

Hanson Town Farm, Burlescombe, Devon

geophysical surveys

on behalf of
Scott Wilson Ltd

Report 1905
April 2008

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1. Summary

The project

- 1.1 This report presents the results of geophysical surveys conducted in advance of a proposed extension to Town Farm Quarry at Burlescombe in Devon. The works comprised six geomagnetic surveys totalling approximately 7.5ha.
- 1.2 The works were commissioned by Scott Wilson Ltd and conducted by Archaeological Services Durham University.

Results

- 1.3 The surveys of Areas A and B may have detected evidence for iron-working in the form of possible smelting furnaces, as detected previously to the west, and areas of associated waste such as slag. Such features, if proven, might be considered to be of regional significance.
- 1.4 Possible traces of ridge and furrow cultivation and former field boundaries have been detected across parts of the area, some of which may be medieval.
- 1.5 Occasional magnetic anomalies throughout the study area could reflect the remains of ditch and gulley features of unknown date, though a number of the longer anomalies correspond to grassed tracks evident on the ground and on recent aerial photographs.

Recommendations

- 1.6 Although no further geophysical survey is recommended, some of the anomalies recorded here may warrant further investigation by means of trial trenching.

2. Project background

Location (Figure 1)

- 2.1 The survey area comprised agricultural land to the east of Town Farm Quarry at Burlescombe, east of Tiverton, in Devon (NGR centre: ST 08220 16990). The site is bounded to the north by a railway (the former Great Western Railway), to the east by fields and woodland, and to the south by further fields and the Woodlands Business Park. Six surveys were undertaken, covering approximately 7.5ha in four fields.

Development proposal

- 2.2 The proposed development scheme comprises an extension to the existing Town Farm Quarry. The proposed development area covers approximately 20ha, of which 14ha is proposed for further gravel extraction.

Objective

- 2.3 The principal aim of the surveys was to assess the nature and extent of any sub-surface features of potential archaeological significance within specified sample areas, so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in advance of development.

Methods statement

- 2.4 The surveys have been undertaken in accordance with a specification provided by Scott Wilson Ltd (Appendix).

Dates

- 2.5 Fieldwork was undertaken between 7th and 11th April 2008. This report was prepared between 14th and 24th April 2008.

Personnel

- 2.6 Fieldwork was conducted by Richie Villis (Supervisor) and Andrew Platell. This report was prepared by Duncan Hale with illustrations by Janine Wilson. The Project Manager was Duncan Hale.

Archive/OASIS

- 2.7 The site code is **BTF08**, for **Burlescombe Town Farm 2008**. The survey archive will be deposited with the Royal Albert Memorial Museum in Exeter (accession no. 164/2008). Archaeological Services is registered with the **Online Access to the Index of archaeological investigationS** project (OASIS). The OASIS ID number for this project is **archaeol3-41047**.

3. Archaeological and historical background

- 3.1 Geophysical surveys were conducted on land to the west of the current site in 1996, in advance of the Town Farm (Whiteball Pit) quarry development (Johnson 1996a, 1996b). Detailed geomagnetic survey was limited to a few small areas but identified a probable iron-working site and occasional other

features of possible archaeological potential. Excavations and watching briefs were subsequently undertaken on the site.

- 3.2 An archaeological desk-based assessment of the present study area has been conducted by Scott Wilson (2008). Information from that assessment is summarised here.
- 3.3 There is no direct evidence for prehistoric activity within the proposed site boundary, however, two Bronze Age burnt mounds were excavated to the west. Struck flints were also recovered and the sites lie close to an ancient route way.
- 3.4 There is no known evidence for Romano-British features within the site although the A38 road to the east is believed to broadly follow the course of a Roman road and three sherds of Roman pottery were found to the west of the site during a watching brief for an earlier extension to the quarry.
- 3.5 Excavations to the west of the site also revealed two timber-lined wells believed to be of early medieval date, and, further north, three Saxon iron-smelting furnaces. The majority of the land here was intensively farmed during the medieval period.
- 3.6 The majority of field boundaries in the manor of Burlescombe date to the 16th and 17th centuries, though some may have much earlier roots.

4. Landuse, topography and geology

- 4.1 At the time of survey the proposed development area comprised pasture fields in the north and one field of cereal in the south (survey Area A), typically divided by wide hedgerows with trees. The north-eastern part of the northernmost field (Area F) was too boggy to enable useful data to be collected there (c.0.06ha).
- 4.2 The survey areas were located on north and north-west facing slopes, ranging in elevation from 160m OD in the south down to 115m OD in the north.
- 4.3 The underlying solid geology of the area comprises strata of the Budleigh Salterton Pebble Beds Formation, a Permian & Triassic conglomerate, which are overlain by gravel.

5. Geophysical survey

Standards

- 5.1 The surveys and reporting were conducted in accordance with English Heritage Research and Professional Services Guideline No.1, *Geophysical survey in archaeological field evaluation*, 2nd edition (David forthcoming); the Institute of Field Archaeologists Technical Paper No.6, *The use of geophysical techniques in archaeological evaluations* (Gaffney, Gater & Ovenden 2002);

and the Archaeology Data Service *Geophysical Data in Archaeology: A Guide to Good Practice* (Schmidt 2001).

Technique selection

- 5.2 Geophysical survey enables the relatively rapid and non-invasive identification of sub-surface features of potential archaeological significance and can involve a variety of complementary techniques such as magnetometry, earth electrical resistance, ground-penetrating radar and electromagnetic survey. Some techniques are more suitable than others in particular situations, depending on a variety of site-specific factors including the nature of likely targets; depth of likely targets; ground conditions; proximity of buildings, fences or services and the local geology and drift.
- 5.3 In this instance, based on existing evidence and previous surveys, it was considered likely that cut features such as ditches and pits might be present on the site, and that of other types of features such as tracks, iron-smelting furnaces and burnt mounds might also survive.
- 5.4 Given the anticipated shallowness of targets and the non-igneous geological environment of the study area a geomagnetic technique, fluxgate gradiometry, was considered appropriate for detecting the types of feature mentioned above. This technique involves the use of hand-held magnetometers to detect and record anomalies in the vertical component of the Earth's magnetic field caused by variations in soil magnetic susceptibility or permanent magnetisation; such anomalies can reflect archaeological features.

Field methods

- 5.5 Six survey areas were established across the site using grid coordinates supplied by Scott Wilson, located with a Trimble Pathfinder Pro XRS global positioning system (GPS) with real-time correction providing sub-metre accuracy.
- 5.6 Measurements of vertical geomagnetic field gradient were determined using Bartington Grad601-2 dual fluxgate gradiometers. A zig-zag traverse scheme was employed and data were logged in 30m grid units. The instrument sensitivity was set to 0.1nT, the sample interval to 0.25m and the traverse interval to 1.0m, thus providing 3600 sample measurements per 30m grid unit.
- 5.7 Data were downloaded on site into a laptop computer for initial processing and storage and subsequently transferred to a desktop computer for processing, interpretation and archiving.

Data processing

- 5.8 Geoplot v.3 software was used to process the geophysical data and to produce both continuous tone greyscale images and trace plots of the raw (unfiltered) data. The greyscale images and interpretations are presented in Figures 2-4; the trace plots are provided in Figure 5. In the greyscale images, positive magnetic anomalies are displayed as dark grey and negative magnetic

anomalies as light grey. Palette bars relates the greyscale intensities to anomaly values in nanoTesla.

- 5.9 The following basic processing functions have been applied to each dataset:

<i>zero mean traverse</i>	sets the background mean of each traverse within a grid to zero; for removing striping effects in the traverse direction and removing grid edge discontinuities.
<i>despike</i>	locates and suppresses iron spikes in gradiometer data.
<i>interpolate</i>	increases the number of data points in a survey to match sample and traverse intervals. In this instance the data have been interpolated to 0.25m x 0.25m intervals.

Interpretation: anomaly types

- 5.10 Colour-coded geophysical interpretations are provided in Figure 3. Three types of geomagnetic anomaly have been distinguished in the data:

<i>positive magnetic</i>	regions of anomalously high or positive magnetic field gradient, which may be associated with high magnetic susceptibility soil-filled structures such as pits and ditches.
<i>negative magnetic</i>	regions of anomalously low or negative magnetic field gradient, which may correspond to features of low magnetic susceptibility such as wall footings and other concentrations of sedimentary rock or voids.
<i>dipolar magnetic</i>	paired positive-negative magnetic anomalies, which typically reflect ferrous or fired materials (including fences and service pipes) and/or fired structures such as kilns or hearths.

Interpretation: features

General comments

- 5.11 Colour-coded archaeological interpretations are provided in Figure 4.
- 5.12 Except where stated otherwise in the text below, positive magnetic anomalies are taken to reflect relatively high magnetic susceptibility materials, typically sediments in cut features (such as furrows, ditches or pits) whose magnetic susceptibility has been enhanced by decomposed organic matter or by burning.
- 5.13 Small, discrete dipolar magnetic anomalies have been detected in all of the survey areas. These typically reflect items of near-surface ferrous and/or fired debris, such as horseshoes and brick fragments, and in most cases have little or no archaeological significance. A sample of these discrete anomalies is shown on the geophysical interpretation plans, however, they have been omitted from the archaeological interpretation plans and the following discussion.
- 5.14 Additionally, in this instance, it is possible that broad concentrations of such anomalies could reflect iron-working waste, since possible iron-smelting

furnaces have been detected in the current surveys (below) and two were previously found to the west of the present survey area.

Area A

- 5.15 This survey was in a field at the southern end of the proposed development area, on land which had been part of the Great Covert wood since before the first edition Ordnance Survey until at least the 1930s. It is likely that any archaeological resource in this area will have been impacted upon both by growing tree roots and by the subsequent deforestation of the area.
- 5.16 Two of the intense dipolar magnetic anomalies in the south-eastern corner of this survey area almost certainly reflect large ferrous/fired objects, and could possibly reflect iron-working sites such as smelting furnaces. The spatial extent of these anomalies is not known, due to their location on the edge of the survey, however, they are similar in nature and magnitude to those produced by two Saxon iron-smelting furnaces previously investigated to the west of the current site. The western feature here produced signals in the range -10 to +94nT and the eastern one -25 to +111nT; the trace plot in Figure 5 clearly demonstrates the difference between these anomalies and others nearby.
- 5.17 Two large parts of this survey area in the north and south are characterised by high concentrations of small dipolar magnetic anomalies, typically reflecting ferrous/fired litter and often indicative of disturbed or backfilled land, though possibly in this case reflecting distributions of near-surface iron-working waste.
- 5.18 A number of extremely weak and diffuse linear anomalies here may reflect variations in the subsoil, either geological or as a result of deforestation.
- 5.19 The survey has not detected any evidence for a former land boundary which is shown to cross this area on early OS editions; this could be due to ground disturbance associated with the deforestation of the area.

Area B

- 5.20 A large dipolar magnetic anomaly in the west of this area could possibly reflect another iron-working site, with slag and other waste materials being concentrated a little way to the east; much of the eastern part of the survey area contains smaller, discrete dipolar magnetic anomalies.
- 5.21 A broad, strong positive magnetic anomaly aligned north-east/south-west across the central part of this area corresponds to a broad, linear hollow shown on early OS maps and still evident on the ground. The hollow is now partly infilled with modern materials. A narrow positive magnetic anomaly detected immediately north and east of the hollow almost certainly reflects the remains of a former field boundary, also shown on the first edition OS.
- 5.22 A possible double-ditched track or pair of drains appears to lead to this former hollow.

- 5.23 Linear positive magnetic anomalies in the north of the survey could reflect a former field boundary and traces of ridge and furrow.
- 5.24 Large intense dipolar magnetic anomalies on the western edge of the survey area are due to the presence of a geotechnical drilling rig just outside the survey area.

Area C

- 5.25 A number of linear magnetic anomalies have been detected here. Some may reflect former field boundaries or other ditched features. A linear arrangement of small dipolar magnetic anomalies aligned broadly north-south corresponds to a former field boundary. Parallel, weak lineations aligned broadly north-south could reflect traces of former ridge and furrow cultivation.
- 5.26 A chain of small, discrete positive magnetic anomalies in the north-eastern corner of the survey could reflect soil-filled features such as pits or large post-holes. The location of these broadly corresponds to an existing grassed track.
- 5.27 A relatively large dipolar magnetic anomaly in the west of the survey area reflects the presence of a telegraph pole.

Area D

- 5.28 A number of linear positive magnetic anomalies have also been detected in this area. At least one of these was probably a former field boundary as it appears to be a continuation of an existing field boundary to the south.
- 5.29 Weak and diffuse linear anomalies aligned north-south may reflect traces of former ridge and furrow cultivation.

Area E

- 5.30 Again, several linear magnetic anomalies have been detected. Two of these correspond to grassed tracks across the field aligned north-east/south-west and north-west/south-east. A wire fence crosses the latter track and is evident in the data as a band of intense magnetisation aligned broadly east-west. Possible traces of ridge and furrow cultivation have been detected on two alignments, north-south, as elsewhere, and north-west/south-east. Anomalies reflecting this possible former cultivation are extremely weak and are to some extent overshadowed by a concentration of small intense anomalies which probably reflects near-surface ferrous/fired debris.
- 5.31 A large and intense dipolar magnetic anomaly just south of the wire fence corresponds to a geotechnical drilling rig.

Area F

- 5.32 Several very weak positive magnetic anomalies were detected in this area, possibly reflecting the remains of soil-filled ditches or gullies. Some of the anomalies could possibly reflect traces of ridge and furrow remains aligned north-east/south-west.

6. Conclusions

- 6.1 Approximately 7.5ha of geomagnetic survey has been conducted on land for the proposed extension to Town Farm Quarry at Burlescombe in Devon.
- 6.2 The surveys of Areas A and B may have detected evidence for iron-working in the form of possible smelting furnaces, like those detected previously to the west, and areas of associated waste such as slag. Such features, if proven, might be considered to be of regional significance.
- 6.3 Possible traces of ridge and furrow cultivation and former field boundaries have been detected across parts of the area, some of which may be medieval. These features would be of local significance.
- 6.4 Occasional magnetic anomalies throughout the study area could reflect the remains of ditch and gully features of unknown date, though a number of the longer anomalies correspond to grassed tracks evident on the ground and on recent aerial photographs.
- 6.5 Although no further geophysical survey is recommended, some of the anomalies recorded here may warrant further investigation by means of trial trenching.

7. Sources

- David, A, forthcoming *Geophysical survey in archaeological field evaluation*, 2nd edition, Research and Professional Services Guideline 1, English Heritage
- Gaffney, C, Gater, J, & Ovenden, S, 2002 *The use of geophysical techniques in archaeological evaluations*, Technical Paper 6, Institute of Field Archaeologists
- Johnson, AE 1996a *Town Farm, Burlescombe (Whiteball Pit) Proposed Extension: Topsoil Magnetic Survey and Gradiometer Survey*, unpublished report, survey ref. 0880796/BUD/ARC for ARC South Western, Oxford Archaeotechnics
- Johnson, AE 1996b *Town Farm, Burlescombe (Whiteball Pit) Proposed Extension: Topsoil Magnetic Survey and Gradiometer Survey, Phase 2*, unpublished report, survey ref. 0880796/BUD/ARC for ARC South Western, Oxford Archaeotechnics
- Schmidt, A, 2001 *Geophysical Data in Archaeology: A Guide to Good Practice*, Archaeology Data Service, Arts and Humanities Data Service

Appendix: Specification

Revision Schedule Specification for Magnetometry Survey April 2008

Rev	Date	Details	Prepared by	Reviewed by	Approved by
01	April 08	Draft	Louise Robinson BA Graduate Archaeologist	Neil Macnab BA MIFA Senior Archaeologist	Annette Roe MA MIFA Associate
02	April 08	Draft	Louise Robinson BA Graduate Archaeologist	Neil Macnab BA MIFA Senior Archaeologist	Annette Roe MA MIFA Associate
03	April 08	Final	Louise Robinson BA Graduate Archaeologist	Neil Macnab BA MIFA Senior Archaeologist	Annette Roe MA MIFA Associate

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1	Introduction
1.1	This specification for geophysical survey has been prepared by Scott Wilson for Hanson Aggregates who has appointed Scott Wilson to undertake an archaeological assessment of the archaeological potential of land at Town Farm, Burlescombe, Devon that will be impacted as a result of development for a quarry extension.
1.2	This document provides a specification for a detailed magnetometer survey of the development area. The survey will be carried out in those areas that will be affected by extraction works.
2	Site Description and Location
2.1	The proposed development scheme involves the extension of Town Farm Quarry, an existing quarry at Burlescombe, Devon to allow for the extraction of gravels from a further 14 hectares of land.
2.2	The quarry extension area is located at Ordnance Survey grid reference (NGR) 308238,1166917 close to Burlescombe, a small village about halfway between Taunton and Exeter (Figure 1). The total area of the proposed development covers approximately 20ha – but only 14ha is proposed for further gravel extraction.
2.3	The site consists of six irregular shaped fields, situated to the east of the existing quarry. To the north lies a railway cutting, to the south agricultural land and light industrial units close to the M5 motorway and to the east further agricultural land and woods.
2.4	The site is currently in use as pasture and occupies a north facing aspect on sloping ground between the 106m and the 96m contour. To the south of the site the ground continues to rise onto the higher ground that forms a ridgeway, although at this point the higher ground terminates at the end of a spur (110m contour) that overlooks the A38 to the east and south.
2.5	The site is currently in use as pasture, as it has been for at least the last 30 years. A site visit determined that there was no evidence of ploughing in recent times and the ground appeared to be relatively undisturbed. All of the surviving hedgerows on the site are set into banks and could be the same hedgerows that were depicted as boundaries on the 1837 Burlescombe Tithe map. It is possible that some form of terracing has occurred on the north facing slope in the northern most field within the site boundary, to the east of

- Little Eastbrook Farm. There were no other extant archaeological or historical landscape features visible at the time of the site visit.
- 3 Geology
- 3.1 The underlying solid geology consists of Budleigh Salterton Pebble Beds overlying Lower Marls (Littleham Mudstone).
- 4 Archaeological and Historical Background
- 4.1 A search of the Devon Historic Environment Record (HER) and the National Monuments Record (NMR) have identified archaeological sites and listed buildings within the study area, ranging in date from the prehistoric to the modern period. There are no records of archaeological sites within the proposed development area. There are, however a number of field boundaries present on the site that are represented on the Burlescombe tithe map of 1837.
- 4.2 Although there is no direct evidence of prehistoric activity on the site there is the potential that remains from this period might be present. Archaeological monitoring and excavations just to the west of the site boundary uncovered two Bronze Age burnt mounds and two associated water-filled troughs that had previously been lined with wood. A number of pieces of struck flint were also recovered. Running close to the burnt mounds is an ancient route way with strong prehistoric characteristics.
- 4.3 During the Roman period Devon, along with Cornwall and part of Somerset west of the River Parrett formed the region known as Civitas Dumnoniorum (Turner 2006, 6). There is a small amount of evidence to suggest Roman activity within the study area. The line of a Roman road is considered to broadly respect the present line of the A38, to the east of the site boundary. Three sherds of Roman pottery were recovered during a watching brief in 2000 on an extension of the existing quarry site, just to the west of the site boundary.
- 4.4 The battle at Beandun in 614 marked the beginning of the Saxon conquest of Dumnonia (Stanes 2000, 33). No great battles were fought within or around Burlescombe during the early medieval period. However there is evidence within the study that suggests the presence of an early medieval community and the continuation of the use of the area from the prehistoric period.
- 4.5 The excavations to the west of the site uncovered two timber-built wells, one of which was a sub-circular pit with a hollowed tree trunk placed vertically into the ground in the western part of the pit. Within the tree trunk was a well preserved leather shoe. The wells were located close to the Bronze Age burnt mounds. Further north three Saxon iron-smelting furnaces dating from between that late 8th and late 10th centuries were uncovered.
- 4.6 There was an abundance of activity at Burlescombe during the medieval period. It was situated in the Hundred of Bampton and the manor was owned by Walter de Claville whose descendent of the same name founded Canonsleigh Priory in 1166. By the mid-14th century a large amount of land was owned by the canonesses. Given that they owned the fields abutting the western site boundary, it is highly likely that they owned the land within the proposed development area. Erected around the same time as the abbey was the Church of St. Mary in Burlescombe itself. The building is currently Grade I listed, however many alterations have been made since the mid-12th century. Four sherds of medieval pottery were found during the archaeological monitoring to the west of the site. This is likely to have been the result of manuring of Burlescombes agricultural fields during the medieval period as this land is likely to have been intensively farmed during this period. There are also several phases of earthworks, Holloways and enclosures on Maiden Down, approximately 500m to the southeast of the site boundary.
- 4.7 Most of the field boundaries within the manor of Burlescombe date to the 16th and 17th centuries, but some have their roots in prehistory. In the South West earlier elements of the landscape were often retained through periods of transformation. Historic Landscape Characterisation has shown that 65% of earlier field boundaries have been lost within the proposed development area.

- 4.8 From the early 19th century the study area saw a surge in industrial activity. The opening of the complete Grand Western Canal in 1838 allowed for easy transport of goods such as stone. Part of the Beambridge to Exeter railway opened in 1844 and is still running today. Associated with the railway was the White Ball Tunnel, part of which also extends into the parish of Holcombe Rogus. A number of quarries and gravel pits were opened within the study area during the 20th century. The site has seen little change since its earliest depiction on the Burlescombe Tithe map of 1837. A number of the field boundaries have been lost and new ones erected as they have moved to accommodate new land owners or land management regimes. However the site appears to have remained in use as agricultural land.
- 5 Project Objectives
- 5.1 The objectives of the detailed magnetometer survey are:
- to establish the presence or absence of any archaeological anomalies within the areas of proposed development;
 - to define the extent of any such anomalies;
 - to characterise, if possible, any such anomalies; and
 - to provide supporting information in order to detail the future archaeological strategy for the development, where appropriate and necessary.
- 6 Survey Areas
- 6.1 The detailed magnetometer survey will cover the areas to be impacted upon by the proposed development. To enable the accurate positioning of survey grids, the co-ordinates for each corner of the grid have been detailed on Figure 2.
- 6.2 If there are any areas that cannot be surveyed the Archaeological Contractor will inform Scott Wilson immediately and details of these will be provided in the report.
- 7 Methodology
- 7.1 The specification defines the methodologies to be used and adhered to. It has been produced in consultation with Stephen Reed (Planning Development Control Officer, Devon County Council). All work shall be carried out in accordance with the Standards and Guidance and Code of Conduct of the Institute of Field Archaeologists (1999), guidelines outlined in *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 1995), and other current and relevant best practice and standards and guidance (Appendix 1).
- 7.2 A detailed magnetometer survey will be carried out over the designated survey areas using either a Geoscan FM 36 Fluxgate Gradiometer or a Bartington GRAD 601 Fluxgate Gradiometer (or similar electronic instrument). Readings should be taken at 0.25m intervals on traverses 1m apart within 30m by 30m grids.
- 7.3 The data should be downloaded at regular intervals on site onto a laptop computer for initial processing and storage. This will ultimately be transferred to a desktop computer for further processing, interpretation and archiving. Geoplot v.3 software (or comparable) will be used to interpolate the data to form an array of regularly spaced values at 0.25m x 0.25m intervals. Continuous tone greyscale images of raw data and an x/y trace plot will also be produced. Palette bars relating the greyscale intensities to anomaly values in ohms will be included with the images. Any algorithms used in processing the data should be detailed within the report.
- 7.4 The raw and processed data will be presented in the report. The processed drawings should be accurately located and presented in relation to the Ordnance Survey base plan for the site and the survey markers should be accurately plotted to aid in the laying out of subsequent evaluation or excavation areas, if deemed necessary. Interpretation plots will be included in the report.
- 7.5 An experienced operator will undertake the survey in order to provide consistent results with regard to pattern recognition and to provide initial screening of noise resulting from recent ferrous disturbance and local magnetic pollution.

- 7.6 During the survey a record should be made of surface conditions and sources of modern geophysical interference that may have a bearing on subsequent interpretation of field data.
- 7.7 The survey grid/transects must be established by electronic means (using an EDM Total station or similar instrument). This must be accurately tied in with the National Grid. This should be internally accurate to ± 10 cm, and the grid locatable on the 1: 2500 Ordnance Survey map.
- 7.8 The Archaeological Contractor will place survey markers at the site such that the location of the survey can be easily re-established.
- 8 Reporting
- 8.1 Verbal progress reports will be provided to Scott Wilson on request and upon completion of the archaeological works. An interim plot and statement of results will be submitted to Scott Wilson within three working days of completing the survey. This interim report will include a grey scale plot and a brief summary of the results.
- 8.2 An assessment report will be submitted within 2 weeks of the completion of fieldwork. The report will include the following and will follow those guidelines set by English Heritage (1995, 5):
- a non-technical summary;
 - site location;
 - archaeological and historical background;
 - methodology;
 - aims and objectives;
 - results (to include full description, assessment of condition, quality and significance of results identified);
 - general and detailed plans showing the location of the surveyed areas accurately positioned on an Ordnance Survey map base (to a known scale);
 - colour/grey scale plots to aid interpretation. The plots will be contoured (if appropriate) to allow trends to be shown superimposed over data without obscuring it;
 - an interpretative plot;
 - statement of potential with recommendations for future survey; and
 - conclusions.
- 8.3 One copy of the complete report will be submitted to Scott Wilson as a draft. In finalising the report the comments of Scott Wilson will be taken into account.
- 8.4 Seven bound hard copies, one unbound master-copy and a digital version of the report and illustrations will be produced within one week of the receipt of comments on the draft report. The digital report shall comprise a CD containing a complete version of the report in PDF format and separate digital text (in Microsoft Word format) and CAD mapping files (in ESRI GIS or AutoCAD format) and any other illustrations or plates.
- 8.5 The raw and processed data will be presented in the report. The processed drawings will be accurately located and presented in relation to the Ordnance Survey base plan for the area and the survey markers should be accurately plotted to aid in the laying out of subsequent surveys.
- 9 Dissemination
- 9.1 Devon County Council supports the Online Access to Index of Archaeological Investigations (OASIS) Project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork.
- 9.2 The Archaeological Contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/> within 3 months of completion of the work. When filling out the form the Archaeological Contractor must make reference to the Regional Research Framework. The Archaeological Contractor is advised to ensure that adequate time and costings are built into their tenders to allow the forms to be filled in.

- 9.3 Technical advice should be sought in the first instance from OASIS (oasis@ads.ahds.ac.uk) and not from Devon County Council.
- 9.4 Once a report has become a public document by submission to or incorporation into the Historic Environment Record, Devon County Council Historic Environment Record Team will validate the OASIS form thus placing the information into the public domain on the OASIS website.
- 10 Archive Deposition
- 10.1 The Archaeological Contractor will liaise with the Royal Albert Memorial Museum to agree a date for the deposition of the documentary archive for long-term storage and curation. When doing so they will quote the accession number 164/2008. The archive will be produced to the standards outlined by English Heritage (1991).
- 11 Monitoring
- 11.1 The Archaeological Contractor will be subject to regular monitoring by Scott Wilson who will be given full access to site records or any other information.
- 11.2 Scott Wilson will liaise with Stephen Reed (Planning Development Control Officer, Devon County Council) to inform him of the commencement of site works and to offer him the opportunity to visit and monitor the work in progress.
- 12 Confidentiality and Publicity
- 12.1 All communication regarding this project is to be directed through Scott Wilson. The Archaeological Contractor will refer all inquiries to Scott Wilson without making any unauthorised statements or comments.
- 12.2 The Archaeological Contractor will not disseminate information or images associated with the project for publicity or information purposes without the prior written consent of Scott Wilson.
- 13 Copyright
- 13.1 The Archaeological Contractor will assign copyright in all reports and documentation/images produced as part of this project to Scott Wilson. The Archaeological Contractor retains the right to be identified as the author/originator of the material. This applies to all aspects of the project.
- 13.2 The Archaeological Contractor may apply in writing to use/disseminate any of the project archive or documentation (including images). Such permission will not be unreasonably withheld.
- 13.3 The results of the survey will be submitted to Stephen Reed (Planning Development Control Officer, Devon County Council) in hard-copy format by Scott Wilson and will ultimately be made available for public access.
- 14 Resources and Timetable
- 14.1 All archaeological personnel involved in the project should be suitably qualified and experienced professionals. The Archaeological Contractor will provide Scott Wilson with staff details including CVs of the Project Manager, Site Supervisor and Site Assistants.
- 14.2 The fieldwork will take place during the week commencing 7th April 2008 and fieldwork will be completed within one week. The date for submission of the final report will be 24th April 2008. Scott Wilson should be informed at the earliest opportunity if this is not achievable.
- 15 Insurances and Health and Safety
- 15.1 The Archaeological Contractor will provide Scott Wilson with details of public and professional indemnity insurance prior to fieldwork commencing.
- 15.2 The Archaeological Contractor will have their own Health and Safety policies compiled using national guidelines and which conform to all relevant Health and Safety legislation. A copy of the Health and Safety policy will be submitted to Scott Wilson in advance of fieldwork.
- 15.3 The Archaeological Contractor will undertake a risk assessment detailing project specific Health and Safety requirements. The risk assessment shall be submitted to Scott Wilson in advance of commencement of site work. If amendments are made to the assessment

- during the works, Scott Wilson must be provided with the amended version at the earliest opportunity. Health and Safety will take priority over archaeological issues.
- 15.4 Scott Wilson will provide information regarding the approximate location of known services within the area of investigation. The Archaeological Contractor will, however, be responsible for identifying any buried or overhead services and taking the necessary precautions to avoid damage to such services, prior to investigation.
- 16 Access Arrangements and Site Information
- 16.1 Prior to the commencement of the survey Scott Wilson will liaise with Hanson Aggregates to arrange access.
- 17 General Provisions
- 17.1 The Archaeological Contractor will undertake the works to the specification issued by Scott Wilson and in any subsequent written variations. No variation from, or changes to, the specification will occur except by prior agreement with Scott Wilson who will consult with Stephen Reed (Planning Development Control Officer, Devon County Council).

Figures

Appendix 1

Archaeological Standards and Guidelines

Darvill, T & Atkins, M 1991 *Regulating Archaeological Works by Contract* (IFA Technical Paper No 8)
English Heritage 1991 *The Management of Archaeological Projects* Second Edition (MAP2)
English Heritage 1995 *Geophysical Survey in Archaeological Field Evaluation* (EH Research and Professional Services Guidelines No 1)
Gaffney, C & Gater, J with Ovenden, S 1991 *The Use of Geophysical Techniques in Archaeological Evaluations* (IFA Technical Paper No 9)
Garratt-Frost, S 1992 *The Law and Burial Archaeology* (IFA Technical Paper No 11)
Handley, M 1999 *Microfilming Archaeological Archives* (IFA Paper No 2)
Institute of Field Archaeologists 1997 *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (and subsequent revisions)
Institute of Field Archaeologists 1999 *Standard and Guidance for Archaeological Field Evaluation* (and subsequent revisions)
Society of Museum Archaeologists 1995 *Towards an Accessible Archaeological Archive - the Transference of Archaeological Archives to Museums: Guidelines for use in England, Northern Ireland, Scotland and Wales*

Appendix 2

Previous Archaeological Surveys



Archaeological Services
University of Durham

Hanson Town Farm, Burlescombe, Devon

geophysical surveys

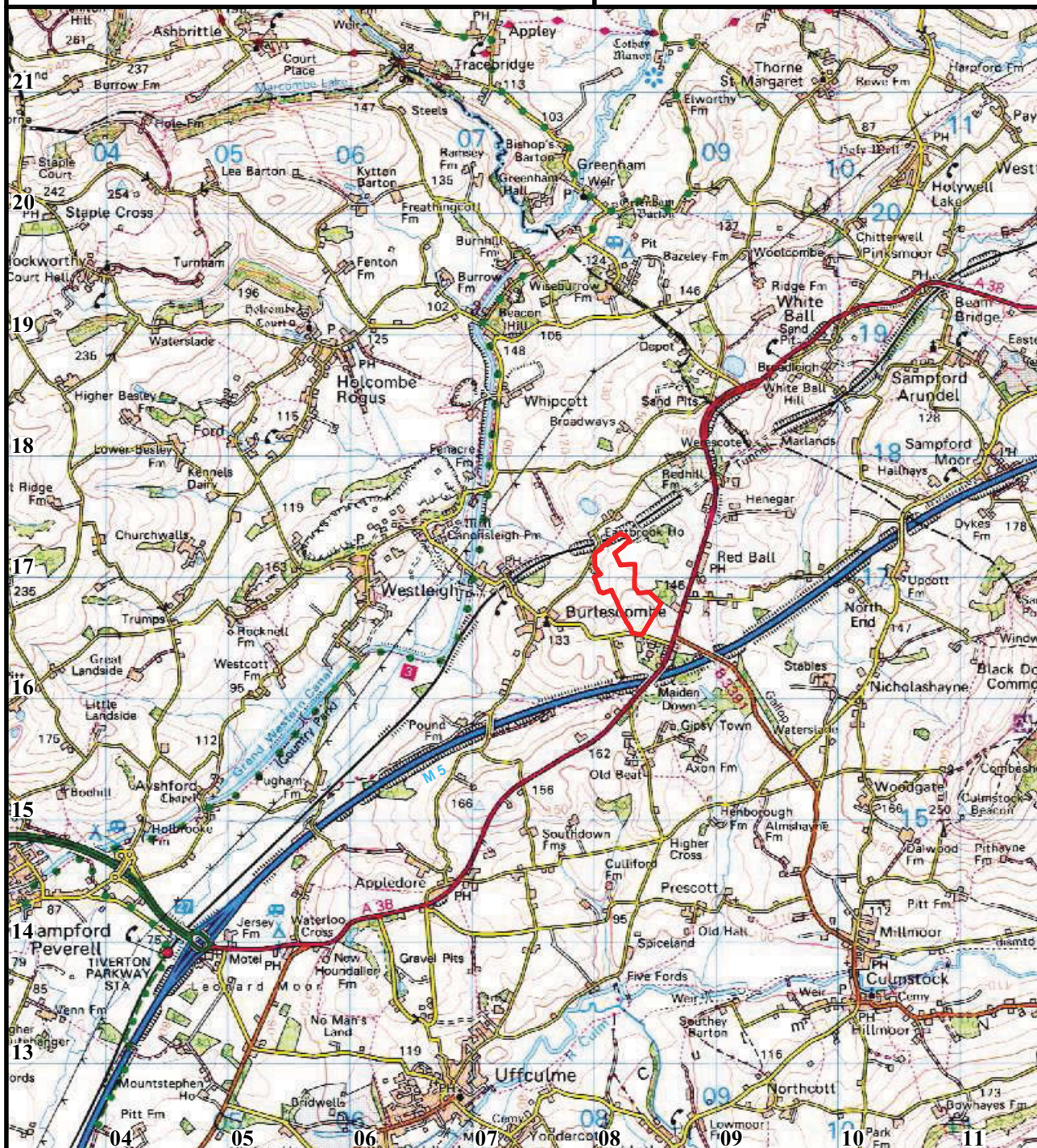
Report 1905

Figure 1

Location map

on behalf of
Scott Wilson Ltd

*Reproduced from Landranger 181 1:25 000
by permission of Ordnance Survey on behalf
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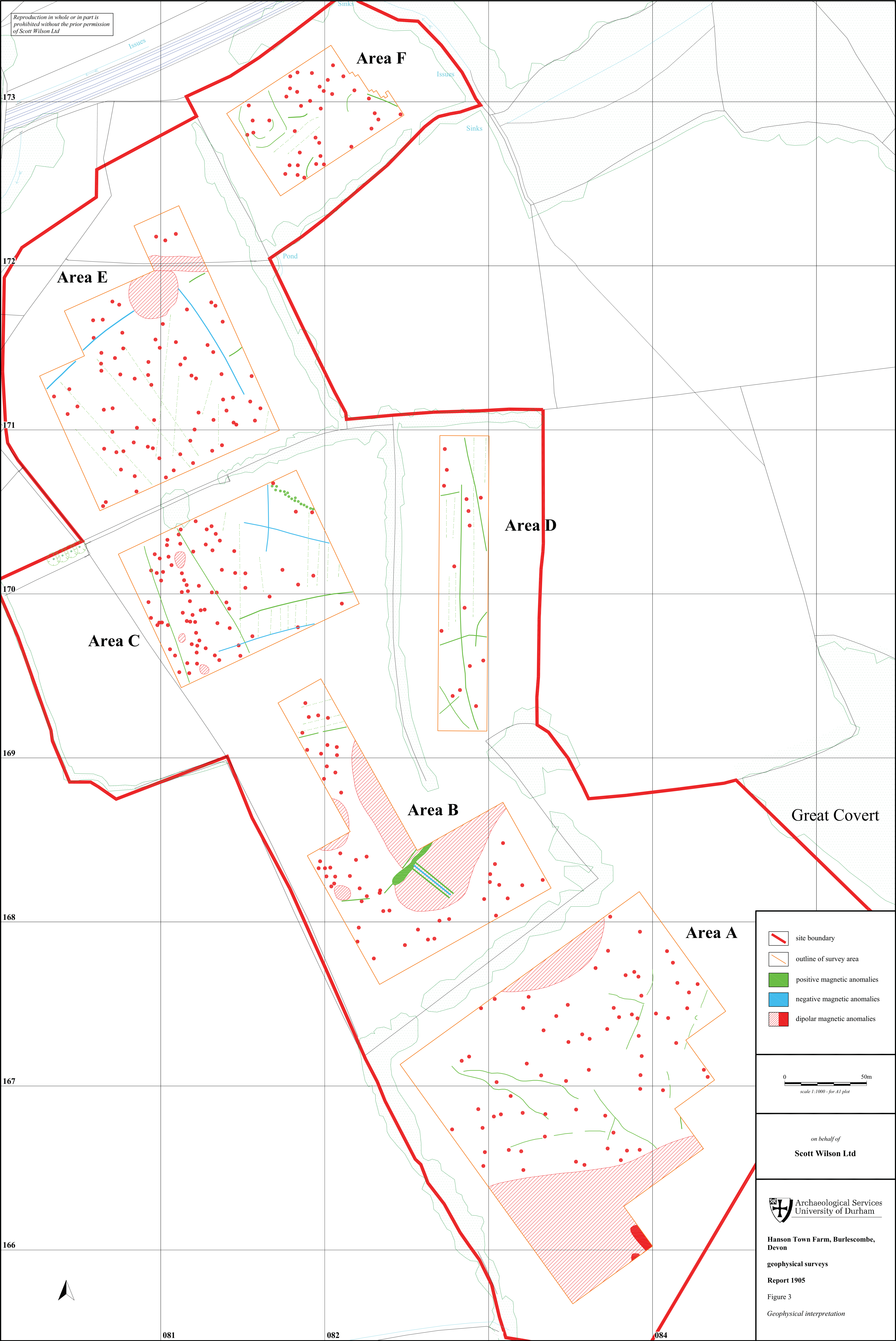
study area

0 2.5km

scale 1:50 000 - for A4 plot







- site boundary
- outline of survey area
- positive magnetic anomalies
- negative magnetic anomalies
- dipolar magnetic anomalies

0 50m
scale 1:1000 - for A1 plot

on behalf of
Scott Wilson Ltd



**Hanson Town Farm, Burlescombe,
Devon**

geophysical surveys

Report 1905

Figure 3

Geophysical interpretation

