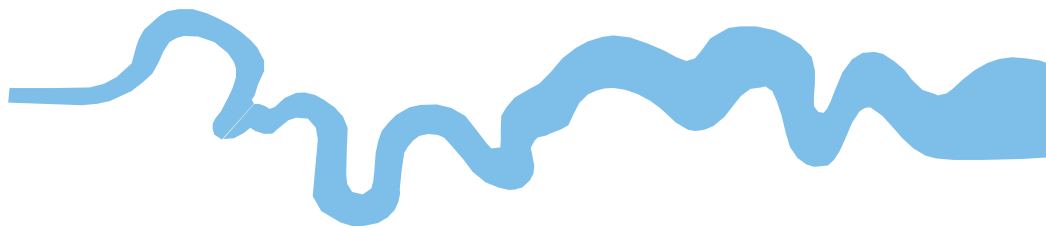


TIME CHART

Calendar Years

Modern _____	AD 1901
Victorian _____	AD 1837
Post Medieval _____	AD 1500
Medieval _____	AD 1066
Saxon _____	AD 410
Roman _____	AD 43
	AD 0 BC
Iron Age _____	750 BC
Bronze Age: Late _____	1300 BC
Bronze Age: Middle _____	1700 BC
Bronze Age: Early _____	2100 BC
Neolithic: Late	3300 BC
Neolithic: Early	4300 BC
Mesolithic: Late	6000 BC
Mesolithic: Early	10000 BC
Palaeolithic: Upper	30000 BC
Palaeolithic: Middle	70000 BC
Palaeolithic: Lower	2,000,000 BC





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