Geophysical Survey Report

Sunny Oaks, Isle of Wight

For

Orion Heritage

Magnitude Surveys Ref: MSSZ1217

HER Event Number: TBC

OASIS Number: TBC

April 2022

Unit 17, Commerce Court

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Abstract

Magnitude Surveys was commissioned to assess the subsurface potential of a c. 37ha area of land at Sunny Oaks, Isle of Wight. An area of c. 2ha was not suitable for survey due to difficult ground conditions and overgrown vegetation. The geophysical survey detected anomalies of archaeological, agricultural and undetermined origins. Anomalies of possible archaeological origin have been identified in the south of the survey area. Evidence of agricultural activity has been detected across the survey area in a form of ploughing trends. The impact of modern activity on the results is fairly extensive, with pylons and overhead cables, along with buried services, which have potentially obscured any weaker anomalies, if they were present. Further disturbance has been identified around field boundaries. Some anomalies classified as 'Undetermined' were identified within the survey area and archaeological interpretations for these cannot be excluded.

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1. Introduction

1.1. Magnitude Surveys Ltd (MS) was commissioned by Orion Heritage on behalf of Client's Client to undertake a geophysical survey over a c. 37ha area of land at Sunny Oaks, Isle of Wight (SZ 52786 91127)

1.2. The geophysical survey comprised quad-towed, cart-mounted and hand-carried GNSS-positioned fluxgate gradiometer survey. Magnetic survey is the standard primary geophysical method for archaeological applications in the UK due to its ability to detect a range of different features. The technique is particularly suited for detecting fired or magnetically enhanced features, such as ditches, pits, kilns, sunken featured buildings (SFBs) and industrial activity (David *et al*., 2008).

1.3. The survey was conducted in line with the current best practice guidelines produced by Historic England (David *et al*., 2008), the Chartered Institute for Archaeologists (CIfA, 2020) and the European Archaeological Council (Schmidt *et al.,* 2015).

1.4. It was conducted in line with a WSI produced by MS (Chmielowska, 2022).

1.5. The survey commenced on 04/04/2022 and took 5 days to complete.

2. Quality Assurance

2.1. Magnitude Surveys is a Registered Organisation of the Chartered Institute for Archaeologists (CIfA), the chartered UK body for archaeologists, and a corporate member of ISAP (International Society for Archaeological Prospection).

2.2. The directors of MS are involved in cutting edge research and the development of guidance/policy. Specifically, Dr Chrys Harris has a PhD in archaeological geophysics from the University of Bradford, is a Member of CIfA and is the Vice-Chair of the International Society for Archaeological Prospection (ISAP); Finnegan Pope-Carter has an MSc in archaeological geophysics and is a Fellow of the London Geological Society, as well as a member of GeoSIG (CIfA Geophysics Special Interest Group); Dr Paul Johnson has a PhD in archaeology from the University of Southampton, is a Fellow of the Society of Antiquaries of London and a Member of CIfA, has been a member of the ISAP Management Committee since 2015, and is currently the nominated representative for the EAA Archaeological Prospection Community to the board of the European Archaeological Association.

2.3. All MS managers, field and office staff have degree qualifications relevant to archaeology or geophysics and/or field experience.

3. Objectives

3.1. The objective of this geophysical survey was to assess the subsurface archaeological potential of the survey area.

4. Geographic Background

4.1. The survey area was located c. 1.62km southwest from the centre of Wootton (Figure 1). Gradiometer survey was undertaken across 13 pasture fields and one arable field. The survey area was bordered to the north by agricultural fields and Palmer's Brook, to the northeast by Park Road, to the east by a cemetery, Briddlesford Road, and residential housing, to the south by Blacklands Copse, further agricultural fields and Little Brook Farm, and to the west by residential housing and Fattingpark Copse. Staplers Road ran through the centre of the survey area (Figure 2). The area of c. 2ha could not be surveyed due to difficult ground conditions and overgrown vegetation.

4.2. Survey considerations:

Survey Area	Ground Conditions	Further Notes
1	The survey area was a grass field sloping down to the northeast.	The field was bordered by hedges to the north, east and west. The southern border was made of a stone road. A metal trough was present on the eastern border.
2	The survey area was a grass field sloping down to the northwest.	The field was bordered by hedges and tree lines on all sides
3	The survey area was a grass field sloping down to the southwest.	The field was bordered by hedges on all sides, with metal gates present on the northern and southern border.
4	The survey area was a grass field sloping down to the southwest.	The field was bordered by hedges on all sides, with metal gates present on the northern and southern border. Overhead cables ran from northwest to southeast through the middle of the field.
5	The survey area was a grass pasture field sloping gently down to the west. A pile of logs and debris was present in the south of the survey area so this could not be surveyed.	The field was bordered by hedges and trees in the north, west and south. The eastern order was made up of hedges. A metal gate was present on the southern border.
6	The survey area was a grass pasture field sloping gently down to the southwest.	The field was bordered by hedges to the east, south and west. The field continued to the north. Metal gates were present on the northern and eastern borders.
7	The survey area was a flat grass pasture field.	The field was bordered by hedges and tree line to the northwest, southwest and southeast. The field continued to the northeast.
8	The survey area was a flat grass pasture field.	The field was bordered by hedges and trees to the northeast, northwest and southeast. The southwest border was comprised of hedges, wooden and wire fences.
9	The survey area was a flat grass pasture field.	The field was bordered by hedges in the southwest and by a discontinuous tree line to the northwest. The field continued to the east.

10	The survey area was a flat grass pasture field. Along the southeast border, there was a mound of debris which could not be surveyed.	The field was bordered by hedges to the north, east and west. The southeast border was made up of a discontinuous tree line.
11	The survey area was a grass pasture field sloping down to the northwest. Adjacent to the northern border the ground could not be surveyed due to unsuitable ground conditions.	The field was bordered by hedges and treelines on all sides.
12	The survey area was a flat ploughed field.	The field was bordered by hedges and treelines on all sides. Overhead cables ran across the western corner.
13	The survey area was a flat grass field.	The field was bordered on all sides by hedges and treelines.
14	The survey area was a flat grass field.	The field was bordered on all sides by hedges and treelines.

4.3. The underlying geology comprises of clay, silt and sand from the Hamstead Member. There are no superficial deposits recorded in this area. (British Geological Survey, 2022).

4.4. The soils consist of slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils (Soilscapes, 2022).

5. Archaeological Background

5.1. The following is a summary of a desk-based assessment produced by E3S Consulting Ltd. and provided by the client (E3S, 2022).

5.2. During installation in 2010 for the gas pipeline that runs through the centre of the survey area, prehistoric activity was identified, with a small assemblage of Neolithic flintwork recovered from the topsoil. In the north of the survey area, further prehistoric worked flint was identified, with flint tools, debitage and fire-cracked flint found, associated with a possible tree clearance pit.

5.3. Evidence of Romano-British activity was identified south of the survey area, southwest of Briddlesford Farm, including a small oven, pits and a post hole. A 3rd-century coin was identified in a garden off Park Road, on the north-eastern boundary of the survey area, with a 4th-century coin identified to the south of Whiterails Road, to the east of the survey area.

5.4. Briddlesford Lodge Farmhouse situated c. 120m southeast of the survey area was built, based on the construction techniques recorded on this standing brick building, between the mid-17th to mid-18th century. Associated with this farmstead is a brick dairy and stone rubble constructed barn. These were constructed from the mid-18th century along with Park Farm, located east of the northern section of the survey area. that is located to the north of Briddlesford Lodge Farm, east of the northern limits of the site. The Ryde and Newport Railway began construction in 1873. The route of the railway forms part of the northern boundary to the survey area and the railway bridges at Fattingpark Copse are situated to the north and to the northwest of the survey area.

6. Methodology

6.1. Data Collection

6.1.1. Magnetometer surveys are generally the most cost effective and suitable geophysical technique for the detection of archaeology in England. Therefore, a magnetometer survey should be the preferred geophysical technique unless its use is precluded by any specific survey objectives or the site environment. For this site, no factors precluded the recommendation of a standard magnetometer survey. Geophysical survey therefore comprised the magnetic method as described in the following section.

6.1.2. Geophysical prospection comprised the magnetic method as described in the following table.

6.1.3. Table of survey strategies:

Method	Instrument	Traverse Interval	Sample Interval
Magnetic	Bartington Instruments Grad-13 Digital Three-Axis Gradiometer	1m	200Hz reprojected to 0.125m

6.1.4. The magnetic data were collected using MS' bespoke quad-towed and hand-carried cart system GNSS-positioned system.

6.1.4.1. MS' cart system was comprised of Bartington Instruments Grad 13 Digital Three-Axis Gradiometers. Positional referencing was through a multi-channel, multi-constellation GNSS Smart Antenna RTK GPS outputting in NMEA mode to ensure high positional accuracy of collected measurements. The RTK GPS is accurate to 0.008m + 1ppm in the horizontal and 0.015m + 1ppm in the vertical.

6.1.4.2. Magnetic and GPS data were stored on an SD card within MS' bespoke datalogger. The datalogger was continuously synced, via an in-field Wi-Fi unit, to servers within MS' offices. This allowed for data collection, processing and visualisation to be monitored in real-time as fieldwork was ongoing.

6.1.4.3. A navigation system was integrated with the RTK GPS, which was used to guide the surveyor. Data were collected by traversing the survey area along the longest possible lines, ensuring efficient collection and processing.

6.2. Data Processing

6.2.1. Magnetic data were processed in bespoke in-house software produced by MS. Processing steps conform to the EAC and Historic England guidelines for 'minimally enhanced data' (see Section 3.8 in Schmidt *et al.*, 2015: 33 and Section IV.2 in David *et al.,* 2008: 11).

Sensor Calibration – The sensors were calibrated using a bespoke in-house algorithm, which conforms to Olsen *et al.* (2003).

Zero Median Traverse – The median of each sensor traverse is calculated within a specified range and subtracted from the collected data. This removes striping effects caused by small variations in sensor electronics.

Projection to a Regular Grid – Data collected using RTK GPS positioning requires a uniform grid projection to visualise data. Data are rotated to best fit an orthogonal grid projection and are resampled onto the grid using an inverse distance-weighting algorithm.

Interpolation to Square Pixels – Data are interpolated using a bicubic algorithm to increase the pixel density between sensor traverses. This produces images with square pixels for ease of visualisation.

6.3.Data Visualisation and Interpretation

6.3.1. This report presents the gradient of the sensors' total field data as greyscale images, as well as the total field data from the lower sensors. The gradient of the sensors minimises external interferences and reduces the blown-out responses from ferrous and other high contrast material. However, the contrast of weak or ephemeral anomalies can be reduced through the process of calculating the gradient. Consequently, some features can be clearer in the respective gradient or total field datasets. Multiple greyscale images of the gradient and total field at different plotting ranges have been used for data interpretation. Greyscale images should be viewed alongside the XY trace plot (Figures 9, 12, 15 & 18). XY trace plots visualise the magnitude and form of the geophysical response, aiding anomaly interpretation.

6.3.2. Geophysical results have been interpreted using greyscale images and XY traces in a layered environment, overlaid against open street maps, satellite imagery, historical maps, LiDAR data, and soil and geology maps. Google Earth (2022) was also consulted, to compare the results with recent land use.

6.3.3. Geodetic position of results – All vector and raster data have been projected into OSGB36 (ESPG27700) and can be provided upon request in ESRI Shapefile (.SHP) and Geotiff (.TIF) respectively. Figures are provided with raster and vector data projected against OS Open Data.

7. Results

7.1.Qualification

7.1.1. Geophysical results are not a map of the ground and are instead a direct measurement of subsurface properties. Detecting and mapping features requires that said features have properties that can be measured by the chosen technique(s) and that these properties have sufficient contrast with the background to be identifiable. The interpretation of any identified anomalies is inherently subjective. While the scrutiny of the results is undertaken by qualified, experienced individuals and rigorously checked for quality and consistency, it is often not possible to classify all anomaly sources. Where possible, an anomaly source will be identified along with the certainty of the interpretation. The only way to improve the interpretation of results is through a process of comparing excavated results with the geophysical reports. MS actively seek feedback on their reports, as well as reports from further work, in order to constantly improve our knowledge and service.

7.2.Discussion

7.2.1. The geophysical results are presented in combination with satellite imagery and historical maps (Figures 4 & 6).

7.2.2. The fluxgate gradiometer survey has been successfully carried out across all but c. 2ha of the c. 37ha survey area. Anomalies of archaeological, agricultural and undetermined origin have been identified across the survey area. The impact from modern sources on the data can be seen around pylons and overhead cables, field boundaries and around buried services. The haloes produced by these may have obscured weaker anomalies, if they were present.

7.2.3. Possible archaeological anomalies have been identified in the south of the survey area (Figure 17). While they appear to match with the surrounding agricultural anomalies, they present a slightly different morphology and alignment, and have therefore been classified as possible archaeology. However, due to the surrounding agricultural anomalies, other anthropogenic origins cannot be ruled out.

7.2.4. Agricultural anomalies have been identified across the survey area (Figures 4 & 6). Many of these appear to follow ploughing trends visible on satellite imagery, or other sources.

7.2.5. Anomalies of undetermined origin have been detected (Figures 4 & 6). These anomalies do not collocate with any features identified on historical maps or satellite imagery, and they do not form coherent shapes. Due to this lack of confidence, they have been classified as undetermined, although an archaeological, agricultural, natural or modern origin cannot be ruled out.

7.3.Interpretation

7.3.1. General Statements

7.3.1.1. Geophysical anomalies will be discussed broadly as classification types across the survey area. Only anomalies that are distinctive or unusual will be discussed individually.

7.3.1.2. **Ferrous (Spike)** – Discrete dipolar anomalies are likely to be the result of isolated pieces of modern ferrous debris on or near the ground surface.

7.3.1.3. **Ferrous/Debris (Spread)** – A ferrous/debris spread refers to a concentration of multiple discrete, dipolar anomalies usually resulting from highly magnetic material such as rubble containing ceramic building materials and ferrous rubbish.

7.3.1.4. **Magnetic Disturbance** – The strong anomalies produced by extant metallic structures, typically including fencing, pylons, vehicles and service pipes, have been classified as 'Magnetic Disturbance'. These magnetic 'haloes' will obscure weaker anomalies relating to nearby features, should they be present, often over a greater footprint than the structure causing them.

7.3.1.5. **Undetermined** – Anomalies are classified as Undetermined when the origin of the geophysical anomaly is ambiguous and there is no supporting contextual evidence to justify a more certain classification. These anomalies are likely to be the result of geological, pedological or agricultural processes, although an archaeological origin cannot be entirely ruled out. Undetermined anomalies are generally distinct from those caused by ferrous sources.

7.3.2. Magnetic Results - Specific Anomalies

7.3.2.1. **Possible Archaeology (Weak/Spread)** – In the centre of Area 5, weak and strong positive linear anomalies have been detected [**5a**] (Figures 16 & 17). These anomalies lie within an identified area of varying ploughing regimes (see Section 7.3.2.3). Some of these anomalies exhibit regular linear morphology that differs from the ploughing alignment. Unfortunately, due to the location within a strong area of agricultural use, their exact extent as well as further differentiation cannot be determined and so these anomalies have been classified as possible archaeology.

7.3.2.2. **Service –** Across the survey area, a total of 5 buried services have been detected (Figures 3, 4, 5 & 6). In the north, two strong, positive, linear anomalies surrounded by a strong, negative halo have been identified (Figures 8, 11, 14 & 16). These crosscut each other, oriented approximately north to south and northwest to southeast. All of these anomalies present a strong dipolar signal, indicative of buried services.

7.3.2.3. **Agricultural Trends –** Across the survey area, several weak, linear anomalies have been identified. These have varying lengths and orientations and so a selection has been digitised to show general trends present (Figures 4 & 6). In Area 12 and 13, these trends run approximately northwest to southeast,

collocating with modern ploughing trends seen in satellite images of the area (Figures 4 & 6). Agricultural trends seen in Area 5, exhibit a cross cutting pattern (Figure 6). These anomalies have weak, linear signals, and these collocate with patterns seen in historic satellite images from 1945 in Google Earth. Due to the presence of multiple orientations seen in this area, it can be interpreted that the land underwent a number of different ploughing regimes during its agricultural use.

7.3.2.4. **Undetermined (Weak) –** In Areas 2, 12 and 13, multiple weak linear and sublinear have been identified (Figures 8, 11, 14 & 17). These do not match with any mapped features seen on satellite or historical OS maps. Due to their proximity to multiple agricultural trends, it is most likely that these have agricultural or modern origins. However, an archaeological origin cannot be ruled out completely and so these have been classified as undetermined.

8. Conclusions

8.1. A fluxgate gradiometer survey was carried out across all but c. 2ha of the c. 37ha survey area. Areas of disturbance was present around field boundaries, and around pylons, overhead cables and buried services, which may have obscured weaker anomalies, if they were present. Despite this, the survey identified anomalies of an archaeological, agricultural and undetermined origin.

8.2. The geophysical results identified anomalies of possible archaeological origin. Their exact morphology and extent is difficult to define due to being located within an area of intensive agricultural activity.

8.3. The geophysical results reflect the long-term agricultural use of the survey area in the form of multiple ploughing regimes.

8.4. Anomalies of an undetermined origin have been identified across the survey area. A more conclusive classification cannot be provided from the geophysical data alone due to the lack of any further diagnostic supportive evidence. Whilst these anomalies are likely to have a modern or agricultural origin, an archaeological origin cannot be ruled out.

9. Archiving

9.1. MS maintains an in-house digital archive, which is based on Schmidt and Ernenwein (2013). This stores the collected measurements, minimally processed data, georeferenced and un-georeferenced images, XY traces and a copy of the final report.

9.2. MS contributes reports to the ADS Grey Literature Library upon permission from the client, subject to any dictated time embargoes.

10. Copyright

10.1. Copyright and intellectual property pertaining to all reports, figures and datasets produced by Magnitude Services Ltd is retained by MS. The client is given full licence to use such material for their own purposes. Permission must be sought by any third party wishing to use or reproduce any IP owned by MS.

11. References

British Geological Survey, 2022. Geology of Britain. Sunny Oaks, Isle of Wight. [http://mapapps.bgs.ac.uk/geologyofbritain/home.html/]. Accessed 11/04/2022.

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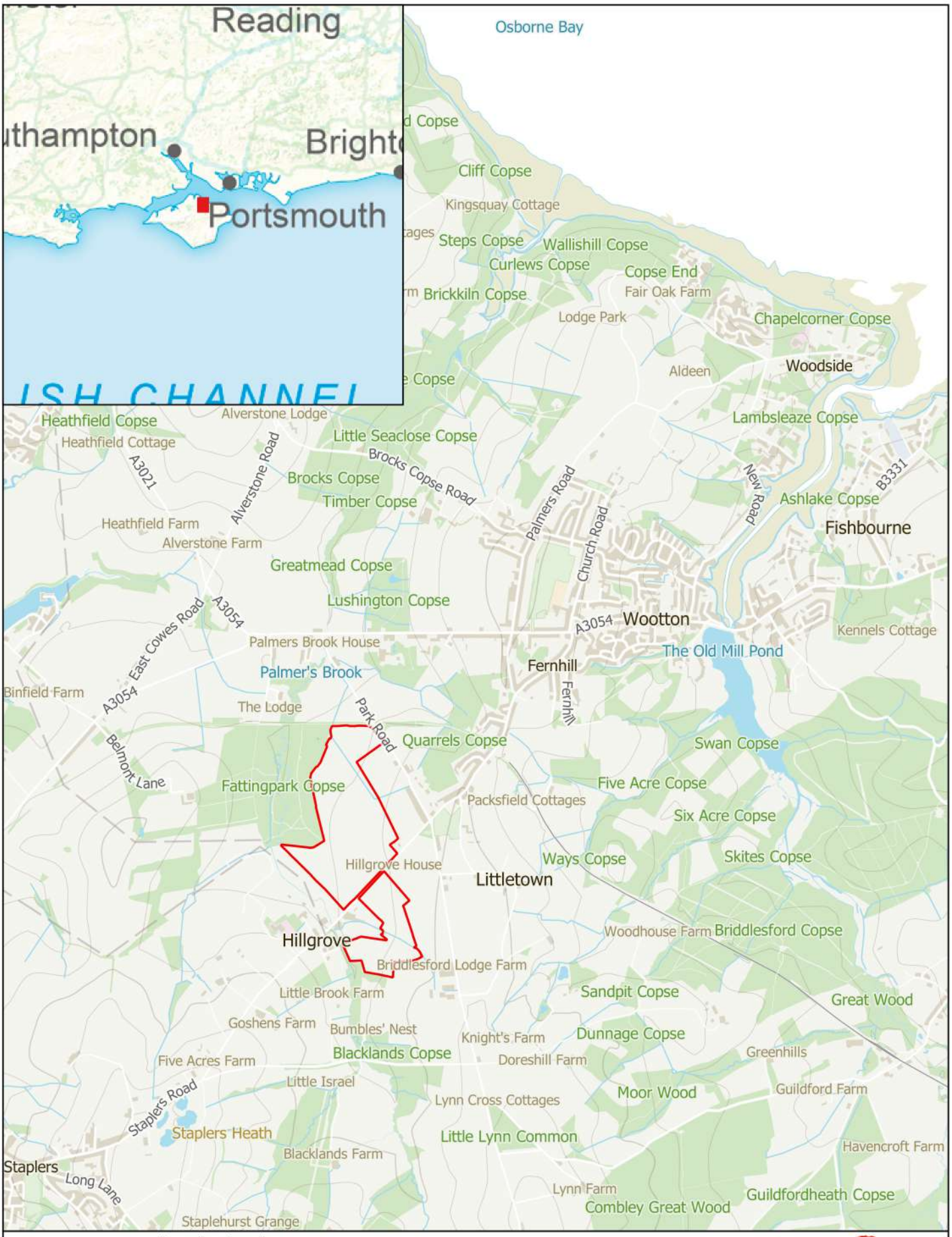
12. Project Metadata

MS Job Code	MSSZ1217
Project Name	Sunny Oaks, Isle of Wight
Client	Orion Heritage
Grid Reference	SZ 52786 91127
Survey Techniques	Magnetometry
Survey Size (ha)	37ha (Magnetometry)
Survey Dates	2021-04-04 to 2021-04-08
Project Lead	Dr. Anna Chmielowska PCIfA
Project Officer	Dr. Anna Chmielowska PCIfA
HER Event No	TBC
OASIS No	TBC
S42 Licence No	N/A
Report Version	0.2

13. Document History

Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	ED, AL	AC	14 April 2022
0.2	Corrections from Project Lead, draft for Director Approval	AC	PJ	19 April 2022



MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 1 - Site Location
1:25,000 @ A4

Survey Area

N

0 0.5 1 km

magnitude surveys

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 2 - Location of Survey Areas
1:10,000 @ A3

Survey Areas
Unsurveyable

N

0 250 500 750 m

magnitude surveys

452500
453000
91500
91000
Quarrels Copse
Wootton Common
Park Road
Park View
Fattingpark Copse
Wootton Common
Station Road
Packsfield Lane
Littletown Lane
Cemetery
Briddlesford Road
Whiterails Road

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 3 - Magnetic Total Field (Lower Sensor) (Overview) (North)
1:3,000 @ A3

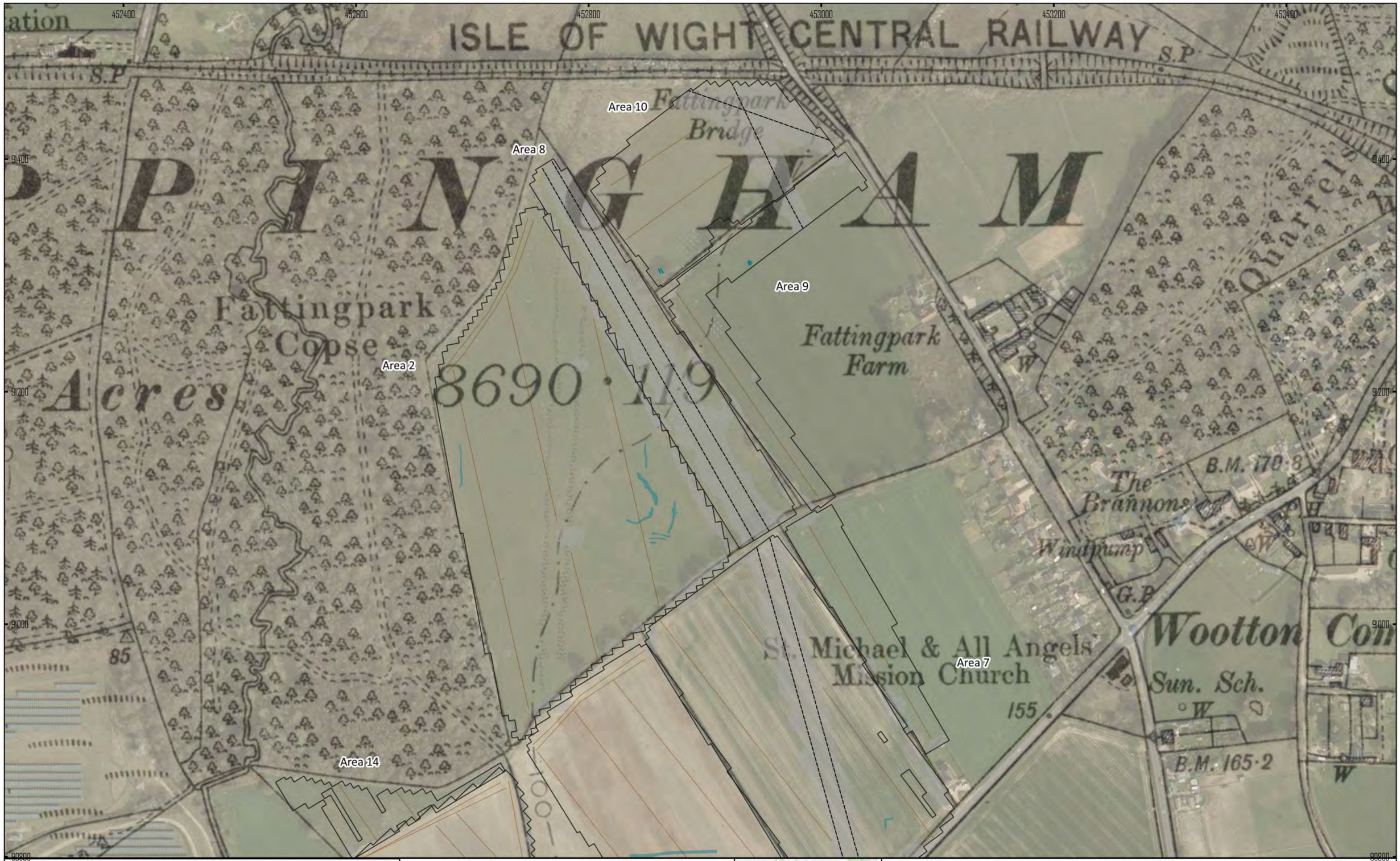
48,997 nT 49,005

Park Road
Station Road
Hillgrove

N

0 50 100 150 m

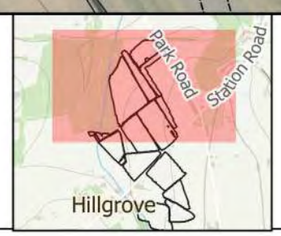
magnitude surveys



MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 4 - Magnetic Interpretation Over Historical Maps (Overview) (North)
1:3,000 @ A3

Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913

- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Undetermined (Strong)
- Undetermined (Weak)
- Overhead Cables
- Agricultural (Trend)
- Service
- Ferrous (Spike)



N

0 50 100 150 m

magnitude surveys

452500

453000

90500

90500

Littletown Lane

Hillgrove House

Whiterails Road

Green Pastures

Briddlesford Road

Solent Grange Nursing Home

Hillgrove

Staplers Road

Ashlea Farm

Briddlesford Lodge Farm

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 5 - Magnetic Total Field (Lower Sensor) (Overview) (South)
1:3,000 @ A3

Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913

48,997 nT 49,005

Park Road

Station Road

Hillgrove

N

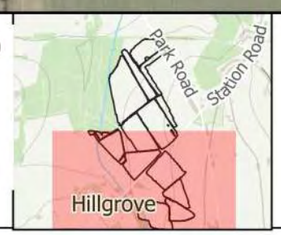
0 50 100 150 m

magnitude surveys

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 6 - Magnetic Interpretation Over Historical Maps (Overview) (South)
1:3,000 @ A3

Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913

- Archaeology Possible (Spread)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Undetermined (Strong)
- Undetermined (Weak)
- Agricultural (Trend)
- Service
- Ferrous (Spike)



N

0 50 100 150 m

magnitude surveys

452600
452800
453000
91400
91200
Area 10
Area 8
Area 9
Area 2
Park Road
Station Road
Hillgrove

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 7 - Magnetic Gradient (North)
1:1,500 @ A3

-1 nT 2

N

0 50 100 150 m

magnitude surveys

452600
452800
453000
91400
91200
Area 10
Area 8
Area 9
Area 2
Park Road
Station Road
Hillgrove

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 8 - Magnetic Interpretation (North)
1:1,500 @ A3

- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Undetermined (Strong)
- Undetermined (Weak)
- Overhead Cables
- Agricultural (Trend)
- Service
- Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

452600
452800
453000
91400
91200
Area 10
Area 8
Area 9
Area 2
Park Road
MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 9 - XY Trace Plot (North)
30nT/cm at 1:1,500 @ A3

Park Road
Station Road
Hillgrove
N
0
50
100
150 m
magnitude surveys

452600
452800
453000
91000
91000
Area 7
Area 14
Area 12
90800
90800
Whiterails Road
Area 12
Hillgrove House

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 10 - Magnetic Gradient (North-Center)
1:1,500 @ A3

-1 nT 2

Park Road
Station Road
Hillgrove

N

0 50 100 150 m

magnitude surveys

452600
452800
453000
91000
91000
90800
90800
Area 14
Area 12
Area 7
Area 12
Whiterails Road
Hillgrove House

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 11 - Magnetic Interpretation (North-Center)
1:1,500 @ A3

Magnetic Disturbance
Ferrous/Debris (Spread)
Undetermined (Weak)
Overhead Cables
Agricultural (Trend)
Service
Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

452600

452800

453000

91000

91000

Area 7

Area 14

Area 12

90800

90800

Whitenails Road

Area 12

Hillgrove House

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 12 - XY Trace Plot (North-Center)
30nT/cm at 1:1,500 @ A3

N

0 50 100 150 m

magnitude surveys

452600
452800
90800
90600
Area 14
Area 12
Area 13
Area 15
Area 1
Area 6
Hillgrove House
Whiterails Road

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 13 - Magnetic Gradient (South-Center)
1:1,500 @ A3

-1 nT 2

Park Road
Station Road
Hillgrove

N

0 50 100 150 m

magnitude surveys

452600
452800
453000
90800
90600
Area 14
Area 12
Area 13
Area 15
Area 1
Area 6
Hillgrove House
Whiterails Road

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 14 - Magnetic Interpretation (South-Center)
1:1,500 @ A3

Magnetic Disturbance
Ferrous/Debris (Spread)
Undetermined (Strong)
Undetermined (Weak)
Agricultural (Trend)
Service
Ferrous (Spike)

N
0
50
100
150 m

magnitude surveys

452600

452800

453000

Area 14

90800

Area 12

Area 12

Hillgrove House

Area 13

Whiterails Road

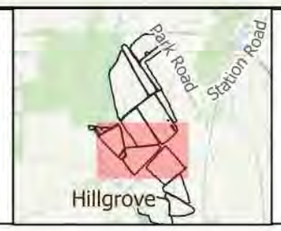
Area 6

Area 15

Area 1

90600

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 15 - XY Trace Plot (South-Center)
30nT/cm at 1:1,500 @ A3



N

0 50 100 150 m

magnitude surveys

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 16 - Magnetic Gradient (South)
1:1,500 @ A3

-1 nT 2

N

0 50 100 150 m

magnitude surveys

452800
453000
453200
90400
90400
Whiterails Road
Staplers Road
Area 3
Area 5
5a
Area 4

MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 17 - Magnetic Interpretation (South)
1:1,500 @ A3

- Archaeology Possible (Spread)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Undetermined (Strong)
- Undetermined (Weak)
- Agricultural (Trend)
- Service
- Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

452800
453000
453200
90400
90400
Whiterails Road
Staplers Road
Area 3
Area 5
Area 4
MSSZ1217 - Sunny Oaks, Isle of Wight
Figure 18 - XY Trace Plot (South)
30nT/cm at 1:1,500 @ A3

Park Road
Station Road
Hillgrove
N
0
50
100
150 m
magnitude surveys