

**Ravensburgh Castle Hillfort Project  
Interim Report No 1**

**Project Outline  
and  
Topographical and geophysical surveys of  
Ravensburgh Castle Hillfort, Hexton,  
Hertfordshire, 2013 - 2015**

**Ian Brown**



**Ravensburgh Castle - western ramparts**

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**June 2015**



**Frontispiece: Ravensburgh Castle bowl      Courtesy North Herts Museums Service**

**Institute of Archaeology, University of Oxford**

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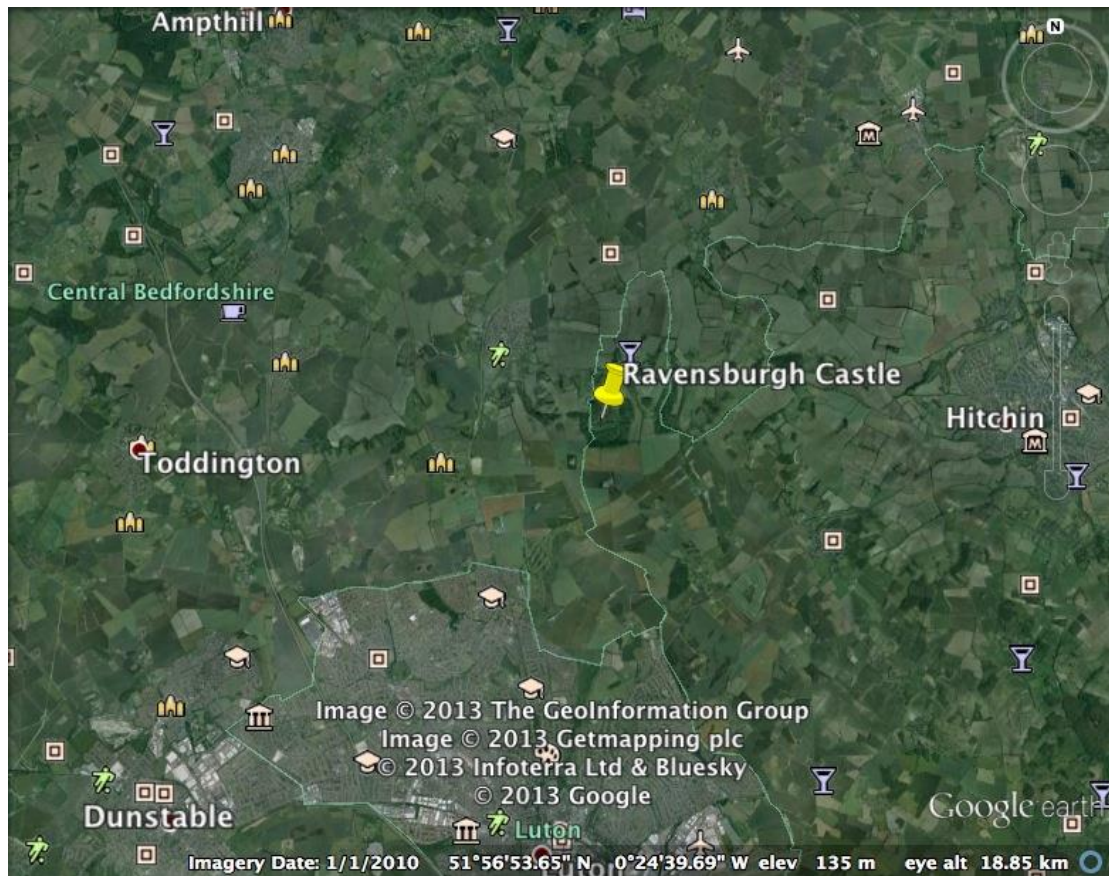
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## **1. Location of Ravensburgh Castle and overall character of the defences**

Ravensburgh Castle Hillfort (GR: TL09952950) is located c. 10km west of Hitchin and 1.2km south-west of Hexton village, on the borders of Hertfordshire and Bedfordshire (Fig 1). The Icknield Way lies 1.5 km to the south. The hillfort, at circa 6.6 ha, is the largest in eastern England and the Chilterns. It is situated on the Upper Cretaceous Chalk sequence and lies on the western half of a plateau surrounded by steep-sided dry valleys, except on the east. Here the main rampart is still 5.1 m high, the other sides no less impressive, being strengthened by the steepness of the slopes below. The fine main gate, with substantial hollow way, is located at the north-western corner above the northern extremity of the steep Claypit Hole, with a second entrance at the south-eastern corner (Fig 2). The whole site was planted with trees c. 1908, and its present wooded character within the landscape is seen well from the air (Fig 3). Before this time, the site was Chiltern chalk downland (Fig 4). There have been episodes of tree removal, predominantly in the SE sector as a result of major windblow, but accompanied by subsequent regeneration. The earliest reference to Ravensburgh appears to be by Francis Taverner in 1640 and William Stukeley visited the site in 1724.

## **2. Past Work**

Selected excavations in the southern half of the site were led by John Moss-Eccardt and James Dyer in 1964 and James Dyer between 1970 and 1975, with no excavation report. Small, and inconclusive, 'diggings' took place in the 1940's.



**Fig 1 Location of Ravensburgh Castle Hillfort**

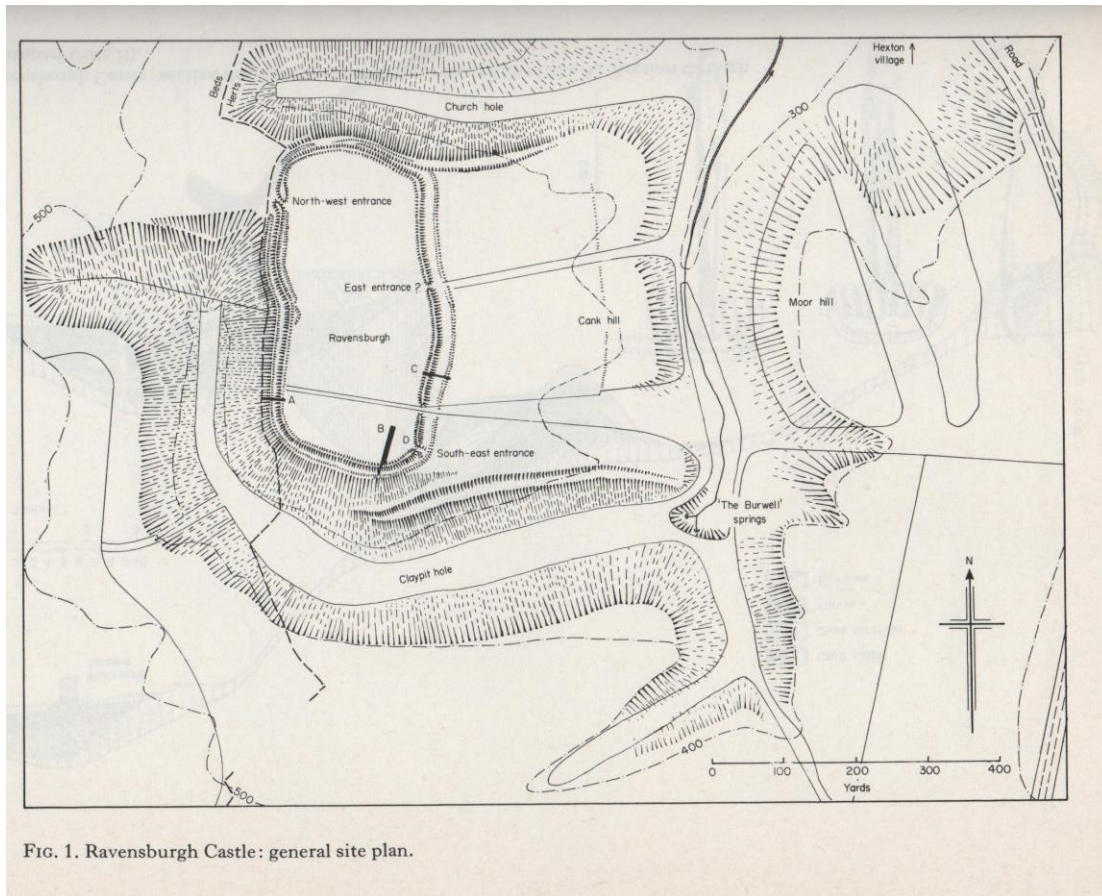


FIG. 1. Ravensburgh Castle: general site plan.

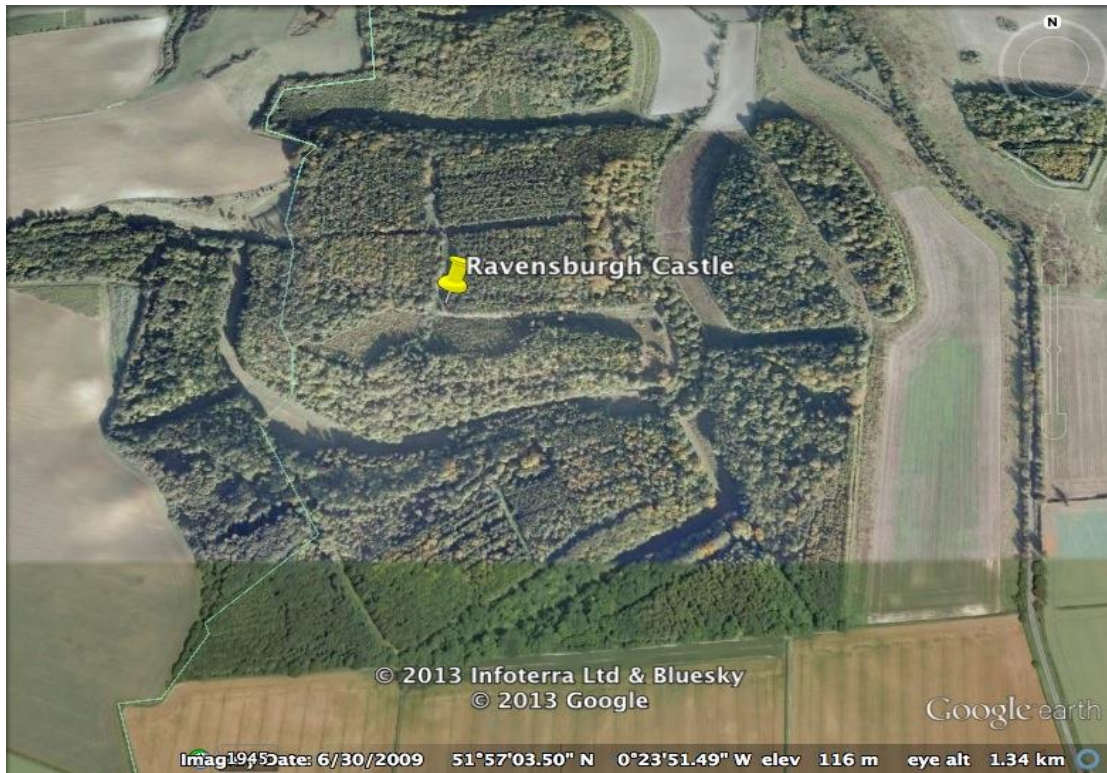
**Fig 2 Plan of Ravensburgh Castle and surrounds by James Dyer 1976**

### **3. Ravensburgh Castle Hillfort Project**

The initiative for the present project resulted from an enquiry by James Dyer to the Hillfort Study Group in 2009 for assistance with the production of a report on the excavations outlined above. The present author, the Chair of the study group, subsequently met with Dr Dyer with a view to begin a programme of work, which eventually began in 2012. The landowner, Mr Patrick Cooper, of Hexton Manor, was also contacted, kindly giving his support to the project, as did English Heritage (now Historic England). After Dr Dyer's untimely death in 2012, the project received support from the Executors of his estate, and continues.

*The project has seven aims:*

1. To locate the whereabouts of notes, plans and photographs from the excavations and other relevant information on the site.
2. To ascertain the whereabouts of the finds from the excavations.
3. To produce reports on the pottery, bone and other finds from the excavations.
4. To undertake a complete topographical survey of the hillfort.
5. To undertake selected geophysical surveys where feasible,
6. To investigate the possibility of LiDar and other survey techniques.
7. To complete a report on the 1964-1975 excavations.



**Fig 3 Wooded nature of the site and environs from the air**



**Fig 4 The ramparts and interior clear of trees c. 1900**

**Source: James Dyer**

### 3.1 The whereabouts of notes, plans and photographs

The first stage of work, contributing towards the analysis and publication of the results of the past excavations, has been completed. The field papers, plans and photographs from the excavations have now been located with great assistance from the Executors of Dr Dyer's estate. Other relevant information has also been gathered.

### 3.2 The whereabouts of the finds from the excavations

The artefacts from the 1964 excavations were transferred to, and stored in, the North Hertfordshire District Council Museum Resource Centre in Hitchin. These comprised three large boxes of predominantly pottery and bone fragments, with, in addition, the reconstructed La Tène angular bowl (Frontispiece) and some decorated and other sherds. The finds from the 1970's excavations were deposited in the Luton Museum, comprising 42 boxes of pottery and bone with some lithics. All have been transferred, on loan, to the University of Oxford.

The excavations also unearthed a fine La Tène brooch, and this has now been located, as has a weaving comb, with notable bird-like symbolism, found in fallen tree roots by James Dyer in 1990 (Figs 5 and 6). A digital reconstruction of the bowl will be possible.



**Fig 5 Ravensburgh Castle brooch**



**Fig 6 Ravensburgh Castle weaving comb. A chance find by James Dyer 1990**

### **3.3 Comments on the pottery, bone and other finds**

The pottery and bone is being sorted and initially analysed. The pottery appears to be coarse ware of late Iron Age date (c. 100 BC to AD 43), but it is possible that there could also be some of the middle Iron Age, with some later Roman ware. Bone is mostly of sheep or goat, pig and cattle (Figs 7 and 8).



**Fig 7 Selection of pottery and bone from 1970's excavations**





**Fig 8 Small selection of animal bone**

The proportions of these domestic animals will be interesting at Ravensburgh, as there is data from nearby Chiltern and Vale of Aylesbury sites, notably Ivinghoe Beacon and Pitstone Hill respectively, which will allow comparisons to be made. Human bone can also be scattered about hillfort sites, and it would be expected to find such bone somewhere at Ravensburgh, and the context of this, whether it be just disposal or having some ritual basis, will be important.

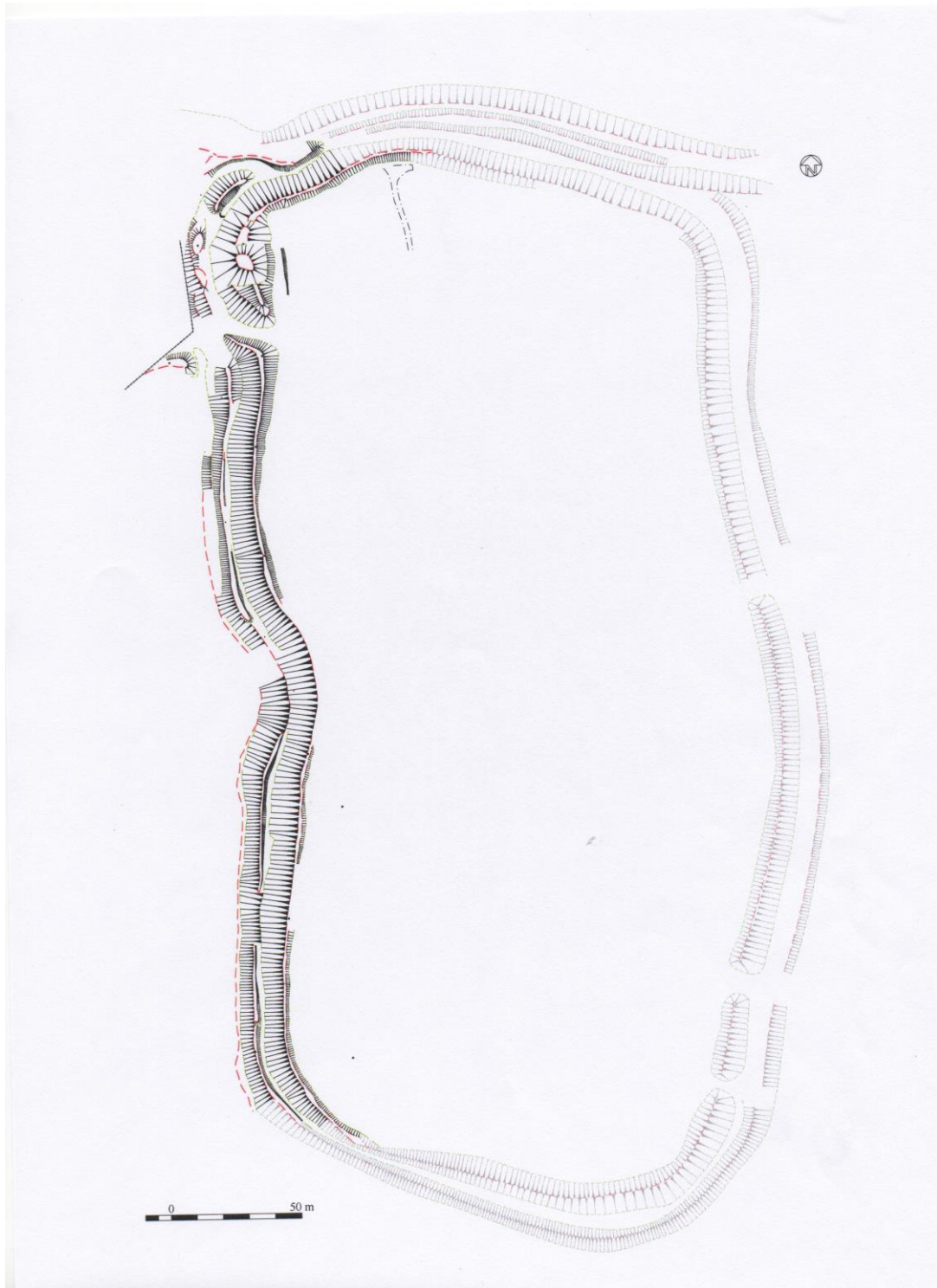


**Fig 9 Neolithic flint hand axe**

Also of immediate interest from the Luton material is a Neolithic flint hand axe (Fig 9). Much earlier activity on later hillfort sites is quite common, and does indicate an interest in such locations, for millennia in some cases, before the construction of a hillfort. This is appearing to be the case at Ravensburgh where recent chance finds of a Mesolithic microlith and Neolithic flints suggest as such.

### 3.4 Interim results of topographical surveys 2013-2014

Topographical surveys of the earthworks began in July 2013 covering the western defences to south of the north-western entrance. In 2014 the upper western defences to the north-western entrance, the entrance area itself and the main ramparts at the north-western apex of the site were surveyed (Fig 10). Surveys used a Geodolite 506 Total Station (Brooks forthcoming).



**Fig 10** Location of the topographical surveys 2013-2014

Ian Brooks - EAS

### 3.4.1 Topographical survey of the western defences to south of the north-western entrance - July 2013

The results of the 2013 survey are shown in Fig 11.

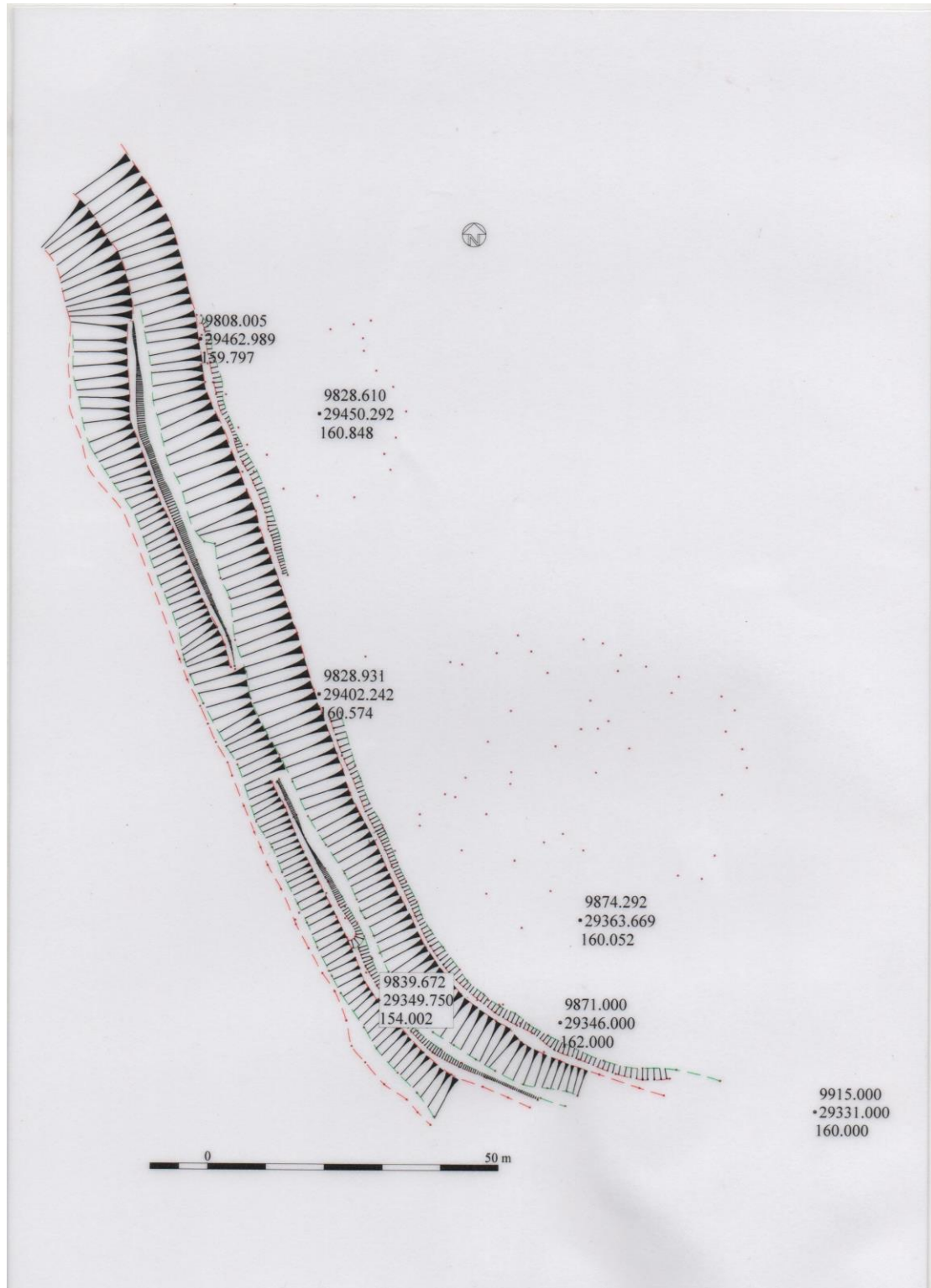


Fig 11 Western defences topographical survey 2013

Ian Brooks - EAS

The western ramparts are still substantial and their detailed dimensions await further examination. Although overgrown, they form a coherent line all along the western course up to the north-western entrance and comprise a substantial inner rampart, although internally now little more than an intermittent scarp, a marked, but discontinuous, medial ditch, and a smaller outer second bank (Figs 11 and 12). This bank has a possible, and again discontinuous, outer ditch or shelf, with, in places, a possible counterscarp bank above the steep slopes falling to the Claypit Hole below. These banks increase in size towards the north-western entrance surveyed during 2014. A series of topographical readings were also taken in the interior of the fort.

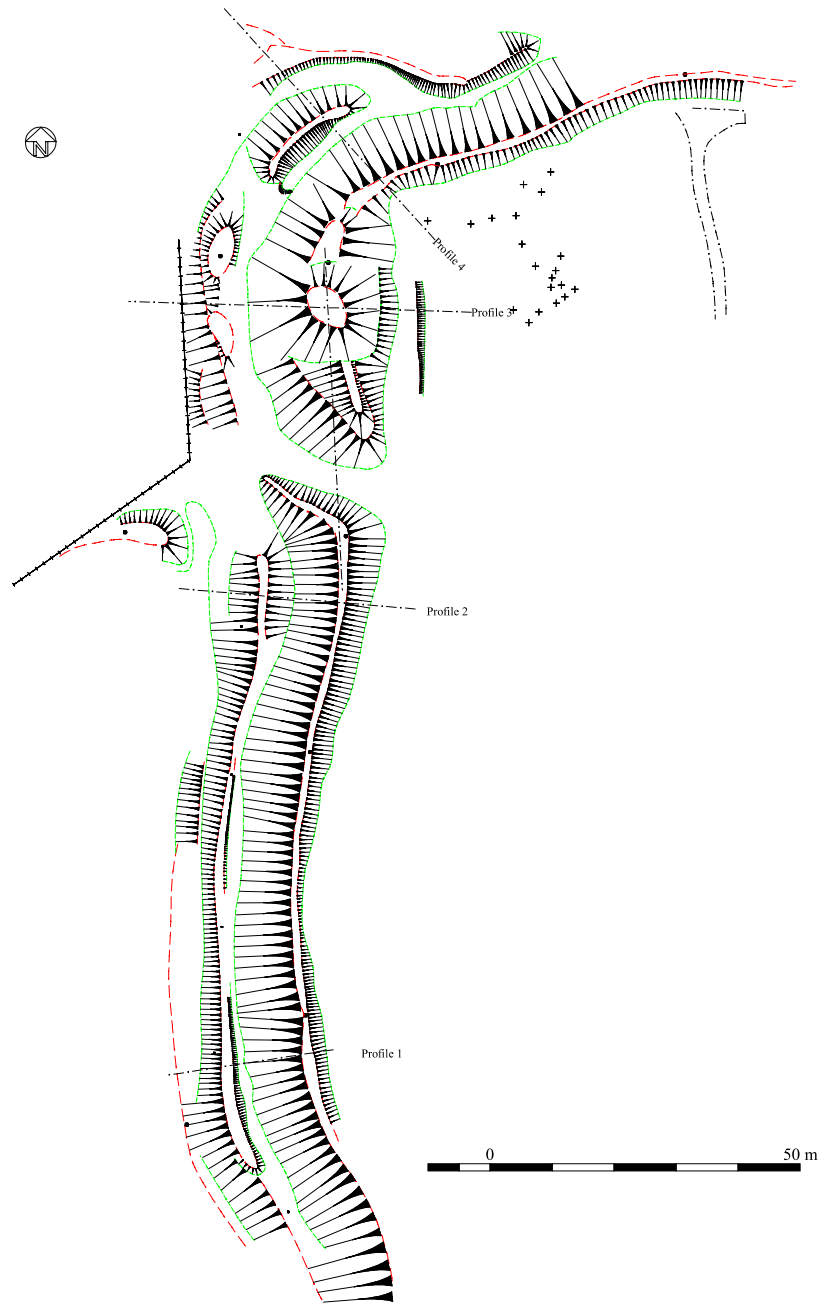


**Fig 12 Mid western ramparts with medial ditch**

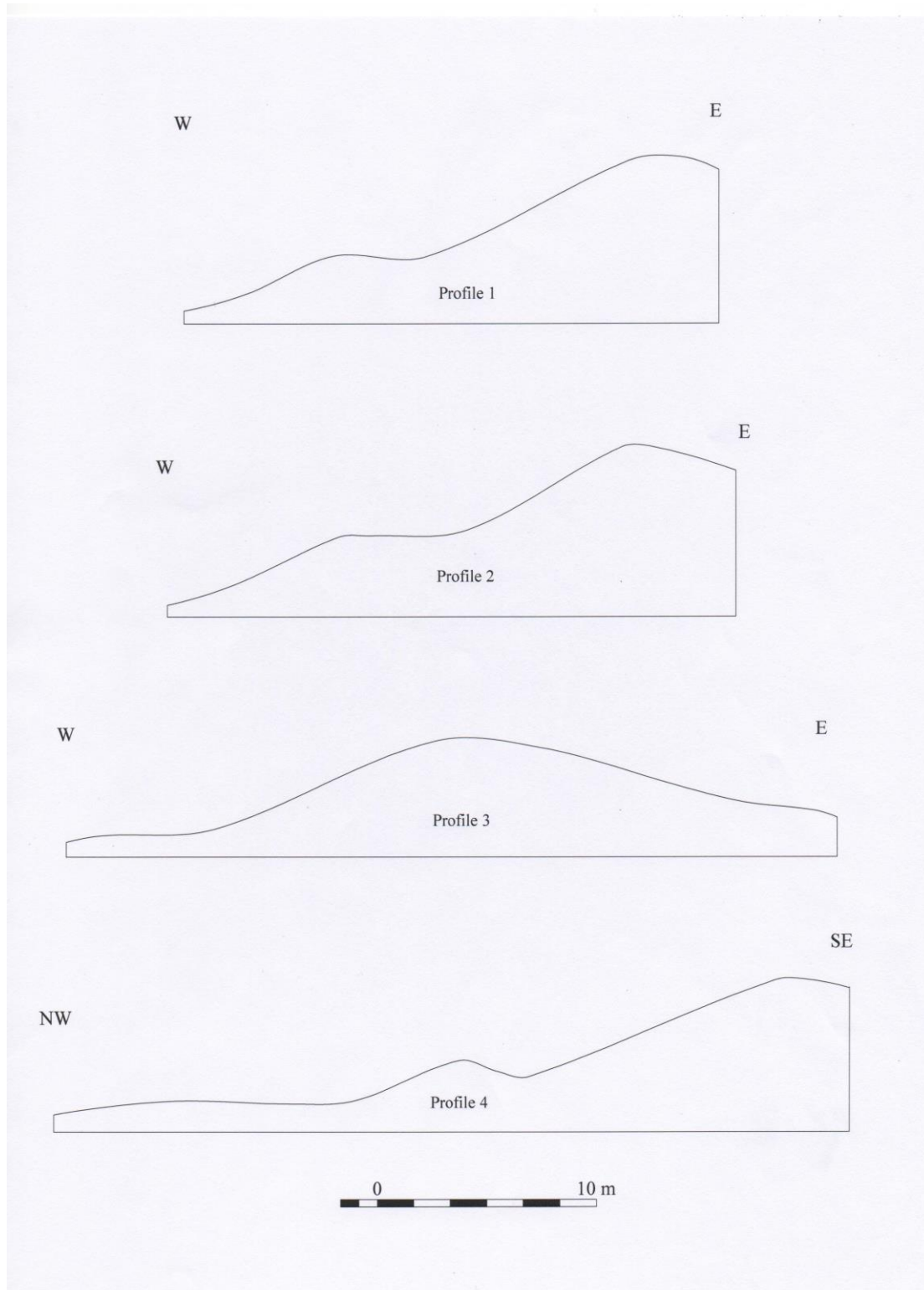
### **3.4.2 Topographical survey of the upper western defences to north-western entrance, north-western entrance area and north-western apex - July 2014**

The results of the 2014 survey are shown in Fig 13.

The main and inner western rampart increases in height and width towards the entrance, with its inner face continuing as a shallow scarp, but steep outer face, its dimensions to be determined. The pronounced medial ditch with second rampart continues to meet a substantial out-turn of the main rampart at the entrance (Figs 13 and 14, Profiles 1 and 2; Fig 15). The possible discontinuous outer shelf/ditch, surveyed in 2013, appears absent here above the steep slopes.



**Fig 13 Upper western defences, NW entrance area and main ramparts at north-western apex topographical survey 2014**  
Ian Brooks - EAS



**Fig 14 Profiles across the ramparts – 2014 survey**

**Ian Brooks – EAS**

The north-western entrance has been much disturbed by use as a modern entry into the fort, but still assumes an imposing prospect, especially from the valley below, which sharply turns westwards just below the gate (Fig 2). The route into this valley is via a marked winding hollow way between substantial outer banks on the north-west and the western ramparts on the south side. On the north side of this hollow way is a pronounced mound, seemingly not a natural feature, and a

potential 'look-out post', or an earlier tumulus, maybe serving the same purpose. This mound dominates the route into the site from the valley below. The main rampart on the south side of the gate has a marked out-turning of the bank, as outlined above, and continues as a slight inturn on the northern side, then rising to a high and marked mound, referred to in the past as a 'citadel' (Figs 13 and 14, Profile 3). The main bank then drops in height northwards from this mound, which forms very much an integral part of the defensive line, and returns eastwards at the north-western apex of the fort to continue along the northern perimeter. Here, and similar to the western ramparts, this main inner bank is now little more than a shallow scarp on its inner face, but is of substantial height externally. To the west of the mound is a substantial berm or terrace, which could be an in-filled ditch, with the second low rampart now curving north, then north-east with medial ditch, both fading to the E. From the east, and below the main northern rampart, a low second rampart curves westwards around the north-western apex to give three banks at this point and appears to end towards the neighbouring arable field, into which it once possibly lay as a third bank to the north of, and protecting, the entrance, and now possibly a buried feature (Figs 13 and 14, Profile 4). Also below the mound to the north-west is a possible, and perhaps earlier and subsequently blocked, entrance, suggested by the outer banks fading at this point. There appear to be several northern outer banks, to be surveyed in due course.



**Fig 15 North-western entrance - fine out-turn to main rampart**

Although the mound has been considered as a purely defensive or decorative feature, as part an elaborate main gate, of which there is no doubt, its features and form suggest that it may have formed an earlier Bronze Age tumulus later to

be incorporated into the design of the ramparts at this point. There are many precedents for cairns or barrows associated with hillforts throughout England and Wales, and Tre'r Ceiri on the Llŷn peninsula of north-west Wales is a noted example, but such a feature does suggest some ritual intent and/or veneration as part of Ravensburgh architecture (Figs 16 and 17).



**Fig 16 Possible tumulus and north-western entrance c. 1900** Source: James Dyer



**Fig 17 Possible tumulus at north-western entrance c. 1900** Source: James Dyer



### 3.5 Geophysical survey of SE segment of hillfort – May 2015

The general results of the 2015 geophysical survey are shown in Figs 18 to 20 and are detailed in the report of I.P. Brooks of Engineering Archaeological Services Ltd (EAS Client Report 2015/10).

#### 3.5.1 Location and methodology

The survey area was located in the SE corner of the hillfort, where an area of woodland was blown down in the late 1980's and which, after clearance, was subject to regeneration with trees and scrub. This area of c. 0.62ha was subsequently cleared in early Spring 2015 as part of a management agreement between Historic England and the landowner, who organised the clearance (Figs 18 and 19).

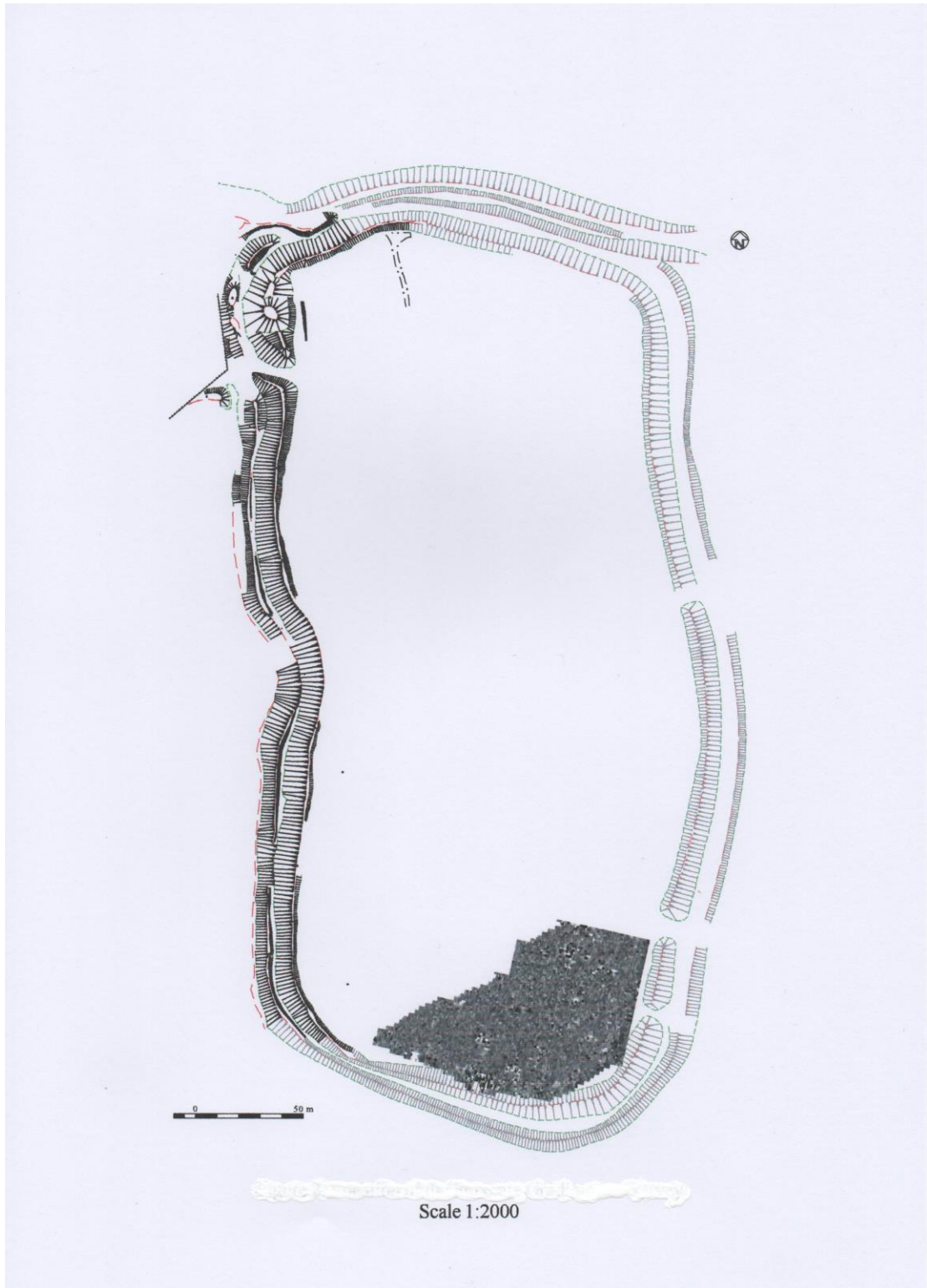


**Fig 18 Location of geophysical survey 2015 – SE ramparts and gate, mid-distance on left**  
Ian Brooks – EAS

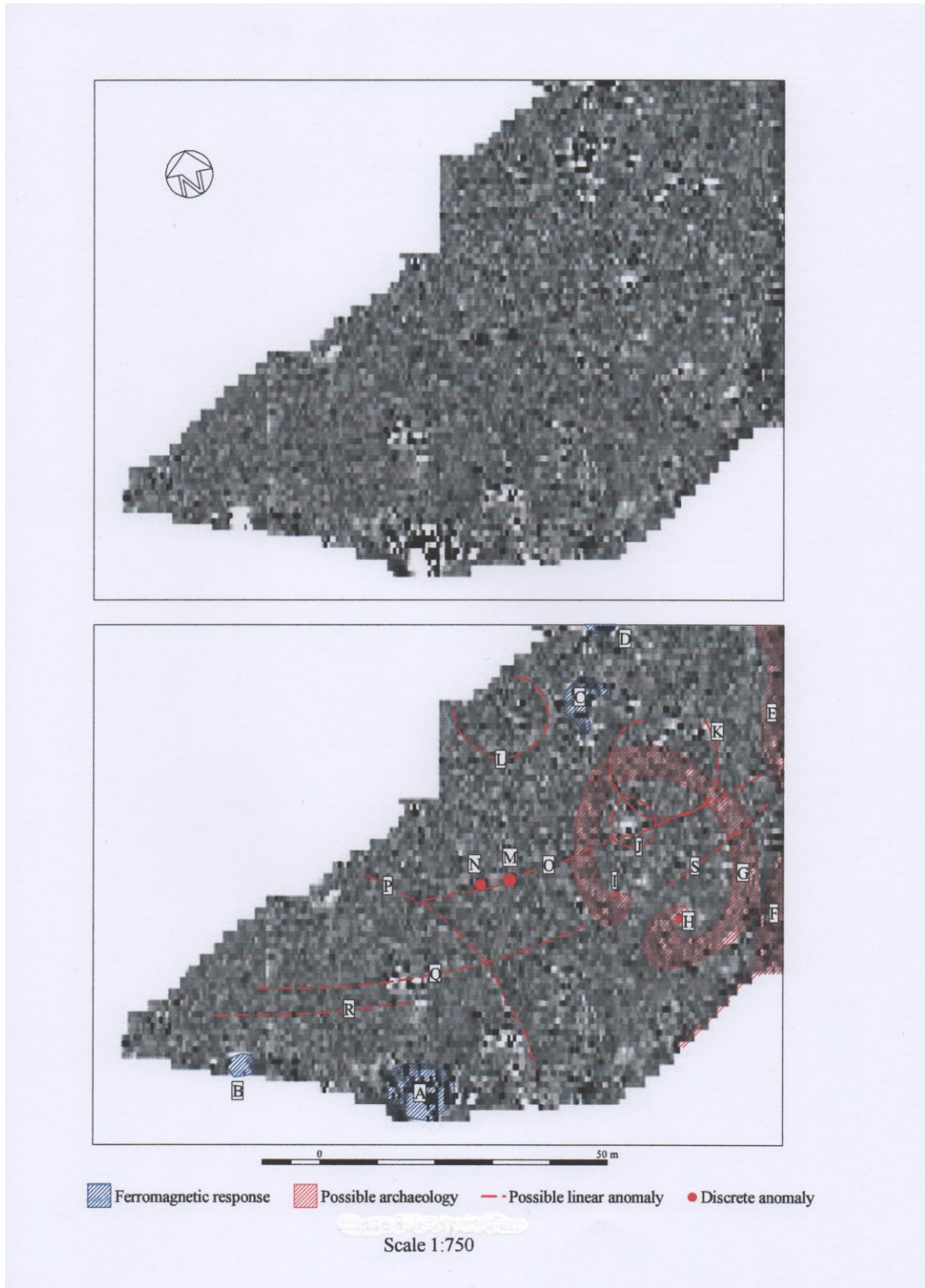
A magnetometer survey was undertaken in May 2015 using a Fluxgate Gradiometer – Geoscan FM36 with initial 30m by 30m grid. Readings were taken at 0.5m intervals along transects 1m apart for the whole area. High resolution surveys were also undertaken for two of the grid squares (c. 0.18ha), with readings taken at 0.25 intervals at 0.5m apart, areas chosen from the results of the first survey investigation. Magnetic susceptibility readings were also taken.

#### 3.5.2 Results of geophysical survey

Although most of the anomalies recorded were somewhat slight, possibly as a result of the underlying strata, there are a series of coherent patterns indicating significant archaeological activity on the site (refer to Fig 20). However, with regard to the ferromagnetic responses delineated in Anomalies A-D, the strength is much greater and could indicate areas of disturbance and possibly episodes of burning on the site. It is likely that these may be modern, although certainly they do not refer to the 2015 clearance, when no burning took place. It is possible, however, that there was burning of vegetation during the c. 1990 clearance after the blow-down event, but, at present, there is no information available. This will be sought if possible and further analysis made if necessary.



**Fig 19 Location of Fluxgate Gradiometer – Geoscan FM36 survey May 2015**  
Ian Brooks - EAS



**Fig 20 Results of Fluxgate Gradiometer – Geoscan FM36 survey May 2015**  
 Ian Brooks - EAS

To the east of the survey area, Anomalies E and F may refer to the effects of the inner face of the southerly rampart here, but also could indicate the presence of quarry hollows from which material for the rampart would have been sought. There appear to be glimpses of quarry hollows just inside the western ramparts in places, but this has to be verified.

Most interesting is a possible feature delineated as Anomaly G on the plan. This appears to define a large inner enclosure c. 38m by 32m directly opposite to the south-eastern entrance and with an inturned entrance to the south and west. The magnetic signature of this possible enclosure is c. 4.25m wide, possibly suggesting that the feature may be of considerable size. Within this enclosure, Anomalies H and I could mark either side of this possible entrance with post-holes within. The inturn is best defined in the high-resolution survey. Also within this enclosure is a circular anomaly (Anomaly J), which could mark the position of a roundhouse of c. 7.5m diameter. As this enclosure appears to cut off access into the hillfort from the south-eastern gate, it must be assumed at this stage that this is of earlier date than the main enclosure. Late Bronze Age ringworks are being reported in the Chilterns (Bryant pers. comm. 2015), and certainly, despite its small size of c. 0.12ha, the possibility of such an earlier enclosure cannot be discounted.

Two other circular anomalies were recorded as Anomalies K and L of c. 16.65m and 15.8m in diameter. Whilst these dimensions appear large in terms of mean roundhouse size, and c. 6m-11m is more normal, such larger dimensions have been found elsewhere. A survey of 80 roundhouse examples reported by Thomas (2005, 84-5) found that 16.25% fell within the 12m-17m diameter category. At Liddington Castle in Wiltshire, another chalk downland site as is Ravensburgh, a very large possible roundhouse structure of 18m diameter was found by geophysics during the Wessex Hillforts Project (Payne et al 2006). The nearness of these possible structures to the gate at Ravensburgh may not be pure chance. It is quite clear that entrances were places of superstition at hillforts and, as boundaries or vulnerable thresholds, were mystical places, and often sites of ritual deposition. The common east and west orientation of hillfort entrances, as indeed at Ravensburgh, is highly charged with symbolism. It is possible, therefore, that these two possible structures at Ravensburgh could have some ritual significance, a view suggested for hillfort guard chambers by Bowden (2006).

However, it is also possible that these circular anomalies at Ravensburgh could suggest the presence of ring ditches from Bronze Age barrows. With the possibility of the mound located at the north-west entrance being itself a Bronze Age barrow, as indicated above, this could be a further indication of substantial earlier pre-hillfort activity on the site, and having a considerable influence on hillfort location. Of interest here could also be the location of the Burwell spring just below the southern gate of the fort, as shown in Fig 2.

There is little evidence in the area of pits, apart from two discrete anomalies in the centre of the area, Anomalies M and N, both c. 1.5m in diameter. The presence of pits within the hillfort context in southern England is well

documented. The Caburn hillfort in Sussex, for example, produced 140 chalk-cut pits in the small excavations there, whilst 2,399 were recorded at Danebury in Hampshire. But, even in southern England, their distribution is variable – the excavations at Ivinghoe Beacon produced no pits, nor evidence of corn growing as such, with only a few quern fragments (Cotton and Frere 1968, 202). Could the lack of the evidence for pits so far at Ravensburgh be more to do with a possible pastoral nature for the site and of the Chiltern Hills in general in prehistory? In this case, the evidence to come from the analysis of animal bone at Ravensburgh will be important; do sheep predominate at the expense of cattle and pig for example? A cursory examination of the animal bone seems to indicate this to be the case, as is the seeming lack of quern fragments. Present chance finds of sandstone rubbers within the survey site could also support any pastoral theories.

Variations in soil magnetic susceptibility occur naturally, but can be greatly enhanced by human activity. Details of tests at Ravensburgh are shown in Brooks (2015), and, in general, follow the results of the gradiometer survey, interestingly with increased readings along inside the ramparts and in the grid square of the circular feature Anomaly L.

### **3.6 LiDar and other remote sensing techniques**

Although the dense tree cover over the site causes obvious problems for LiDar survey, if such a technique can be undertaken it will be possible to ‘cut through’ the tree cover and so determine the nature of banks and ditches beneath. Unfortunately the flights of the Environment Agency archive stop a little way below the hillfort environs. The feasibility of LiDar is being investigated with Historic England.

### **3.7 Completion of an excavation report or monograph on the 1964-1975 excavations of James Dyer and colleagues**

To sum up the following work has been undertaken so far 2012-2015:

- Locating papers and artefacts emanating from the excavations 1964, 1970-75.
- Commencement of site topographical earthwork and geophysical survey, to put the present nature and condition of the site in context.
- Initial sorting and investigation of pottery, bone and other material from the excavations.
- Photographic record as work proceeds.

Finance is being actively sought for future work and the completion of the excavation report or monograph of the past excavations.

#### **4 Investigation of additional ramparts**

The 1<sup>st</sup> Ed. Ordnance Survey 1:2500 map shows possible additional banks outside the main mapped area to the NE of the site and to the SW, and these are again shown on Dyer's plan of 1976 (Fig. 2). These areas were briefly investigated during 2013 and 2015. Termed 'lynchets' by Dyer, those extending from the site to the NE appear to form an extenuation of the second northern rampart for an estimated 150m-200m before fading out. To the SW they appear to be additional banks and ditches, perhaps two in number, seemingly forming an additional defence outside the SE entrance. At this stage no further comment will be made as to their nature and they will be surveyed.

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#### **References**

Brooks, I.P. 2015. *Ravensburgh Hillfort Geophysical Survey*, EAS Client Report 2015/10, Engineering Archaeological Services Ltd.

Brooks, I.P. forthcoming. Detailed report on the topographical surveys at Ravensburgh Castle hillfort (title to be determined).

Brown, I. 2009. *Beacons in the landscape. The hillforts of England and Wales*, Oxford: Windgather Press/Oxbow Books.

Bowden, M. 2006. 'Guard Chambers': an unquestioned assumption in British Iron Age studies, *Proceedings of the Prehistoric Society*, 72, 423-436.

Cotton, M.A. and Frere, S.S. 1968. Ivinghoe Beacon, excavations 1963-5, *Records of Buckinghamshire*, 18, 187-260.

Payne, A., Corney, M. and Cunliffe, B. 2006. *The Wessex Hillforts Project. Extensive survey of hillfort interiors in central southern England*, London: English Heritage.

Thomas, N. 2005. *Conderton Camp, Worcestershire – a small middle Iron Age hillfort on Bredon Hill*, CBA Research Report 143, York: Council for British Archaeology.

#### **The surveys**

The topographical and geophysical were undertaken by Dr Ian Brooks of Engineering Archaeological Services Ltd. assisted by Dr Ian Brown of Oxford University. Joshua Murphy gave valued on-site assistance.

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