

August 2000

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**BALLAFAYLE,  
BRIDE  
ISLE OF MAN**

**Assessment Report**

Ballafayle, Bride  
Isle of Man

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Archaeological Assessment Report

Report no 2000-2001/004/AUA8931

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August 2000

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## CONTENTS

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<b>SUMMARY .....</b>	<b>3</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>5</b>
<b>1. INTRODUCTION .....</b>	<b>6</b>
1.1 Circumstances of Project.....	6
1.2 Previous Work.....	7
<b>2. METHODOLOGY .....</b>	<b>8</b>
2.1 Desk-Based Survey .....	8
2.2 Artefact Survey .....	9
2.3 Archive.....	10
<b>3. DESK-BASED ASSESSMENT .....</b>	<b>11</b>
3.1 Physical Background.....	11
3.2 Prehistoric Background.....	12
3.3 Historic Background .....	14
3.4 Desk-Based Assessment.....	15
<b>4. SURVEY RESULTS .....</b>	<b>16</b>
4.1 Artefact and Earthwork Survey.....	16
4.2 Finds analysis .....	16
4.3 Lithic Distribution.....	18
<b>5. DISCUSSION .....</b>	<b>20</b>
<b>6. IMPACT.....</b>	<b>21</b>
6.1 Impact of Development.....	21
<b>7. BIBLIOGRAPHY .....</b>	<b>22</b>
7.1 Primary Sources .....	22
7.2 Cartographic Sources .....	22
7.3 Secondary Sources and Published Primary Sources .....	22
<b>APPENDIX 1.....</b>	<b>26</b>
Project Design	
<b>APPENDIX 2 .....</b>	<b>31</b>
Site Gazetteer	
<b>APPENDIX 3.....</b>	<b>51</b>
Tool Assemblage	
<b>ILLUSTRATIONS .....</b>	<b>52</b>

- Fig 1 Ballafayle Location Map
- Fig 2 Ballafayle Desk-Based Site Plan
- Fig 3 Ballafayle Total Lithic Assemblage
- Fig 4 Ballafayle Artefact Distribution

**PLATES .....53**

- Plate 1 The access road from the south looking north
- Plate 2 General shot of the proposed development area showing the mound to the south
- Plate 3 The broad lynchet bank (Site 41) running north
- Plate 4 The burnt area

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## SUMMARY

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This report describes the results of an archaeological survey and documentary research undertaken at the Ballafayle proposed communication mast site, in the parish of Bride, Isle of Man (centred at NGR NX 4565 0305), by Lancaster University Archaeological Unit (LUAU), in June and July 2000. The work was undertaken on behalf of CPM Environmental Planning and Design Ltd and the Isle of Man International Broadcasting Co. Ltd, in accordance with a verbal brief by Andrew Johnson, of Manx National Heritage, and to an agreed methodology.

The proposed 'cross-field antenna' facility, which will utilise off-site studios, probably in Ramsey, is to be contained within an enclosure measuring c150m in circumference, lying within Plots Nos. 59 and 127, with a c1km access track linking it to the A16 Bride to Point of Ayre road. The site itself lies c1.9km north-east of Bride village, and the same distance south-west of the Point of Ayre lighthouse, which marks the north-easterly tip of the island. Using traditional Manx land division terms, the site lies in the Sheading of Ayre, Treen of Cranstal I, and straddles the Quarterlands of Ballafayle (to the east) and Ballamooar (to the west).

The work undertaken consisted of a documentary study which examined the sources in The Manx Museum Library and Archives (MM), Manx National Heritage (MNH), the Isle of Man Government Department of Local Government and the Environment (DoLGE), the Centre for Manx Studies (CMS) (all in Douglas).

Following on from the documentary research, an archaeological survey was undertaken in order to establish the level of prehistoric activity within the study area. This took the form of an artefact survey in which lithics were located *in situ* by means of GPS survey, prior to their collection. The distribution and assemblage was assessed in conjunction with similar artefact surveys undertaken in the area. The survey area covered the route of the proposed access track leading from the southern extent of the site into a roughly square area (10,000m<sup>2</sup>) representing the main area of the site to be impacted. The main area actually butts onto the main treen field boundaries to the north and east of the proposed development area and a former hedgeline runs close to the western edge of the boundary of the site but only exists at this point in the form of a lynchet some 100m long by 10m wide.

Within the scope of the survey was an area of possible burning restricted to the pinnacle of a circular hillock, c50m in diameter, which was located in the southern part of the main study area. There was a significant amount of lithics recovered from the main study area, comprising 51 tools and 496 waste products and cores, and their distribution appears to be concentrated to three specific areas. The first, lies to the west of the lynchet bank and comprises a mix of both tools and waste material; there is a marked cut-off along the line of the medieval / post-medieval boundary, and the distribution is likely to reflect differential plough activity in the two former fields on either side of the boundary. Thus the distribution to the west of the bank probably reflects that this area has seen deeper and more intensive ploughing, hence more artefacts have been brought to the surface

The second area lies close to the northern extent of the site and appears to have a higher concentration of waste material and cores. There is, within this area, a slight bias in distribution to the eastern extent of this apparent concentration.

The third area of distribution is concentrated on the southern and western slopes of the raised mound located to the southern edge of the main study area. The distribution pattern shows a definite increase in the number of tools in comparison with the other main areas. It is possible that the amount of lithics recovered from this site is a direct result of differential ploughing activity, reflecting greater erosion over the small hill; however, the fact that there is a significantly higher proportion of tools in this area than elsewhere may suggest that the concentration reflects increased prehistoric activity rather than differential erosion.

The present development proposal will result in the placement of a raised bund over a small part of the south-eastern concentration, and would not necessarily cause disturbance to the underlying stratigraphy. However, the construction of the transmitter building will impact upon the northern and western lithic concentrations.

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## ACKNOWLEDGEMENTS

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Thanks go to Andrew Johnson, of Manx National Heritage, for supplying the Project Brief, for Sites and Monuments Record information and aerial photographs, and for guidance on the other sources of information. The staff at the Manx Museum's Library and Archives are thanked for their speedy and helpful service in accessing maps and secondary sources. Dr Peter Davey, Director of the Centre for Manx Studies, Douglas, is thanked most especially for supplying a copy of the Centre's Kerrowdhoo report, for access to the archive of that project, and for discussing unpublished work being carried out by the Centre as part of its *New History of the Isle of Man* project. David Kelley, at the Isle of Man Department of Local Government and Environment (DoLGE), is thanked for supplying aerial photographic and cartographic sources, and we are grateful to Marlene Hendy and Brian Sinden, both also at DoLGE, for useful discussions about archaeological and conservation policy and Manx Planning Acts.

Alan Cleary, in Castletown, Isle of Man, is thanked for supplying a draft copy of his report to Manx National Heritage on 'Chain Home Bride' Second World War radar installation remains. Dr Roger Dackombe at the School of Applied Science, University of Wolverhampton, is thanked for discussing, and abstracting, his ongoing work on ground-penetrating radar study of the Quaternary geological drift deposits of the area.

Documentary research was undertaken by Nigel R J Neil, a freelance desk-based assessment specialist. The survey was undertaken by Andrea Scott and Daniel Elsworth. The report was written by Andrea Scott and Daniel Elsworth and was edited by Jamie Quartermaine and Alan Lupton. The project was managed by Jamie Quartermaine.

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## 1. INTRODUCTION

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### 1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 An archaeological assessment has been undertaken at the Ballafayle proposed communication mast site, in the parish of Bride, Isle of Man (centred at NGR NX 4565 0305), by Lancaster University Archaeological Unit (LUAU), in June and July 2000, on behalf of CPM Environmental Planning and Design Ltd, and the Isle of Man International Broadcasting Co. Ltd. The proposed innovative 'cross-field antenna' facility, which will utilise off-site studios, probably in Ramsey, is to be contained within an enclosure measuring c150m across, with a c1km access track linking it to the A16 Bride to Point of Ayre road.
- 1.1.2 The site lies c1.9km north-east of Bride village, and the same distance south-west of Point of Ayre lighthouse, which marks the north-easterly tip of the island. Using traditional Manx land division terms, the site lies in the Sheading of Ayre, Treen of Cranstal I, and straddles the Quarterlands of Ballafayle (to the east) and Ballamooar (to the west), the northern site boundary being shared also with eighteenth/nineteenth-century intakes or 'perks' belonging to the quarterlands of Ballacondra (aka Ballacundyr) and Ballachrink.
- 1.1.3 A project design (*Appendix 1*), submitted to CPM in June 2000, sets out LUAU's proposals and methodology for undertaking the assessment. The work is undertaken in accordance with *Archaeological Planning Background*, which is a document equivalent to the English and Welsh Department of the Environment's *Planning Policy Guidance Note 16: Archaeology and Planning* ('PPG 16', November 1990). All LUAU decisions regarding the handling of archaeological matters have been monitored by Manx National Heritage.
- 1.1.4 **Purpose of the assessment:** the project was designed to assemble desk-based evidence for the archaeological and historical potential of the site, and to test this by artefactual survey. The desk-based assessment covered the proposed mast site itself, a c500m corridor around the field containing it, and a c500m on either side of the access track. The artefactual survey examined the area of the proposed radio mast complex and also the access track. The aim of this survey was to establish the amount of prehistoric activity in the area, thereby determining the level of impact the development would have on these sites. The inspection of the site was in the form of a GPS survey in which lithics were recorded *in situ* prior to collection, in order to establish a possible distribution pattern in relation to other prehistoric activity in the area.
- 1.1.5 This report outlines the methodology employed during the assessment and presents the findings resulting from the work carried out.

### 1.2 PREVIOUS WORK

- 1.2.1 In 1992-94 fieldwork and excavations took place in advance of a proposed land-fill site, at Kerrowdhoo, for the Manx Government, centred at NGR NX 4600 0320, just c400m north-east of the Ballafayle proposed mast site. The proposal was eventually abandoned, but two other land-fill facilities are currently in use in the vicinity, utilising former sand and gravel extraction sites: Ballacallow c1km to the north-east and Wright's Pit East, c1.1km to the east of the proposed communication



mast site. The whole area, and especially the exposures of Quaternary deposits on the east coast of the island for c1km north and south of Phurt (formerly called Port Cranstal), c1.2km south-east of the proposed mast site, continues to receive detailed palaeoenvironmental study (Gonzalez *et al* forthcoming).

- 1.2.2 Davey *et al* (1995) included some desk-based assessment of the proposed mast site in their studies, particularly relating to the field-enclosure history of the area. However, their fieldwalking and trial-trench excavations extended southwards and westwards only as far as the north boundary of Plot 130, a major earthwork marking the *treen* boundary, of probable medieval or earlier origin, between Cranstal I and II. The Kerrowdhoo project produced a large flint assemblage with items dated typologically from the late Mesolithic to the early Bronze Age, the majority dating from the later Neolithic to Early Bronze Age (*ibid*, 65). Trial excavations included one of five possible burnt mounds within the Ballafayle study area, providing useful dating material. However, with a few exceptions, the other trial excavations revealed that the artefacts recovered from the arable fields derived entirely from the ploughsoil, the buried prehistoric ground-surface profile having been destroyed by nineteenth and twentieth-century ploughing. The notable exceptions are one of Davey's sample quadrats, one burnt mound trench, and the Kerrowdhoo Farm excavations below demolished farm buildings which revealed the potential of preserved prehistoric soil profiles.
- 1.2.3 Pending the introduction of a Geographical Information System in the near future, Isle of Man SMR information for the area has *not* been revised (A Johnson, MNH, pers comm) since the publication by the Centre for Manx Studies (CMS) of their archaeological report on the proposed Kerrowdhoo land-fill site (Davey *et al* 1995).

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## 2. METHODOLOGY

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### 2.1 DESK-BASED SURVEY

- 2.1.1 The desk-based assessment utilised sources in the Manx Museum Library and Archives (MM), Manx National Heritage (MNH), the Isle of Man Government Department of Local Government and the Environment (DoLGE), the Centre for Manx Studies (CMS) (all in Douglas), and items held by Mr Alan Cleary in Castletown, Isle of Man, and in Lancaster University Library (LU), and LUAU's and N Neil's own collections. The sources used in the documentary assessment are listed in the bibliography. In the time available, an exhaustive search of published, and, particularly, manuscript sources was not possible, and the available time was targeted at the sources with the highest potential for accurate, and specifically relevant, data, particularly aerial photographs, cartographic sources, and the results of recent fieldwork by other archaeologists and related disciplines.
- 2.1.2 A rapid desk-based compilation of geological, soils, and topographical information was undertaken, though no borehole data specific to the site was available. The Centre for Manx Studies are currently co-ordinating detailed Quaternary deposits research of the east coast at Phurt (Gonzalez *et al* forthcoming; Dr R Dackombe, Univ of Wolverhampton, pers comm), and soil survey of the whole island, further to the work of Kear (1982) and Fullen *et al* (1996).
- 2.1.3 **Sites and Monuments Record study:** the Isle of Man Archaeological Sites and Monuments Record (Isle of Man SMR) refers to Primary Record Numbers (PRNs) [ie sites, findspots, and buildings] within or in the immediate vicinity of the proposed development area.
- 2.1.4 **Museum Collections:** Manx National Heritage (A Johnson, pers comm) have stated that no other finds or monuments have been accessioned into the Isle of Man SMR from the site or its vicinity since the publication of the Kerrowdhoo report, which lists known sites in its Appendix 1 (Davey *et al* 1995, 69-70). Manx Museum accession numbers are given in the Gazetteer for the results of Davey's work and earlier finds.
- 2.1.5 **Aerial photographic study:** a Royal Air Force black and white vertical sortie, at the small scale of c1:30,000, held by the Manx Museum Library and Archives (sortie 106G/DY31/frames 6029 and 9822-25, 6 Oct 1944 [frame numbers not given on prints]) was studied, using a hand stereoscope and 8x enlarging lens. A recent colour sortie at 1:7500 scale, held by DoLGE (BKS Survey Ltd for Isle of Man Govt, sortie 98-19, frames 0058-60, May 1998), was studied using the same equipment.
- 2.1.6 The Manx Museum Library were thought to hold further, pre-1940, photographs, but it was reported that this sortie did not cover the study area (A Johnson, MNH).
- 2.1.7 **Cartographic research:** a comparison of changing use of the site and a c500m radius from its centre, especially field and local administrative boundaries (treens and quarterlands), and buildings, was based principally on Ordnance Survey 1:2500 (1869) and 6": 1 mile (1:10,560; 1870 and c1970) coverage. Features were compared on maps enlarged to a uniform 1:2500 scale. James Wood's (1867) atlas incorporates information and annotation from the 1844 Tithe Commutation Act and

1860 Asylum Act valuations, and the schedule gives the names of land proprietors. Crowe (1998) has discussed the background to Wood's mapping. Treen and quarterland boundaries are taken from Davey *et al* (1995, 7, fig 5), confirmed by comparison with Wood and with William Cubbon's (1930) map of the Bride boundaries, as printed at small scale in Kneen (1929). Only around Lough Cranstal is there any real difficulty in determining the location of these boundaries in the present landscape. Conveniently, the current OS maps of the island still use the same plot numbers as the OS 1869 maps.

- 2.1.8 **Primary and secondary documentary sources:** from a study of secondary documentation and selected primary documents, a historical framework to the site was constructed.
- 2.1.9 **Site Gazetteer:** a gazetteer (*Appendix 2*) of archaeological sites identified from documentary and aerial photographic sources, within the designated area, and a c500m corridor around the fields (Plots 59, 127) to be occupied by the proposed development, and c500m either side of the access road has been compiled (*Appendix 2*), and these sites have been plotted on Figs 3 and 4. Those sites from the Isle of Man SMR and Davey *et al* (1995, 69-71) which lie within the above study perimeter are listed first, followed by further World War II sites identified by Mr Alan Cleary (2000, 5-9 and 15), 'new' sites (or at least those not specifically mentioned by previous writers) identified from the desk-based research, and finally the results of the LUAU fieldwork. Other relevant sites, outwith the study corridor, are mentioned in the text, but are not included in the gazetteer. Note that the Kerrowdhoo fieldwalking and burnt mound excavation fall within the study perimeter, but the Kerrowdhoo Farm excavations and farm field fieldwalking fall outside it.

## 2.2 ARTEFACT SURVEY

- 2.2.1 **Field walking:** a programme of fieldwalking was carried out for a period of two days during 24<sup>th</sup> and 25<sup>th</sup> July 2000 over the fields designated as the access trackway and the site of the proposed mast (Plots 59, 127). In order to accurately assess the lithics recovered, the width of the trackway was traversed in two sections of around 5m wide each.
- 2.2.2 The ground had been lightly ploughed and then allowed to weather for a three week period prior to the survey to allow for the exposure of artefacts. The direction of the ploughing across the main site was east/west and formed roughly 2m transects in the ground surface. It was decided that the fieldwalking would therefore follow this direction with the ends of the transects denoted by two ranging rods, which allowed maximum coverage of the field.
- 2.2.3 Isolated artefacts were collected, individually bagged and allocated a unique record number. Analysis of the artefacts was later undertaken in-house by lithics specialists, in conjunction with advice from the Centre of Manx Studies.
- 2.2.4 **Artefact Location:** the location of finds within the study area was established using Global Positioning System (GPS) techniques, which allowed for the accurate mapping of the artefacts with respect to the local field boundaries and the OS National Grid. GPS instrumentation uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey National Grid. It uses

a post-processed system by comparing a roving station with a similar station on a fixed known point in order to achieve high levels of accuracy, which are typically between  $\pm 0.5\text{m}$  and  $0.25\text{m}$ . The use of GPS techniques has proved to be an essential and extremely cost effective means of locating monuments.

- 2.2.5 **Analysis:** this fieldwork resulted in the production of distribution plots which were then translated into recording the location of each of the artefacts. The site mapping was created using AutoCAD14 and an examination was undertaken of the assemblage in conjunction with advice from the Centre of Manx Studies to assess the character and period of the assemblage, the results of which are presented within *Section 4*.

### 2.3 ARCHIVE

- 2.3.1 A full archive of the project has been produced to a professional standard in accordance with current English Heritage guidelines (*Management of archaeological projects*, 2 edn, 1991). The archive will be deposited with Manx National Heritage, and the finds deposited with them for storage or display at a suitable location by the Manx Museum and National Trust, with the agreement of CPM Environmental Planning and Design Ltd. and the Isle of Man International Broadcasting Co. Ltd.

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## 3. BACKGROUND

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### 3.1 PHYSICAL BACKGROUND

- 3.1.1 **Solid geology:** the solid and drift geology of the Isle of Man was mapped in 1895 by G W Lamplugh (Geol Survey and OS 1895; Lamplugh 1903, 417-18 and 428-9), and only recently has a revision of the complex Quaternary sequence been attempted (Bowen 1977; Thomas 1977; Ford 1993).
- 3.1.2 Seventy five per cent of the Isle of Man's rock formations consist of greywackes (hard slates and grits) of 'Primary' (Kinvig 1975, 5) or more correctly Lower Palaeozoic age (Dackombe 1990, 18), and are termed the Manx Group. As a result of igneous intrusions, predominantly granites, and faulting which occurred during the Caledonian orogeny, many of these are rich in metalliferous ores which were mined extensively from the eighteenth century until the 1920s. In the north of the island, from just south of Ramsey on the east coast to near Kirk Michael on the west coast, Permo-Triassic rocks lie buried under drift deposits. Thomas (1977, 307) states that the solid geology of the north of the island is buried to a maximum depth of 145m below OD, by Quaternary deposits (*Section 3.1.3*), though they are perhaps as little as 30m below the surface in the vicinity of the site.
- 3.1.3 **Drift geology, soils, and topography:** a latest possible date (*terminus ante quem*) for the retreat of the ice sheets from the Isle of Man is provided by a radiocarbon date of 15,150 ± 350 BP (Birm 754) from a kettle hole on the Jurby ridge (McCarroll *et al* 1990, 55). The ice retreated to a position running from Orrisdale Head on the west coast to Point of Ayre, depositing the Shellag and Wyllin Sands, and the Kionlough Gravel. The powerful but short distance Orrisdale Readvance, accompanied by tectonic activity, is thought to have been responsible for the Bride Moraine, and the widespread Ballavarkish Till to the rear (north) of it. The retreat deposited outwash sands and gravels. A later readvance, which contorted the underlying strata, deposited the Ballaquark Till, and in retreat deposited the Ballaquark Sands and Gravels.
- 3.1.4 **Lough Cranstal:** a fairly rapid readvance deposited the Cranstal Till towards Phurt, after which the ice permanently left the island (Thomas 1977, 309 and 312-17). Bounding the northern face of this till is a Flandrian (Holocene) cliff, overlooking the Ayre raised beach, the Cranstal Silts in Lough Cranstal then filling a depression north of the cliff. Borings indicate that two basins are present in Lough Cranstal, the larger northern basin sedimentation beginning in Flandrian Zone I, c7,825 BP (Hv5226), at a time of high precipitation and erosion of the surrounding till ridges. Marine deposition ceased c7,370 BP (Hv5225), correlating with the Lytham III transgression of the Fylde. This was followed by the deposition of lake muds with a mixed oak woodland; shrub and open habitat species were poorly represented. One metre higher in the succession, cultivated cereal pollen links to the discovery of Neolithic 'Ronaldsway' artefacts in the marl pits to the north (Sites 1, 3, and 4). The present flora of Lough Cranstal, on fen peat, is dominated by *Iris*, *Equisitum*, *Lotus*, *Phragmites*, *Menyanthes*, *Alnus*, and reed and sedge species (Bowen 1977, 28-9).
- 3.1.5 **Soils:** north of a line through the centre of Lough Cranstal, small-scale and provisional classification of the 'Balllacree' soil association on the blown sand

indicates 'loamy sands over sandy gravels' (Fullen *et al* 1996, 20 and 24, code D6). To the south of the same line, 'Glentruan' association soils comprising 'sandy clay loams over gravel' are present (*ibid*, D4B).

## 3.2 PREHISTORIC BACKGROUND

- 3.2.1 **Mesolithic:** considerable interest has been shown in recent years in the Mesolithic hunter-gatherer colonisation of the Isle of Man. Excavations at Cass ny Hawin, Malew (Woodman 1987) confirmed that occupation had been established by 7500 BP. It has been suggested that the Isle of Man was at this time part of a peninsula extending from the Cumbrian coast, becoming an island around 9000 BP (McCarroll *et al* 1990, 55-6). The relative merits of this land-bridge hypothesis, and of a glaciomarine model (that is, rapid sea-level rise following ice retreat) requiring sea-borne colonisation, are the subject of continuing debate. A strong similarity has been noted between some of the Manx flint assemblages, particularly in the later Mesolithic 'heavy-bladed industries', and Irish material (McCartan 1990, 522-3). With few exceptions in the north of the island, the 18 known early Mesolithic 'narrow-blade' and microlithic sites are located close to the shore. 'Heavy-bladed' (Bann) sites, which are considerably more numerous, are spread more evenly up to c5km from the shore, and further in the low-lying north of the island.
- 3.2.2 Whilst Mesolithic material was undoubtedly present at Kerrowdhoo (McCartan 1995), including two probable Mesolithic flakes redeposited in Iron Age deposits from the burnt mound excavation (Woodcock 1995, 15), the bulk of the assemblage is of late Neolithic and Bronze Age in character.
- 3.2.3 Field 4 of the Kerrowdhoo 1992 fieldwalking programme was closest to the proposed Ballafayle development site; the 20m square intensive fieldwalking area (Number 4A), undertaken in January 1993, lay c50m north of the proposed development. The 1992 and 1994 fieldwalking, by east/west traverses, was very thorough indeed, but the timescale and labour-force requirements of the project were such that detailed location of the artefacts recovered was not possible.
- 3.2.4 A total of 693 lithic fragments were recovered from Field 4, 14% of the total recovered from the three campaigns of fieldwork in four fields. The assemblage included 108 cores, 28 blades and 23 retouched/tool items (3% of the total), amongst which end-scrapers predominate. The only end-and-side, and notched scrapers from Fields 1-4 come from this assemblage. The field was walked in 28 east to west traverses in Oct 1992, and three 20 x 20m quadrats were intensively walked in January 1993. In 1994 the field was divided into six east/west traverses to give c100% coverage. The fieldwalking taken as a whole suggests a concentration in the south-west corner of the field, the corner nearest to the proposed mast development site (Manx Museum Acc Nos: MM92.106, 92.201, 93.146, 94.247).
- 3.2.5 **Later Neolithic:** until the work of LUAU and the University of Bournemouth (Darvill 1996) at Billown, Malew, there had been relatively little study in recent years of the Manx Neolithic. Moffatt's (1978) review of the Ronaldsway Culture usefully re-appraises earlier excavations of both domestic and cemetery sites and the Ronaldsway Culture is now described as 'later Neolithic, with affinities to the assemblage from the Ronaldsway site'. Radiocarbon determinations have been obtained for several Ronaldsway cemetery sites and, with one early anomaly, these

dates lie in the second half of the third millennium BC (uncalibrated dates). However, Moffatt (1978, 214) regards these dates as suspect, in part due to the presence of 'bog oak'. McCartan and Johnson (1992, 121) state that the most reliable assay for Ronaldsway material is a date of 4140±50 BP (laboratory number not given) from Ballavarry, Andreas, which falls within the spread of Irish Beaker dates, and is therefore transitional between late Neolithic and Early Bronze Age.

- 3.2.8 **Bronze Age:** the Bronze Age is largely represented in the Isle of Man by Beaker and Food-Vessel type burial sites, and by stray finds of barbed-and-tanged arrowheads. The climatic deterioration experienced by the rest of Britain during the Iron Age, from the seventh century BC onwards, was also felt on Man. The period is characterised by defended settlements in remote locations and by very large Celtic round-house homesteads. Whilst the Romans did not invade or settle the island, trade and other contacts are likely, as for Ireland. A very large (c27m diameter) round house of the 'Roman Iron Age' was excavated by Bersu in 1942 at Ballacagan, near Castletown, and seventeen such houses are known (Freeman *et al* 1966, 263).
- 3.2.9 A number of burnt mounds have been found in the area of the proposed development and a ploughed-out example was located close to the south-west corner of the field, at its closest point to the proposed mast site. A burnt mound has been defined as '*... an accumulation of fire-crazed stones, ash and charcoal, usually sited next to a river or lake, with hearths and/or some form of trough or basin capable of holding water either within the mound or adjacent to it*' (Raymond 1987, quoted by Woodcock 1995, 17). It is generally accepted that burnt mounds are the debris from 'some cooking process', but Barfield and Hodder (1987) have suggested a form of primitive steam bath or 'sauna', for pleasure or ritual, fumigation or cleansing. Both hypotheses can be supported from ethnographic parallels.
- 3.2.10 Four further burnt mounds were revealed by the Kerrowdhoo project, one of which (c600m east of the Ballafayle proposed development) was partially excavated (Site 35). Previous excavations on Manx burnt mounds, where they have supplied radiocarbon dates, have tended to confirm early to mid Bronze Age dates expected from mainland and Northern Isles examples, but the Kerrowdhoo site (Site 35), surprisingly, but not uniquely, produced Iron Age dates:

OXA-3866 MM92-107 3 East: 2060±60 BP (195 cal BC to cal AD 75)

OXA-3867 MM92-107 3 West: 2000±60 BP (160 cal BC to cal AD 130)

### 3.3 HISTORIC BACKGROUND

- 3.3.1 **Early Medieval:** early research on this period has concentrated on the early Christian decorated stone crosses, while more recently the debate has centred, on the one hand on the extent to which the native Celtic, Gaelic-speaking population was supplanted by Norse settlers and invaders, and on the other hand - a related question - the date of the *keeills* or small chapels, and the traditional land divisions of treens and quarterlands. Broderick (1995, intro. section 3) argues that the treen may equate with the Gaelic *tir uinge*, 'ounceland', comparable with the seventh century Irish concept of *tir mbo*, 'cow-land', as a taxable unit. Broderick follows Marstrander's 1937 demonstration that each treen originally had a keeill and family burial ground, as related in the Manannan Ballad of c1500. There is little reason to

doubt that quarterlands are also a pre-Scandinavian concept. There may have once been *c*220 treens, of which in *c*1500 there were 179 treens of lord's land, divided into 594 quarterlands, and a further 147 quarterlands of monks' and bishops' land where no treen organisation had survived. The six-fold division of the island into Sheadings may also derive from a Celtic court concept, similar to the Welsh *cwmwd*, 'commot'. The parish system may date from the time of the Manx king Olaf I, in the twelfth century (Freeman *et al* 1966, 265). Quayle (1950) has demonstrated how the construction of quarterland and other boundaries, generally termed 'hedges' on the island, was closely regulated under Manx law, and that from 1577 all property had compulsorily to be marked by a hedge. Various combinations of stone foundations (including orthostats - stones on edge) surmounted by soil dug from either side, and planted to form a 'growing hedge' were tried.

- 3.3.2 Although early intack land, that is parts of the commons, wastes, or forests enclosed under licence from the Lord of Man, may have been reckoned as quarterland, or even treen land, by and large a firm distinction was made until as late as the mid-nineteenth century. Until 1869 quarterland could not be sold, while intack land could (Crowe 1998, 376-7).
- 3.3.3 **Medieval:** during the Scandinavian rule which began *c*800, Peel on the west coast of Man became the capital of the Kingdom of the Isles, encompassing the Hebrides, which were ceded to Scotland in 1266. The Isle of Man was disputed between England and Scotland until 1405 when sovereignty was granted to Sir John Stanley, whose descendants, as Earls of Derby, ruled until 1736, when the lordship passed to the Dukes of Atholl by descent. Castletown was the capital until 1869, when it was displaced by Douglas.
- 3.3.4 **Post-medieval:** in the study area, the treen earthwork forming the northern limit of the site represents the boundary of early post-medieval enclosure, the lands to the north, up to Deemster Lace's line - demarcating the Duke of Atholl's warrens, having been progressively enclosed between 1795 and 1844 (Davey *et al* 1995, 5).
- 3.3.5 The study area is also notable for the presence of the remains of Chain Home Bride, a World War II radar transmission station. Chain Home comprised over 200 such stations around the British Isles, completed in 1941 (Lowry 1996, 36-45). Cleary (2000) has prepared a draft document on the site for Manx National Heritage and Island Aggregates Ltd., which emphasises that the site is significantly better preserved than those on the mainland. A domestic compound at Ballacallow, south-east of the Ballafayle study area, is contemporary with the Chain Home site.

### 3.4 DESK-BASED ASSESSMENT

- 3.4.1 The documentary study identified several sites in the vicinity of the proposed development area. Of particular significance are the burnt mounds (Sites 33 and 40) immediately to the north. They demonstrate most tangibly that there was exploitation of the immediate area by the later prehistoric period. Two more burnt mounds a short distance to the east (Sites 34c and 35) further emphasise this.
- 3.4.2 Further field walking finds, again in the fields to the immediate north (Sites 18, 36, 37, 38 and 39), demonstrate that there was significant prehistoric activity in the area during the Late Mesolithic and Neolithic.



- 3.4.3 The proposed development area lies within an area of agricultural land that was enclosed before 1795 (Davey 1995a) and across the area there is a series of medieval and post-medieval field boundaries (Site 15, 16, 27, 41, 50 and 51) which are shown on the OS 1st edition map (1870). Although most of these are still shown on current mapping there is one boundary (Site 41), extending through the development site, which is no longer depicted and has evidently fallen out of use. A linear crop mark (Site 43) extends east/west through the area, being recognised from aerial photographs. While it may perhaps be another field boundary it is not shown on the OS first edition and is potentially a geological feature, possibly corresponding with the Flandrian cliff line.
- 3.4.4 Other post-medieval and twentieth century sites occur in the vicinity of the proposed development area. To the north is a collection of second world war military buildings, bunkers and radar stations (Sites 21, 22, 23, 25, 26 and 29).
- 3.4.5 To the south is an area of marl pits (Sites 10 and 11) and post-medieval buildings (Site 49 and 69). Within the proposed development area is a post-medieval or modern sand pit (Site 42). All of these sites demonstrate continuing activity in the area until the present day, and in particular emphasise the expansion of agriculture in the nineteenth century.

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## 4. SURVEY RESULTS

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### 4.1 ARTEFACT AND EARTHWORK SURVEY

- 4.1.1 **Introduction:** the survey area lies to the south of two substantial tree earthwork field boundaries to the north and east which represent the extent of the early post-medieval enclosure system. They separate this site from those areas investigated as part of the Kerrowdhoo project (Sites 33, and 37-40).
- 4.1.2 **Artefact Survey:** the survey identified a broad range of lithic material extending across the study area and to a lesser extent along the access track. Although the main study area had only been lightly ploughed, a significant amount of lithics was recovered. The individual artefacts were located by GPS and their distribution is shown in Figs 3 and 4. The analysis of these lithic finds is presented in *Section 4.2*, and the assessment of their distribution is presented in *Section 4.3*.
- 4.1.3 **Earthwork Survey:** the only features visible within the boundary of the main site was a broad bank (c150m x 10m x 1m in height) (Site 41) and a large circular mound at the southern extent of the development area. The position and orientation of this bank corresponds with a field boundary shown on the OS first edition map (1877) (Site 41). The southernmost extent of this feature survives as an extant hedgeline, but survives only as a lynchet (Plate 3) within the extent of the survey study area.
- 4.1.4 The only other significant feature within the scope of the survey was an area of possible burning restricted to the pinnacle of a circular mound c50m in diameter located at the southern part of the main study site. This area of burning was circular and comprised an orange red silty sand with flecks of charcoal that were exposed on the surface as a result of recent ploughing activity and mammalian bioturbation. It is possible that this patch of burning was the result of later activity, but spatially it does coincide with a high concentration of tools found on the western and southern slopes of this mound, and it is possible that there was a relationship between the charcoal and the lithics.

### 4.2 FINDS ANALYSIS

- 4.2.1 The artefacts and associated waste recovered from Ballafayle are typical of what has been previously recovered from the area (Davey *et al* 1995). In total 549 pieces were recovered, all flint, except for one piece of medieval pottery, one undiagnostic body sherd of possible prehistoric pottery, and one chunk of fine, workable quartz crystal. A large amount of the recovered lithics was working waste (74.5%, or 90.5% when including cores), and this compares well with that from the Kerrowdhoo project (Davey 1995c), suggesting that extensive artefact production was being undertaken within the general area. The use of flint beach pebbles for producing artefacts is known elsewhere on the Isle of Man (Woodman 1987; McCartan 1999) and is seen in other locations in the British isles; the opposing West Cumbrian coast is a particularly good area for comparison (Barnes 1978; Cherry and Cherry 1983). This is undoubtedly a significant factor in the characterisation of flint artefacts from these areas, in particular the tendency towards small tool types, which inevitably gives the impression of a Mesolithic site.

- 4.2.2 The numbers and range of tools recovered are presented in *Appendix 3*. The limited number of finished artefacts (only 49 tools and 88 cores) makes an accurate analysis of chronological development difficult. Of the waste material only the cores give any indication of date, a large amount (24) were used for the production of small blades from one or two striking platforms; indicative of a Mesolithic date. However, the use of beach pebbles as a primary source of material may be a significant factor in the relatively large concentration in this locale. There are, however, also a good proportion of discoid cores (8) which would be fitting for the Neolithic (Davey 1995c). There is a substantial number of less well defined cores, which are relatively amorphous, having no well-defined striking platforms (22), and there is an even larger number that are little more than flaked pebbles (32), and as such can give no indication of date.
- 4.2.3 The survey recorded three particular types of artefact which have an essentially Mesolithic character: a small borer (find 374), a micro burin (find 530) and a possible triangular microlith (find 68). Borers or awls, although not apparently common on the Isle of Man, are suggestive of a late Mesolithic date (Palmer 1977), and similarly micro burins are not common but were found at the Mesolithic site of Cass Ny Hawin (Woodman 1987). The putative microlith is isosceles in form with a slightly rounded proximal end but unfortunately has been so heavily abraded by wind blown sand that it is unclear if it is truly even a microlith and can not therefore provide a diagnostic date. These pieces do, however, begin to show that Late Mesolithic activity was occurring in the area.
- 4.2.4 Of the other artefacts, there were seven blades between 50mm and 100mm in length and six bladelets between 15mm and 30mm in length. The smaller of these would fit within a Mesolithic microlith producing industry but otherwise are relatively inconclusive. There are four retouched flakes (finds 192, 289, 262 and 531), but these could have either a Mesolithic or Neolithic attribution (Davey 1995c). There are thirteen retouched blades which again may be suggestive of a late Mesolithic date (Darvill 1999), however, many have the appearance of saws and may again represent a vague period somewhere between the Late Mesolithic and the Neolithic (Bruce *et al* 1947). The three concave saws (finds 388, 526 and 530), similar to those at Ronaldsway, help to push this date toward the Neolithic.
- 4.2.5 Perhaps the most interesting artefacts in terms of date characterisation are the scrapers and the two possible Bann type points. There were eleven scrapers from the study area plus one core, which appeared to have been reused as a scraper. Nine were generally very similar to those from Ronaldsway (Bruce *et al* 1947) and so would fit a later Neolithic date, while two (find nos. 366 and 384) were more like the characteristic hump-backed scrapers of Ronaldsway. The presence of two Bann type points (finds 171 and 552), however, again suggests a late Mesolithic date (Clark 1935; Woodman 1978; McCartan 1999). Find 403 is unique to the study area as it would appear to be a small transverse arrowhead, being somewhat rare on the Isle of Man, and would point to a Neolithic date.
- 4.2.6 The study area therefore perhaps unsurprisingly, represents something of a palimpsest comprising activity from the late Mesolithic, overlapping into the late Neolithic. The draw of a relatively abundant flint source at the north end of the island (McCartan 1999) and the area of slight high ground would have made the study area a likely place to gather and work flint, and may be enough to suggest a settlement site (Davey 1995c). Also, the proximity of burnt mounds (Woodcock

1995) further gives the impression that the area had been well exploited by the end of the Neolithic.

### 4.3 LITHIC DISTRIBUTION

- 4.3.1 In the absence of extant surface remains the best indicator of prehistoric activity is through examination of the flint scatters to examine if there are significant distributions; however, it must be borne in mind that there is a relatively dense background scatter throughout the area, as demonstrated by the investigations for the Kerrowdhoo project (Davey *et al* 1995) and it is therefore important to demonstrate that any concentration is significantly different from that background. The artefact distribution is concentrated in three specific areas (I, II, and III) (Fig 4):
- 4.3.2 **Scatter I:** the first, lies to the west of the lynchet bank (Site 41) and comprises a mix of both tools and waste material. It has a relatively well-defined cut off corresponding with the medieval/post-medieval boundary bank, and as such would suggest a relationship. One possibility explanation for such a relationship is that differential ploughing within the two fields divided by this boundary has caused greater penetration into the subsoil to the west, resulting in a larger number of finds being brought to the surface.
- 4.3.3 **Scatter II:** the second concentration of lithics extends in a broad north-east/south-west band across the study area. Such a concentration is higher than the general background scatter, but may potentially reflect localised disturbance of the ground that has brought a greater density of lithics to the surface. Although there was a considerable quantity of waste debris and core material there was relatively little in the way of actual tools. Such a density of waste material may point to an area of production and manufacture of tools rather than a casual loss of lithics due to implement usage, but this relative concentration of tools to waste is broadly concordant with that found elsewhere in this study area (500 waste artefacts from a total of 549) and also that identified by the Kerrowdhoo project (Davey *et al* 1995). Hence there is no additional aspect beyond that of the observed density to indicate that this locale was a focus of prehistoric activity.
- 4.3.4 **Scatter III:** the third area of distribution is concentrated to the southern and western slopes of the raised mound and located near the southern edge of the main study area, and there was a significant reduction in the amount of lithics around the northern slope (see Fig 4). In addition to a high concentration of lithics there is also a markedly higher proportion of tools by comparison with waste, and also significantly less cores. The relatively high ratio of tools:waste across this area may reflect that there is greater amount of tool usage as oppose to tool production and as such may reflect settlement. This scatter corresponds with a low natural mound and as such may have presented a better area for settlement than the surrounding topography.
- 4.3.5 **Field Edges:** along the northern and eastern margins of the proposed mast site, there is a noticeably lower concentration of lithics. These areas are adjacent to the treen boundary (Site 16), and the quarterland boundary (Site 50) and it is possible that the construction of these boundaries will have necessitated excavation of large quantities of soil and sub-soil, probably from immediately adjacent parts of the

fields which it separates, resulting in the disturbance to the distribution of the pre-medieval assemblage (Dr P Davey, Centre for Manx Studies, pers comm).

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## 5. DISCUSSION

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- 5.1 The topographical location of the site is close to the Point of Ayre on a large flat plain onto which the Holocene beach sands and gravel were deposited. These provided the source for a supply of local drift pebbles to utilise in the production of tools from the Mesolithic period onwards. The amount of small tool types: borers, micro burin, blades and Bann scrapers, all confirm activity at this site from the Mesolithic. However, the abundance of flint in this part of the island (McCartan 1999), the slightly higher ground within the study area and the proximity of the burnt mounds dated to the Iron Age, within the vicinity of Ballafayle, reaffirms activity in the area and provides some useful dating material. As only a small number of finished tools was recovered by the survey accurate dating of the site is difficult to establish.
- 5.2 While the present survey results and those of the Kerrowdhoo project has highlighted considerable prehistoric activity in the environs of the proposed development, the survey reported on here has not been able to demonstrate confidently whether there were settlement sites or working floors within the study area or whether the artefact distribution simply reflects the dispersed assemblage from such sites outside the confines of the development area. Similarly, even if there were former settlement / working floor remains within the extent of the study area, the present evidence can not demonstrate below ground survival of physical remains.

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## 6. IMPACT

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### 6.1 IMPACT OF DEVELOPMENT

- 6.1.1 The proposed development will result in considerable below ground disturbance for the construction of the main transmitter building which is proposed to be at the south-western side of the study area. The area beyond this to the south, south-east and east will involve the establishment of an outer earthen bund, which will, subject to design proposals, potentially provide protection for the underlying stratigraphy. Assuming that these proposals are implemented, the south-eastern scatter (III) which, on the present evidence, would appear to be the most significant, will be afforded protection and will not necessarily be subject to below ground disturbance.
- 6.1.2 The westernmost scatter (I) will be directly affected by the construction of the proposed transmitter building. However, this area, on the present evidence, is most probably an area of high level background scatter enhanced by differential ploughing and does not necessarily indicate a settlement / working floor area.
- 6.1.3 The northern broad band scatter (II) will be both affected by the construction of the transmitter building and the road that will provide access for the building. This scatter does not correlate with any topographic features or land-use boundaries and does not necessarily reflect areas of agricultural disturbance; however, the component assemblage does not stand apart from the general background and it is not possible to establish if it reflects an underlying settlement or working floor.
- 6.1.4 In addition to the potential prehistoric sites, the proposed development has the potential to affect later elements of the landscape. The important treen boundary (Site 16) extends along the northern side of the proposed development site. Two further quarterland boundaries (Sites 41 and 50) will be potentially affected; in the case of boundary 41, this is already disused but its foundations survive as an earthwork. Furthermore, the proposed access track will extend to Ballafayle farm, and will extend over the site of an earlier 10m square building (Site 68), which was shown on the OS first edition map (1869) but is no longer extant as a surface feature. The date of the building is unknown, but could potentially have medieval origins.

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## 7. BIBLIOGRAPHY

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### 7.1 PRIMARY SOURCES

*Location of sources: Manx Museum Library and Archives, unless otherwise stated. Other repositories given in parentheses [xx]: DoLGE = Isle of Man Government Department of Local Government and the Environment, Mount Havelock, Douglas; LU = Lancaster University Library; NN = N Neil's collection*

#### 7.1.1 *Manx Museum Library and Archives, Douglas*

*Aerial photographs:* 106G/DY31/6029 and 9822-25, 6 Oct 1944, height c30,000 feet

#### 7.1.2 *Isle of Man Government Department of Local Government and the Environment, Mount Havelock, Douglas*

*Aerial photographs:* BKS Survey Ltd for Isle of Man Govt, sortie 98-19, frames 0058-60, May 1998

### 7.2 CARTOGRAPHIC SOURCES

OS, 1869 *1:2500 series, Sheets Isle of Man 3.2, 3.3, 3.6, 3.7, (surveyed 1866-9) 1st edn, Southampton, Ordnance Survey*

OS, 1870 *6" : 1 mile Series: Isle of Man Sheet 3 (surveyed 1866-9) 1st edn, Southampton*

OS, 2000 *1:2500, site-centred map plot from digital data [DoLGE]*

Geol Surv/OS Geological Survey of Great Britain (England and Wales), and Ordnance Survey, 1895 *6" : 1 mile (1:10,560) series, Sheet Isle of Man 3, Geological Survey by G W Lamplugh, hand coloured and annotated*

Geol Surv, 1898 *1" : 1 mile (1: 63,360) series, Sheets 36, 45, 46, 56 and 57, reprinted as Isle of Man (one sheet) 1966, Chessington, Surrey*

Wood, J, 1867 *A new atlas and gazetteer of the Isle of Man, ... compiled from original and authentic sources, describing the civil and ecclesiastical boundaries of several baronies, freeholds and quarterlands, as well as the boundaries of the several farms as they are now held in possession...*, London and Douglas

### 7.3 SECONDARY SOURCES, AND PUBLISHED PRIMARY SOURCES

Barfield, L, and Hodder, M, 1987 *Burnt mounds as saunas, and the prehistory of bathing, Antiquity, 61 (233), 370-9*

Barnes, F, 1978 *Barrow and District* The Barrow Corporation

Bowen, DQ (ed), 1977 *Guidebook for excursion A4: the Isle of Man, Lancashire coast, and Lake District*, International Union for Quaternary Research 10th Congress, Norwich



- Broderick, G, 1997 *Place-names of the Isle of Man, 3 Sheading of Ayre (Kirk Andreas, Kirk Bride, and Kirk Christ Lezayre)*, Manx Place-Name Survey, Tübingen, Germany
- Bruce, JR, Megaw, EM and Megaw, BRS, 1947 A Neolithic Site at Ronaldsway, Isle of Man, *Proc Prehistoric Soc*, 13, 139-160
- Cherry, J and Cherry, PJ, 1983 Prehistoric Habitation Sites in West Cumbria: Part 1, the St. Bees Area and North to the Solway. *Trans Cumberland Westmorland Antiq and Archaeol Soc*, 83, 1-14
- Clark, G, 1935 The prehistory of the Isle of Man, *Proc Prehistoric Soc*, 1, 70-92
- Cleary, A, 2000 *Chain Home Bride - a World War II Radar Station*, draft report for Island Aggregates Ltd and Manx National Heritage, Castletown, Isle of Man
- Crowe, NG, 1998 A new atlas and gazetteer: an appreciation of James Wood's *Atlas* and its origins, *Proc Isle of man Nat Hist and Antiq Soc*, 10(4), 373-9
- Cubbon, W, 1930 *The treen divisions of the Isle of Man, 1511-15*, Douglas
- Dackombe, R, 1990 Solid geology, in Robinson and McCarroll (eds), 18-39
- Darvill, T, 1996 *Billown Neolithic landscape project, Isle of Man, 1995*, Bournemouth Univ Sch of Conservation Sci Res Rep 1, Bournemouth and Douglas
- Darvill, T, 1999 *Billown Neolithic Landscape Project 1995-1997* In Davey P J, ed *Recent Archaeological Research on the Isle of Man*, BAR 278
- Davey, PJ (ed), 1978 *Man and environment in the Isle of Man*, Brit Archaeol Reps British Ser 54, 2 vols, Oxford
- Davey, PJ, 1995a Desk-top study and preliminary site inspection: the evolution of the Kerrowdhoo landscape in Davey et al, *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, 3-10
- Davey, PJ, 1995b Discussion: The results of the fieldwork at Kerrowdhoo, 1992 to 1994 in Davey et al, *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, 65-66
- Davey, PJ, 1995c The Fieldwalking Programme at Kerrowdhoo, May 1992 to March 1994 in Davey et al, *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, 21-36
- Davey, PJ, Higgins, D A, Johnson, N C, McCartan, S B, and Woodcock, J J, 1995 *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, Centre for Manx Studies Res Rep 4, Douglas
- Ford, TD, 1993 *The Isle of Man*, Geologists' Association Guide 46
- Freeman, TW, Rodgers, H B, and Kinvig, R H, 1966 *Lancashire, Cheshire, and the Isle of Man*, London

Fullen, MA, Harris, J, and Kear, BS, 1996 *Soils of the Isle of Man*, Centre for Manx Studies Res Rep 5

Gonzalez, S, Huddart, D, Innes, J, and Davey, P, forthcoming Holocene coastal change in the north of the Isle of Man: stratigraphy, palaeoenvironment, and archaeological evidence, in British Geological Society *Coastal and estuarine environments: sedimentology, geomorphology, and geoarchaeology*

Isle of Man Government, 1983 *Register of protected buildings*

Isle of Man Government, 1999 *Town and Country Planning Act*

Johnson, NC, 1995 Sampling excavations at Kerrowdhoo, fields 1-4, April 1993, in Davey *et al*, *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, 37-44

Kear, BS, 1982 *The Isle of man - its soils and their significance*, Grange-over-Sands, Cumbria, North of England Soils Discussion Group

Kermode, PMC, 1894 *List of antiquities of the Isle of Man, exclusive of the sculptured and inscribed stones*, Ramsey

Kermode, PMC, 1911 Keeills and burial grounds in the Sheading of Ayre, *The Manx Archaeological Survey*, 3, repr 1968, Douglas

Kinvig, RH, 1975 *The Isle of Man: a social, cultural, and political history*, 3 edn, Liverpool

Kneen, JJ, 1929 *The place-names of the Isle of Man with their origin and history*, 4 *Sheading of Ayre*, Douglas

Lamplugh, GW, 1903 *The geology of the Isle of Man*, Memoirs Geol Survey United Kingdom, London

Lowry, B (ed), 1996 Brown I, Burridge, D, Clarke, D, Guy, J, Hellis, J, Lowry, B, Ruckley, N, Thomas, R, and Parry, M *20th Century defences in Britain: an introductory guide*, Council Brit Archaeol Practical Handbook 12, 2 edn, York

McCarroll, D, Garrad, L, and Dackombe, R, 1990 Lateglacial and Postglacial environmental history, in Robinson and McCarroll (eds), 55-76

McCartan, S, 1990 The early prehistoric colonisation of the Isle of Man: Mesolithic hunter-gatherers, *Proc Isle of Man Nat Hist and Antiq Soc*, 9(4), 517-34

McCartan, S, 1995 Kerrowdhoo lithic analysis: summary and conclusions, in Davey *et al*, *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, 63-4

McCartan, S, 1999 *The Manx Early Mesolithic: A Story in Stone* In: PJ Davey (ed) *Recent Archaeological Research on the Isle of Man*, BAR 278

McCartan, S, and Johnson, A, 1992 A rescue excavation at Ballachrink, Jurby, *Proc Isle of Man Nat Hist and Antiq Soc*, 10(1), 105-22

Moffat, P J, 1978 The Ronaldsway Culture: a review, in Davey (ed) 1978, i, 177-217

Palmer, S, 1977 *Mesolithic Cultures of Britain*, Dolphin

Quayle, G E, 1950 History in hedges, *Proc Isle of Man Nat Hist and Antiq Soc*, **5(2)**, 114-21

Raymond, F, 1987 *Monuments Protection Programme, single monument class description: burnt mounds*, typescript, English Heritage

Robinson, V, and McCarroll, D, 1990 *The Isle of Man: Celebrating a sense of place*, Liverpool

Thomas, GSP, 1977 The Quaternary stratigraphy of the Isle of Man, *Proc Geologists' Assoc*, **87**, 307-23

Woodcock, JJ, 1995 The excavation of a burnt mound at Kerrowdhoo, July 1992, in Davey *et al*, *Kerrowdhoo, Bride, Isle of Man: field work and excavations, 1992-1994*, 11-20

Woodman, PC, 1987 Excavations at Cass ny Hawin, a Manx Mesolithic site, and the position of the Manx microlithic industries, *Proc Prehistoric Soc*, **53**, 1-22

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APPENDIX 1  
PROJECT DESIGN

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**JUNE 2000**

**Lancaster  
University  
Archaeological  
Unit**

**BALLAFAYLE**

**COMMUNICATION MAST**

**ISLE OF MAN,**

**ARCHAEOLOGICAL ASSESSMENT**

***Proposals***

*The following project design is offered in response to a request from Countryside Planning and Management Ltd for an assessment of the area around a proposed communications mast at Ballafayle, on the Isle of Man.*

## 1. INTRODUCTION

- 1.1 Lancaster University Archaeological Unit (LUAU) have been requested by Countryside Planning and Management to submit a project proposal for an archaeological assessment of an area of cultivated land at Ballafayle, Isle of Man, in advance of a proposed communications mast. The requirement is for a documentary study and an artefactual field walking survey across one hectare of land.
- 1.2 **Lancaster University Archaeological Unit (LUAU):** LUAU has considerable experience of the assessment of sites of all periods, having undertaken a great number of small and large scale projects during the past 18 years. Assessments and evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU has considerable experience of undertaking numerable archaeological assessments throughout the North-West of England and has also undertaken an archaeological evaluation on the Isle of Man at Billown Quarries, Malew.
- 1.3 LUAU has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. LUAU is a registered organisation (No 27) with the Institute of Field Archaeologists' (IFA).

## 2. OBJECTIVES

- 2.1 The following programme has been designed to provide an accurate archaeological assessment of the designated area. The principal purpose of the assessment is to collate existing information about the archaeology of the site, to determine the significance of the identified archaeological resource, and to provide recommendations for any further archaeological investigation. The required stages to achieve these ends are as follows:
- 2.2 **Desk Top Survey:** to accrue an organised body of data to inform the identification survey.
- 2.3 **Artefact Survey:** to undertake a detailed artefactual survey of 1ha of land centred on the proposed mast.
- 2.4 **Assessment Report:** a written assessment report will be generated for the site, which will assess the significance of the data generated by this programme within a local and regional context. This will advise on the requirements for further recording measures as necessary.

## 3. METHODS STATEMENT

- 3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.
- 3.2 **DESK TOP SURVEY**
- 3.2.1 The following will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the time scale of the project.
- 3.2.2 **Documentary and cartographic material:** this work will rapidly address the full range of potential sources of information. It will include an appraisal of the Isle of Man Sites and Monuments Records, as well as appropriate sections of County histories, early maps, and such primary documentation (tithes and estate plans etc.) as may be reasonably available. Particular attention will be paid to field and place names recorded on early cartographic sources as these often provide important evidence of archaeological activity. Any photographic material lodged in either the Sites and Monuments Records or the Isle of Man Record Offices will also be studied. Published documentary sources will also be examined and assessed. This work will involve visits to the Manx National Heritage Library, Manx Museum and possibly also the Civil Registry for land records. The Centre of Manx Studies has undertaken detailed documentary and field walking studies in areas immediately adjacent to the study area, at Kerrodhoo, and they will be consulted (contact Peter Davey: 01624 673074) to provide comparable material.
- 3.2.3 **Aerial photography:** a survey of the extant air photographic cover will be undertaken. This may indicate the range and survival of archaeological and structural features in the designated area. It will also facilitate the rapid recognition and plotting of archaeological features including those no longer visible at ground level. Identified features will be plotted at 1:1000. Aerial photographic

work is available within the Sites and Monuments Record and also at the Department of Local Government (contact David Kelley: 01624 685923).

- 3.2.4 **Physical environment:** a rapid desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken. This will not only set the archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field inspection.

### 3.3 IDENTIFICATION SURVEY

- 3.3.1 **Access:** liaison for basic site access will be undertaken through Countryside Plan.

- 3.3.2 **Artefact Survey:** it is proposed to undertake an artefact survey of land around the proposed mast and a 10m corridor for the access road between the site and the nearest point of access; the road will be up to 400m long; it is estimated the total area will be c 1ha. The ground will be ploughed and then allowed to weather for a minimum of two weeks prior to the survey to allow for the exposure of artefacts.

- 3.3.3 The artefact survey will involve walking along an average of 5m wide transects, which will identify the exposed artefacts, although only pre-nineteenth century material will be collected. Isolated artefacts will be individually bagged and allocated a unique record number; however, clearly defined artefact scatters will be collectively bagged and numbered. Analysis of the artefacts will be undertaken by in-house lithics specialists, in conjunction with advice from the Centre of Manx Studies.

- 3.3.4 It is proposed to use Global Positioning System (GPS) techniques to locate and record the artefacts with respect to the local field boundaries and the OS National Grid. GPS instrumentation uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey National Grid. It uses a post-processed system by comparing a roving station with a similar station on a fixed known point in order to achieve high levels of accuracy, which are typically between  $\pm 0.5\text{m}$  and  $0.25\text{m}$ . The use of GPS techniques has proved to be an essential and extremely cost effective means of locating monuments.

- 3.3.5 This fieldwork will result in the production of distribution plans at a scale of 1: 500 or any other appropriate scale required, recording the location of each of the artefacts or artefact scatters. The site mapping will be created within a CAD (AutoCAD14) environment. An assessment will be undertaken of the assemblage in conjunction with advice from the Centre of Manx Studies to assess the character and period of the assemblage, and the results will be presented within the report (Section 3.4). The costs assume a low to moderate level of artefact recovery, if there is a large number of artefacts recovered there will need to be a variation to the defined costs to cover for the additional finds processing.

- 3.3.6 LUAU provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997) and risk assessments are now being implemented for all projects.

### 3.4 ASSESSMENT REPORT

- 3.4.1 **Archive:** the results of Stages 3.2-3.3 will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of any features and finds recovered during fieldwork. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

- 3.4.2 This archive can be provided in the English Heritage Central Archaeology Service format, both as a printed document and on computer disks as ASCII files (as appropriate), and a synthesis (in the form of the index to the archive and the report) will be deposited with the Isle of Man Sites and

Monuments Record, as appropriate. LUAU practice is to deposit the original record archive of projects (paper, magnetic, and plastic media) with the appropriate County Record Office (Manx Heritage Library, Manx Museum, and a full copy of the record archive, should any material be recovered, with the material archive (artefacts, ecofacts, and samples, at this stage from surface collections) with an appropriate museum.

- 3.4.3 **Collation of data:** the data generated by 3.2 and 3.3 (above) will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area. It will also serve as a guide to the archaeological potential of the area to be investigated, and the basis for the formulation of any detailed field programme and associated sampling strategy, should these be required in the future.
- 3.4.4 **Assessment Report:** one bound and one unbound copy of the report will be submitted to the Client, and a further copy submitted to the Isle of Man Sites and Monuments Record Office. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, together with appropriate illustrations, including maps and gazetteers of known or suspected sites identified within or immediately adjacent to the study area. It will also include a complete bibliography of sources from which the data has been derived, and a list of further sources identified during the programme of work, but not examined in detail.
- 3.4.5 The report will identify areas of defined archaeology, an assessment and statement of the actual and potential archaeological significance of any features within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, which can be tailored to the specific requests of the client (eg particular scales etc.), subject to discussion. The report will be in the same basic format as this project design; a copy of the report can be provided on 3.5" disk (IBM compatible format).
- 3.4.6 **Confidentiality:** the assessment report is designed as a document for the specific use of the client, for the particular purpose as defined in the project brief and this project design, and should be treated as such; they are not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

#### 4. WORK TIMETABLE

The phases of work will comprise:

- 4.1 **Desk Top Study**  
A five day period is required to collate all the available data.
- 4.2 **Identification Survey**  
A three day period is required for the identification survey.
- 4.3 **Prepare Assessment Report**  
A six day period would be required to complete this element.
- 4.4 LUAU can execute projects at very short notice once an agreement has been signed with the client.
- 4.5 **Staffing:** the project will be under the management of Jamie Quartermaine, BA, Surv Dip, MIFA (Unit Project Manager) to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise. The documentary study would be done by Nigel Neil BA.

## APPENDIX 2 SITE GAZETTEER

<i>Site number</i>	<b>1</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Occupation site; flint, pottery, cup-marked stone
<i>Site name</i>	Lough Cranstal
<i>NGR</i>	NX 4512 0263
<i>SMR PRN</i>	399
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 1, p.69, No. 1
<i>Period</i>	Prehistoric/Neolithic
<i>Description</i>	‘The remains of a low hillock or tumulus at the north-west end of Lough Cranstal ... (Plots 88, 90, and 96). The flints consisted of cores and chips, scrapers and flakes; one perfect axehead which is 3” long and 2” broad, and about a dozen flints with small notches. One of the urns was smooth and grey, the other bright red and rough with possible herring bone markings. A small cup marked stone in grey slate, 4” by 3” was found.
<i>Manx Museum Acc Nos</i>	MM 632 Flint axehead, marked ‘Cranstal tumulus’; 61-66 a collection of prehistoric sherds; 61-68 a Bann-type blade; 67-71 sherds and flints; 67-101 pottery, flints, polished stone axe; 71-84 5 cores, 54 flakes, 1 scraper; 71-84a cup-marked stone; 71-84c small box of sherds (Ronaldsway), Bann-style flake, blades, cores, etc.; 83-29 scraper of ?Ronaldsway pottery, c40 waste flakes, 8 blades, 2 Bann-type flakes, ?utilised stone; 81-84A flakes and core from clearance of drain.
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>2</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Keeill, site of
<i>Site name</i>	Faaie Cabb’lagh, the chapel close/flatt (field name; Broderick 1997, 197-8)
<i>NGR</i>	NX 4580 0270
<i>SMR PRN</i>	403
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 1, 69, No. 2; Kermod 1911, 31
<i>Period</i>	Early medieval
<i>Height</i>	‘75 ft (22.86m) AOD’ (Kermod 1911, 31)
<i>Description</i>	The site of a keeill (early medieval chapel) which was not marked on the OS map (1869) but should (Kermod) be in Plot 154. The old farmhouse stood in a close called Faaie Cabb ’lagh ... the keeill was close by its gable, but has long since been destroyed. ... There is a well in the field, but it does not appear to have been a holy well ...’ (Kermod 1911, 31)
<i>Comment</i>	(N Neil) Canon J H Cain, Rector of Bride in 1941 noted the field name (Broderick 1997, 197), but the Folk Life Surveyors of 1950 (annotated 1:2500 maps in MM), show Plot <u>152</u> (adjacent, to the south of, the mast development plot) as <i>Faaie Cabagh (sic)</i> , and Plot 154 as Faaie Rennie (‘ferny flatt’). The old house is more likely to have been in smaller Plot 153 (not numbered on Client’s map) which is occupied by the present Ballamooar house. Note that there are crop marks in the north end of Plot 152 on the 1944 and 1998 aerial photographs (Site 45).
<i>Assessment</i>	If the keeill site is in the small Plot 153, then it will not be affected by the development proposal. However, if it is in Plot 152 then there is a slight possibility that features related to it could be found in the south part of the adjacent field to the north, (i.e. the development site). Note that there is no mention in any of the published sources of burials having been located (unlike the Port Cranstal keeill at NGR NX 4666 0268, Isle of Man SMR PRN 404, Davey <i>et al</i> 1995, Appendix 1, 69, 3).



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<i>Site number</i>	<b>3</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Finds/Stone: flint
<i>Site name</i>	Lough Cranstal; Greenland marl pit
<i>NGR</i>	?NX 4520 0260 (probably not NX 452 028 given by Davey)
<i>SMR PRN</i>	1175
<i>Refs</i>	Davey 1995a, Appendix 1, p.69, No. 5
<i>Period</i>	Prehistoric/?Neolithic
<i>Description</i>	A flint axehead, chipped, irregular, and oval in outline and section, which was found in Greenland sandpit, in Plot No. 272.
<i>Comment</i>	Plot 272 is on the shore of Lough Cranstal, centred NX 4520 0260. Davey's NGR coincides with a marl pit nearer to Greenland (Site 55; destroyed farmstead) numbered Plot 87 on the 1869 OS 1:2500.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>4</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Finds/Stone: lignite ring fragment, flints
<i>Site name</i>	Lough Cranstal; Greenland
<i>NGR</i>	NX 4514 0269
<i>SMR PRN</i>	1176
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 1, p.69, No. 6
<i>Period</i>	Prehistoric/?Neolithic
<i>Description</i>	A lignite ring fragment and 12 flints found in Plot No. 90, north of Lough Cranstal
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>5</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Finds/Stone: flint, other worked stone
<i>Site name</i>	Lough Cranstal; south of Ballamooar farmhouse; Naaie (field name) 'flatt'
<i>NGR</i>	NX 4570 0250
<i>SMR PRN</i>	1183
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 1, p.69, No. 7
<i>Period</i>	Prehistoric/?Neolithic
<i>Description</i>	'Two scrapers, blade, flake, waste material, worked stone (?hone), found in Plot 631. It was possibly an eastern extension of Site 1'.
<i>Manx Museum Acc Nos</i>	MM83-14
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>8</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Extractive; agricultural: marl pit
<i>Site name</i>	Cooill Dhreem or Dreeym (field name), Manx = 'ridge nook'
<i>NGR</i>	NX 4520 0281 (centred)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.13
<i>Period</i>	Post-medieval/c1836-70
<i>Description</i>	A marl pit which is c170m east/west x 20m, it is shown on the OS 1870 map (Plot 87). Davey <i>et al</i> state that marl pits such as this are larger than the norm for this type of site, suggesting that they supplied material for land improvement throughout the Ayres, their use was being advertised and advocated in 1836.

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<i>Assessment</i>	The site will not be affected by the development proposal.
<i>Site number</i>	<b>9</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Extractive; agricultural: marl pit
<i>Site name</i>	(field name) Airy Breck, Old Norse <i>eyrr</i> 'gravel bank' and Manx <i>brackan</i> 'small piece ploughed in a field' or Gaelic <i>breac</i> , 'speckled' (Broderick 1997, xxii and 173).
<i>NGR</i>	NX (centred) 4540 0281
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.14
<i>Period</i>	Post-medieval/c1836-70
<i>Description</i>	A marl pit group c100m east/west x 80m comprising one marl pit in use in 1870, and six small ponds in former marl pits, shown on OS 1870 map (Plots 92-95, 97, 99). Davey <i>et al</i> state that marl pits such as this are larger than the norm for this type of site, suggesting that they supplied material for land improvement throughout the Ayres, their use was being advertised and advocated in 1836.
<i>Assessment</i>	The site will not be affected by the development proposal.
<i>Site number</i>	<b>10</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballacondra
<i>Form/Type</i>	Extractive; agricultural: marl pit
<i>Site name</i>	(field name) Well Field
<i>NGR</i>	NX (centred) 4599 0275
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.15
<i>Period</i>	Post-medieval/c1836-70
<i>Description</i>	A pond (c40m north/south x 15m) shown on the OS 1870 map (Plot 158), and was probably a marl pit. It lies adjacent to the treen and quarterland boundary between Ballacondra and Ballachrink. The nearest well in 1870 was 50m to south-west in Ballafayle quarterland. Davey <i>et al</i> state that marl pits such as this are larger than the norm for this type of site, suggesting that they supplied material for land improvement throughout the Ayres, their use was being advertised and advocated in 1836.
<i>Assessment</i>	The site will not be affected by the development proposal.
<i>Site number</i>	<b>11</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballachrink
<i>Form/Type</i>	Extractive; agricultural: marl pit
<i>Site name</i>	Ballacondra (field name not known)
<i>NGR</i>	NX (centred) 4603 0272
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.16
<i>Period</i>	Post-medieval/c1836-70
<i>Description</i>	A marl pit (c80m north/south x 25m) shown on the OS 1870 map (Plot 164). Davey <i>et al</i> state that marl pits such as this are larger than the norm for this type of site, suggesting that they supplied material for land improvement throughout the Ayres, their use was being advertised and advocated in 1836.
<i>Assessment</i>	The site will not be affected by the development proposal.
<i>Site number</i>	<b>12</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Extractive; agricultural: marl pit
<i>Site name</i>	Kerrowdhoo Beg (field name not known)
<i>NGR</i>	NX (centred) 4617 0271

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<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.17
<i>Period</i>	Post-medieval/c1836-70
<i>Description</i>	A marl pit in Davey <i>et al</i> list and fig 2, but not shown on the OS 1870 map. Davey <i>et al</i> state that marl pits such as this are larger than the norm for this type of site, suggesting that they supplied material for land improvement throughout the Ayres, their use was being advertised and advocated in 1836.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>13</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Extractive; agricultural: marl pit
<i>Site name</i>	Ballaherd (field name not known)
<i>NGR</i>	NX (centred) 4623 0262
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.18
<i>Period</i>	Post-medieval/c1836-70
<i>Description</i>	A marl pit (c70m east/west x 25m) shown on the OS 1870 map. Davey <i>et al</i> state that marl pits such as this are larger than the norm for this type of site, suggesting that they supplied material for land improvement throughout the Ayres, their use was being advertised and advocated in 1836.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>14</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd (to west)/Kerrowdhoo (to east)
<i>Form/Type</i>	Earthwork: boundary, site of
<i>Site name</i>	Ballaherd/Kerrowdhoo quarterland boundary
<i>NGR</i>	NX 4625 0270 to 4623 0313 (linear)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.21
<i>Period</i>	?Medieval or post-medieval/not known
<i>Description</i>	'The site of a quarterland boundary which shows as a shadow mark under low sunlight.'
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>15</b>
<i>Treen</i>	Cranstal II/III
<i>Quarterland</i>	Kerrowdhoo (Cranstal II), to west / Ballacallow (Cranstal III), to east
<i>Form/Type</i>	Earthwork: boundary
<i>Site name</i>	Cranstal I/II treen boundary
<i>NGR</i>	NX 4645 0242 to 4595 0353 (linear)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.22
<i>Period</i>	?Medieval or Post-medieval/not known
<i>Description</i>	A treen and quarterland boundary, and is a significant landscape feature.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>16</b>
<i>Treen</i>	Cranstal I/II
<i>Quarterland</i>	Ballacondra (Cranstal I), to west and south/ Ballachrink (Cranstal II), to east and north
<i>Form/Type</i>	Earthwork: boundary
<i>Site name</i>	Cranstal I/II treen boundary
<i>NGR</i>	NX 4614 0210 to 4560 0340 (linear)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.23
<i>Period</i>	?Medieval or Post-medieval/not known
<i>Description</i>	A treen and quarterland boundary, which is a substantial earthwork, probably enriched by blown sand.'

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*Comment:* Northwards as far as NX 4592 0304, the fields to the east belong to Ballachrink quarterland; thereafter, northwards, the intake (or 'perk') fields are staggered by two quarterlands, such that the next field north belongs to Ballacallow, and then westwards in the sequence Ballaherd, Ballachrink, Ballacondra, and then Ballafayle (this, two fields in width), with shared access from the south along the treen boundary. On the OS 1869, at NX 4611 0252, the track (Site 71) which extends north up to the development site, forming part of the boundary, diverges and joins the A16 road at NX 4615 0232.

*Assessment* This important earthwork lies c5m from the northern/eastern boundary of the development proposal security fence for a distance of at least c150m. The stratigraphic relationship of the soils in the fields to the south of it may therefore be damaged by the development.

*Site number* **17**  
*Treen* Cranstal II  
*Quarterland* Kerrowdhoo  
*Form/Type* Finds/Stone: flint  
*Site name* Kerrowdhoo (field name not known)  
*NGR* NX 4627 0319  
*Refs* Davey *et al* 1995, Appendix 2, p.71, No.24  
*Period* Prehistoric/?Neolithic  
*Description* A fieldwalking find from Engineer's Test Pit No. 26, in Plot 168. It comprised a flint core rejuvenation flake.  
*Manx Museum Acc Nos* MM92-80  
*Assessment* The site will not be affected by the development proposal.

*Site number* **18**  
*Treen* Cranstal II  
*Quarterland* Kerrowdhoo  
*Form/Type* Finds/Stone: flint  
*Site name* Kerrowdhoo (field name not known)  
*NGR* NX 4600 0347 to 4628 0320  
*Refs* Davey *et al* 1995, Appendix 2, p.71, No.25  
*Period* Prehistoric/?Neolithic  
*Description* Fieldwalking finds from the eastern edge of Field 1 (Site 36) (Davey *et al*). It incorporates two cores and five flakes. It includes the area of a possible burnt mound (Site 34).  
*Manx Museum Acc Nos* MM92-81  
*Assessment* The site will not be affected by the development proposal.

*Site number* **19**  
*Treen* Cranstal I  
*Quarterland* Ballacondra  
*Form/Type* Finds/Stone: flint  
*Site name* Well Field (field name)  
*NGR* (centred) NX 4595 0272  
*Refs* Davey *et al* 1995, Appendix 2, p.71, No.26  
*Period* Prehistoric/?Neolithic  
*Description* The site comprises fieldwalking finds from marl pit (Site 10) cleaning, in Plot 159. It comprises one core and two primary flakes.  
*Manx Museum Acc Nos* MM92-82  
*Assessment* The site will not be affected by the development proposal.

*Site number* **20**  
*Treen* Cranstal II  
*Quarterland* Ballafayle

<i>Form/Type</i>	Finds/Stone: flint
<i>Site name</i>	Ballafayle In Perk (field name)
<i>NGR</i>	NX 4530 0320 (centred)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.29
<i>Period</i>	Prehistoric/?Neolithic; Post-medieval/Nineteenth-century
<i>Description</i>	Fieldwalking finds from Plot 54. Flint: three tools, 37 flakes, 30 primary flakes, 26 cores, 26 natural. Pottery: 39 sherds, mostly nineteenth-century, four pieces of low-fired clay. Three pieces of glass, four pieces of stone.
<i>Manx Museum Acc Nos</i>	MM92-85
<i>Assessment</i>	Adjacent to north-west corner of development site, but unlikely to be affected by it.

<i>Site number</i>	<b>21</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballacondra
<i>Form/Type</i>	Standing building: military accommodation block
<i>Site name</i>	Ballacondra Perks (field name); Chain Home Bride, West Accommodation Block (Cleary)
<i>NGR</i>	NX 4563 0314 (centred)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.30; Cleary 2000, 9, 15 site 18
<i>Period</i>	Modern/c1941
<i>Description</i>	A second World War accommodation block (Davey); these buildings may have been used to accommodate guards (Cleary).
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>22</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Standing building: military, radar transmission bunker
<i>Site name</i>	Ballaherd Perks (field name); Chain Home Bride, Transmitter Block, Type C, west (Cleary)
<i>NGR</i>	NX 4588 0319 (centred)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.31; Cleary 2000, 8, 15 site 13, and figs 3, 4; Lowry (ed) 1996, 36-7, 40-2
<i>Period</i>	Modern/c1941
<i>Description</i>	A Second World War communications and radar bunker (Davey). ‘The transmitter block was constructed from reinforced concrete. Two pairs of transmission lines, probably running along the hedge boundary, carried high voltage radio frequency power to the two aerials slung between each pair of transmitter masts. The transmission lines were suspended from insulators (?ceramic) on wooden poles. In order to carry the radio frequency power efficiently to the aerials, careful control of the geometry of the transmission lines was necessary. Adjacent to the blast wall entrance to the building was a bay with four glass-insulated feed-throughs for the transmission lines. To minimise danger to the operating staff from the transmission lines, transmitter blocks were built right or left handed depending on the direction of traffic to and from the building’ (Cleary).
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>23</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	partly in Ballacallow, Ballaherd, and Kerrowdhoo
<i>Form/Type</i>	Standing building: military, radar transmission bunker
<i>Site name</i>	Chain Home Bride, Transmitter Block, Type C, east (Cleary)
<i>NGR</i>	NX 4607 0316 (centred)

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<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.32; Cleary 2000, 7-8, 15 site 11, and figs 3 and 16
<i>Period</i>	Modern/c1941
<i>Description</i>	As Site 22, but mirror image
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>24</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Standing structure: military, radar transmitter mast foundations
<i>Site name</i>	Ballaherd Perks (field name); Chain Home Bride, transmitter aerial mast (Cleary)
<i>NGR</i>	NX 4587 0357
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.35; Cleary 2000, 8, 15 site 14; AP (MM) 00G/DY31/6029, 6 Oct 1944
<i>Period</i>	Modern/c1941
<i>Description</i>	Second World War radar mast foundations (Davey) 'Each pair of steel transmitter aerial masts usually supported curtain wire aerials for two different frequencies. The weight of the aerial curtain was counterbalanced by a massive concrete aerial halyard balance weight, and the geometry of the aerial was maintained by a series of aerial curtain balance weights. Each mast was set on a steel ball and was stabilised by steel ropes to eight massive concrete guy points' (Cleary).
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>25</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Standing structure: military, radar transmitter mast foundations
<i>Site name</i>	Ballaherd Perks (field name); Chain Home Bride, transmitter aerial mast (Cleary)
<i>NGR</i>	NX 4590 0348
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.36; Cleary 2000, 8, 15 site 14; AP (MM) 00G/DY31/6029, 6 Oct 1944
<i>Period</i>	Modern/c1941
<i>Description</i>	Second World War radar mast foundations (Davey); as site 24 (Cleary)
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>26</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Other structure: military, radar transmission line feeder posts
<i>Site name</i>	Ballaherd Perks (field name); Chain Home Bride, transmission line feeder posts (Cleary)
<i>NGR</i>	NX 4583 0347
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.40; Cleary 2000, 8, 15 site 15
<i>Period</i>	Modern/c1941
<i>Description</i>	Second World War GPO signalling posts (Davey). 'When Davey was working on this site, remains of feeder posts could still be seen upright in the ground. Today no posts were visible <i>in situ</i> , but a few posts could be seen lying on the ground in the gorse hedge at the northern end.' (Cleary)
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>27</b>
<i>Treen</i>	Cranstal II

<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Road: military
<i>Site name</i>	Ballaherd Perks (field name); Chain Home Bride access road
<i>NGR</i>	NX 4593 0308 to 4583 0349 (linear)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.41
<i>Period</i>	Modern/c1941
<i>Description</i>	‘Second World War access route: this is visible on the air photographs and is apparent on the ground as a slightly raised platform on the eastern edge of Field 3 which, when disturbed reveals a surface consisting of freshly broken slate fragments’ (Davey).
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>28</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Part in Ballaherd, part in Kerrowdhoo
<i>Form/Type</i>	Road: military
<i>Site name</i>	Chain Home Bride access road
<i>NGR</i>	NX 4605 0312 to 4628 0320 (linear)
<i>Refs</i>	Davey <i>et al</i> 1995, Appendix 2, p.71, No.42
<i>Period</i>	Modern/c1941
<i>Description</i>	As Site 27 (Davey)
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>29</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Other structure: military, electric cable junction box
<i>Site name</i>	Ballaherd perks (field name)
<i>NGR</i>	NX 4588 0330
<i>Refs</i>	Cleary 2000, 8 and 15, no 16, and fig 27, photo 9
<i>Period</i>	Modern/c1941
<i>Description</i>	‘A large three-port concrete and brick electric cable junction box is clearly visible in the gorse hedge. The box now contains brick tiles which would originally have been used to mark the route of the cable and are now scattered along the hedge. The box has three shielded ports, to the north and south along the hedge line and to the east at right angles to the hedge line. The shield for the eastern port is now detached from the box, possibly to make space for the new wire fence’ (Cleary).
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>30</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Other structure: military, radar technical building
<i>Site name</i>	Ballaherd perks (field name); Chain Home Bride, small technical building (west)
<i>NGR</i>	NX 4592 0308
<i>Refs</i>	Cleary 2000, 9 and 15, no 17, photo 6
<i>Period</i>	Modern/c1941
<i>Description</i>	‘This small technical building appears to be similar to the small technical building east. Its purpose is unknown’ (Cleary).
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>31</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Earthwork: burnt mound ?; earthwork: burial mound?

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<i>Site name</i>	Rheath, field name, Manx = 'wasteland', and un-named field to north
<i>NGR</i>	NX 4527 0267 (centred)
<i>Refs</i>	OS 1870 6": 1 mile maps, annotation by P M C Kermode (1855-1932); Davey, pers comm, distribution of burnt mounds in Bride, map/OHP in Kerrowdhoo archive
<i>Period</i>	Prehistoric/?Neolithic, Bronze Age, or Iron Age
<i>Description</i>	Note on OS 1st edition map (MM) map by Kermode. The note says 'tumulus' at same location as Davey shows burnt mound. Note proximity to sites 1, 3, 4, and 32.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>32</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Earthwork: burnt mound ?
<i>Site name</i>	Greenland (farm name); Cooill Dreeym (field name) = 'ridge nook'
<i>NGR</i>	NX 4507 0278 (centred)
<i>Refs</i>	Davey, pers comm, distribution of burnt mounds in Bride, map/OHP in Kerrowdhoo archive
<i>Period</i>	Prehistoric/?Neolithic, Bronze Age, or Iron Age
<i>Description</i>	Davey shows burnt mound on distribution map. Note the proximity to sites 1, 3, 4, and 31.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>33</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Earthwork: burnt mound ?
<i>Site name</i>	Ballaherd Perks, field name
<i>NGR</i>	NX 4587 0312 (centred)
<i>Refs</i>	Johnson's (1995, 42-4) trial excavations (Trenches A, B, Ba) and a sample quadrat (178/-044) confirmed surface indication of burnt mound
<i>Period</i>	Prehistoric/?Neolithic, Bronze Age, or Iron Age
<i>Description</i>	The site was subject to Johnson's (1995, 42-4) trial excavations (Trenches A, B, Ba). A sample quadrat (178/-044) confirmed surface indication of either one or two burnt mound(s).
<i>Assessment</i>	The extent of the site is very uncertain. Since it chronologically pre-dates the treen boundary Site 16, the burnt mound material could possibly extend below it, though it is unlikely that the same site continues as far as the mast development site, c200m to the west.

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<i>Site number</i>	<b>34</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballachrink
<i>Form/Type</i>	Earthwork: burnt mound ?
<i>Site name</i>	Ballachrink Perks, field name
<i>NGR</i>	NX 4621 0330 (centred)
<i>Refs</i>	Johnson 1995, 37 and 44
<i>Period</i>	Prehistoric/?Neolithic, Bronze Age, or Iron Age
<i>Description</i>	Johnson's trial trenches confirmed the existence of a burnt mound, but the extent of the site is not known.
<i>Comment</i>	The extent of the site is very uncertain. Since it chronologically pre-dates the treen boundary Site 22, to the east, it is possible that this site continues below it.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>35</b>
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<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Partly in Ballaherd, and mostly in Kerrowdhoo
<i>Form/Type</i>	Earthwork: burnt mound ?; Finds: stone, flint; Finds: ceramic, pottery, prehistoric; Finds: head-fractured stones
<i>Site name</i>	Kerrowdhoo burnt mound (field name not known)
<i>NGR</i>	NX 4625 0318 (centred)
<i>Refs</i>	Woodcock 1995
<i>Period</i>	Prehistoric/?Iron Age
<i>Description</i>	A burnt mound subject to trial excavation in 1992, this was a c3.5m square supplemented by borings, (Woodcock 1995, 14). The burnt mound soil horizons were found c0.35m below the modern surface, but the limit of the site was not determined. Previous excavations on Manx burnt mounds, where they have supplied radiocarbon dates, have tended to confirm the late Neolithic to mid Bronze Age date expected from mainland and Northern Isles examples, but the Kerrowdhoo site, surprisingly but not uniquely, produced Iron Age dates: OXA-3866 MM92-107 3 East: 2060±60 BP (195 cal BC to cal AD 75) OXA-3867 MM92-107 3 West: 2000±60 BP (160 cal BC to cal AD 130)
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>36</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Kerrowdhoo
<i>Form/Type</i>	Finds/Stone: flint
<i>Site name</i>	(field name not known) Davey Field 1
<i>NGR</i>	(centred) NX 4610 0330
<i>Refs</i>	Davey and McCartan 1995, 22-5
<i>Period</i>	Prehistoric/?Neolithic
<i>Description</i>	956 flints were recovered in 1992-4 from Davey's fieldwalking programme, including 223 cores, 63 blades and 24 retouched items (3%; mostly end-scrapers, also a borer, and a ?laurel leaf or bifacial disc core). The field was walked in 14 east to west traverses in Oct 1992, and 14 south to north traverses in Jan 1993, 20m apart (beginning 100m from south boundary); two 20 x 20m quadrats were also intensively walked.
<i>Manx Museum Acc Nos</i>	MM92.198, 93.143, 94.244
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>37</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	partly in Ballacallow (east), partly Ballaherd (west)
<i>Form/Type</i>	Finds/Stone: flint
<i>Site name</i>	(field name not known) Davey Field 2
<i>NGR</i>	(centred) NX 4595 0330
<i>Refs</i>	Davey and McCartan 1995, 25-8
<i>Period</i>	Prehistoric/?Early Mesolithic to Bronze Age
<i>Description</i>	357 flints were recovered in 1992-4 from Davey's fieldwalking programme, including 66 cores, 18 blades and 18 retouched items (4%; half of these are end scrapers, edge-retouched ?'Irish hollow scraper', small late Neolithic axe/adze). Single sherd of ?Neolithic ?Ronaldsway-type pottery. The field was walked in 13 east to west traverses in Oct 1992, and two 20 x 20m quadrats were intensively walked.
<i>Manx Museum Acc Nos</i>	MM92.199, 93.144, 94.245
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>38</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Finds/Stone: flint

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<i>Site name</i>	Ballaherd Perks (field name); Davey Field 3
<i>NGR</i>	(centred) NX 4585 0330
<i>Refs</i>	Davey and McCartan 1995, 28-30
<i>Period</i>	Prehistoric/?Early Mesolithic to Bronze Age
<i>Description</i>	464 flints were recovered in 1992-4 from Davey's fieldwalking programme, including 82 cores, 19 blades and 6 retouched items (1%; one scraper, one borer, preform for late Neolithic kite-shaped arrowhead). One single sherd of ?Neolithic ?Ronaldsway-type pottery was found. The field was walked in 24 east to west traverses in Oct 1992, and two 20 x 20m quadrats were also intensively walked.
<i>Manx Museum Acc Nos</i>	MM92.200, 93.145
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>39</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballachrink
<i>Form/Type</i>	Finds/Stone: flint
<i>Site name</i>	Ballachrink Perks (field name); Davey Field 4
<i>NGR</i>	(centred) NX 4570 0330
<i>Refs</i>	Davey and McCartan 1995, 30-4
<i>Period</i>	Prehistoric/?Early Mesolithic to Bronze Age
<i>Description</i>	693 flints were recovered in 1992-4 from Davey's fieldwalking programme, including 108 cores, 28 blades and 23 retouched items (3%; end scrapers predominate, only end-and-side, and notched scrapers from fields 1-4 come from this assemblage). The field was walked in 28 east to west traverses in Oct 1992, and three 20 x 20m quadrats were also intensively walked. In 1994 the field was divided into six east/west traverses to give c100% coverage. The fieldwalking taken as a whole suggests a concentration in the south-west corner of the field, the corner nearest to the proposed mast development site.
<i>Manx Museum Acc Nos</i>	MM92.106, 92.201, 93.146, 94.247
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>40</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballachrink
<i>Form/Type</i>	Earthwork: burnt mound; Finds/Stone, burnt
<i>Site name</i>	Ballachrink Perks (field name); Davey Field 4
<i>NGR</i>	(centred) NX 4575 0314
<i>Refs</i>	Davey and McCartan 1995, 30
<i>Period</i>	Prehistoric/?Neolithic to Iron Age
<i>Description</i>	'At least one completely ploughed-out burnt mound site appears to have existed in the centre of the field towards its southern edge. A dense concentration of thermally fractured stones survives on the surface of the field, 45m from its eastern boundary on the crest of a fossil sand dune' (Davey).
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>41</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar/Ballafayle
<i>Form/Type</i>	Quarterland boundary/cartographic and AP evidence
<i>Site name</i>	Field names: <i>Caraghyn</i> ('stony, barren land') to north, <i>cooill thie vedn</i> ('the white ridge') to east, <i>faaie cabbagh</i> ('chapel field') to south
<i>NGR</i>	NX 4584 0275 to 4561 0311 (linear)
<i>Refs</i>	OS 1869 and 1944 AP
<i>Period</i>	Medieval or Post-medieval?/-
<i>Description</i>	A destroyed north/south field and quarterland boundary, extant to north and south of NGRs given.

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*Assessment* The development proposal will potentially destroy the northern c150m of this boundary.

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*Site number* **42**  
*Treen* Cranstal I  
*Quarterland* Ballamooar  
*Form/Type* Earthwork: sandpit?  
*Site name* Field name: *Caraghyn* ('stony, barren land')  
*NGR* NX 4572 0291  
*Refs* Noted by P M C Kermode on his annotated 1870 6": 1 mile OS maps (MM), but not included on Isle of Man SMR; visible on 1944 and 1998 APs.  
*Period* ?Post-medieval/?twentieth-century  
*Description* A c30m diameter sandpit with a 'tail' to the east; it is visible on aerial photographs.  
*Assessment* This is within the field occupied by the development, but will probably not be affected by the proposal.

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*Site number* **43**  
*Treen* Cranstal I  
*Quarterland* Mostly in Ballamooar, small part to east in Ballafayle  
*Form/Type* Aerial photo site/?geological  
*Site name* Field name: *Caraghyn* ('stony, barren land'), and possibly extending westwards into *creggans* ('rocky area')  
*NGR* NX 4535 0295 to 4574 0296 (linear)  
*Refs* 1944 and 1998 APs  
*Period* Prehistoric/?geological  
*Description* A linear cropmark, c380m long, taking the form of a darker area to south, and a lighter area to north of a fairly abrupt east/west line. This could represent the Flandrian cliff line.  
*Assessment* The development proposal will potentially damage part of this cropmark.

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*Site number* **44**  
*Treen* Cranstal I  
*Quarterland* Ballamooar  
*Form/Type* Field boundary/cartographic and AP evidence  
*Site name* Field names: *Caraghyn* ('stony, barren land') to north, *faaie cabbagh* ('chapel field') to south  
*NGR* NX 4558 0284 to 4576 0287 (linear)  
*Refs* 1869 OS; 1944 and 1998 APs  
*Period* ?Medieval or Post-medieval/-  
*Description* An east/west field boundary, lying south of a modern boundary.  
*Assessment* It will probably not be affected by the development proposal, but is very close to the field containing it.

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*Site number* **45**  
*Treen* Cranstal I  
*Quarterland* Ballamooar  
*Form/Type* Aerial photo site/?geological  
*Site name* Field name: *faaie cabbagh* ('chapel field')  
*NGR* (centred) NX 4570 0284  
*Refs* 1944 APs  
*Period* ?Medieval or ?geological  
*Description* A group of cropmarks on 1944 Aerial photographs. There are two larger (c50m north/south x 30m) sub-oval areas to the east, and two smaller (c15-20m diameter) areas to the west. There is a slight possibility that these were related to

the keeill site recorded by Kermode as having lain in a field of this name, but at an uncertain location (Site 2).  
*Assessment* It will probably not be affected by the development proposal, but is very close to the field containing it.

*Site number* **46**  
*Treen* Cranstal I  
*Quarterland* Ballamooar  
*Form/Type* Field boundary/cartographic and AP evidence  
*Site name* Field names: *faaie cabbagh* ('chapel field') to north, *faaie rhenny* ('ferny flatt') to south  
*NGR* NX 4567 0273 to 4584 0275 (linear)  
*Refs* 1869 OS; 1944 and 1998 APs  
*Period* ?Medieval or Post-medieval/-  
*Description* An east/west field boundary, which is no longer extant  
*Assessment* The site will not be affected by the development proposal.

*Site number* **47**  
*Treen* Cranstal I  
*Quarterland* Ballamooar  
*Form/Type* ?Field boundary or track/AP evidence  
*Site name* Field name: *faaie rhenny* ('ferny flatt')  
*NGR* NX 4581 0261 to 4576 0274 (linear)  
*Refs* 1944 APs  
*Period* ?Medieval or Post-medieval/-  
*Description* A north/south field boundary or track, passing the location of well (Site 48) on the 1869 OS map.  
*Assessment* The site will not be affected by the development proposal.

*Site number* **48**  
*Treen* Cranstal I  
*Quarterland* Ballamooar  
*Form/Type* Well/cartographic evidence  
*Site name* Field name: *faaie rhenny* ('ferny flatt') or *faaie cabbagh* ('chapel field')  
*NGR* NX 4577 0271  
*Refs* 1869 OS  
*Period* ?Medieval or Post-medieval/-  
*Description* A well shown on the OS 1869 map. There is a very slight possibility that it was related to the early medieval keeill lying somewhere in the field to the north or west called *faaie cabbagh* 'chapel field', but note that some authorities (see Site 2) think this field was called *faaie cabbagh* (Kermode 1911, 31).  
*Assessment* The site will not be affected by the development proposal.

*Site number* **49**  
*Treen* Cranstal I  
*Quarterland* Ballafayle  
*Form/Type* Well/cartographic evidence  
*Site name* Field name: Well Field  
*NGR* NX 4594 0266  
*Refs* 1869 OS  
*Period* ?Medieval or Post-medieval/-  
*Description* A well shown on the OS 1869 map.  
*Assessment* It may be affected by works associated with the access track for the development proposal.

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<i>Site number</i>	<b>50</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballafayle (to west)/Ballacondra (to east)
<i>Form/Type</i>	Quarterland boundary and track/cartographic and AP evidence
<i>Site name</i>	Ballafayle/Ballacondra quarterland boundary
<i>NGR</i>	NX 4596 0261 to 4571 0311 (linear)
<i>Refs</i>	1869 and ?1970s OS; 1944 and 1998 APs
<i>Period</i>	?Medieval or Post-medieval/-
<i>Description</i>	A north/south quarterland boundary and track, the track is not shown on the OS 1869 map, but is on the current 6": 1 mile edition.
<i>Assessment</i>	It will be damaged by works associated with the construction of the proposed access track for the mast complex.

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<i>Site number</i>	<b>51</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballacondra
<i>Form/Type</i>	Field boundary/cartographic and AP evidence
<i>Site name</i>	Field name: <i>lheennee</i> 'meadow' to south, field name to north not known
<i>NGR</i>	NX 4585 0292 to 4595 0294 (linear)
<i>Refs</i>	1869 OS, 1944 AP
<i>Period</i>	?Medieval or Post-medieval/-
<i>Description</i>	An east-west field boundary, which is not shown on the current map edition. It adjoins treen boundary, Site 16, at its east end, and quarterland boundary Site 50 at its west end.
<i>Assessment</i>	This boundary will probably be affected, at its west end, by the construction of the access track to the proposed development.

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<i>Site number</i>	<b>52</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballacondra
<i>Form/Type</i>	Building: sod house, site of?
<i>Site name</i>	Ballacondra Cottage, beside
<i>NGR</i>	NX 4605 0227
<i>Refs</i>	William Cubbon's (1865-1953) annotation to OS 6": 1 mile maps (MM)
<i>Period</i>	?Medieval or post-medieval/-
<i>Description</i>	A map annotation states 'sod house in ruins or red clay'.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>53</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Aerial photo site/?geological
<i>Site name</i>	Field name: <i>creggans</i> 'rocky'
<i>NGR</i>	(centred) NX 4540 0297
<i>Refs</i>	1944 APs
<i>Period</i>	?Medieval or ?geological
<i>Description</i>	A group of three sub-rectangular cropmarks on the 1944 APs, It is overlying and to north of Site 43
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>54</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Field boundary: cartographic evidence

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<i>Site name</i>	Field names: <i>cooill dreeym</i> 'ridge nook', <i>creggans</i> 'rocky', <i>airy breck</i> '?small shieling'
<i>NGR</i>	(centred) NX 4525 0292
<i>Refs</i>	Wood 1867; OS 1869; Davey <i>et al</i> 1995
<i>Period</i>	?Post-medieval/pre-1795
<i>Description</i>	A group of field boundaries to the west of proposed development. It is shown by Davey as pre-1795 enclosures.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>55</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Farmstead/cartographic evidence, site of; keeill/site of?
<i>Site name</i>	Greenland
<i>NGR</i>	(centred) NX 4500 0275
<i>Refs</i>	OS 1869; MM OS 1870 annotation by P M C Kermode
<i>Period</i>	?Medieval-; ?Post-medieval/-
<i>Description</i>	A farmstead called Greenland on the OS 1869 map, comprising three or more buildings. Annotation by Kermode states 'buildings gone' (by ?c1900). It is at the same location as the 'site of keeill', but this was not listed by Kermode (1894; 1911).
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>56</b>
<i>Treen</i>	?Cranstal I
<i>Quarterland</i>	Lough Cranstal
<i>Form/Type</i>	Well
<i>Site name</i>	Lough Cranstal
<i>NGR</i>	NX 4521 0261
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/-
<i>Description</i>	A well shown on the OS 1869 map, but not on the current edition.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>57</b>
<i>Treen</i>	Kyrke Bryde
<i>Quarterland</i>	Ballacowle
<i>Form/Type</i>	Well
<i>Site name</i>	Lough Cranstal/Ballacowle Beg ('little Ballacowle')
<i>NGR</i>	NX 4540 0221
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/-
<i>Description</i>	A well shown on the OS 1869 map, but not on current edition.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>58</b>
<i>Treen</i>	Balywaranagh
<i>Quarterland</i>	Ballayonnage
<i>Form/Type</i>	Well
<i>Site name</i>	Field name: <i>Close Phallagh</i> (meaning unknown)
<i>NGR</i>	NX 4578 0210
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/-
<i>Description</i>	A well shown on the OS 1869 map, but not on current edition.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>59</b>
<i>Treen</i>	Cranstal I / Balywaranagh / Kyrke Bryde
<i>Quarterland</i>	Ballamooar, Lough Cranstal, Ballacowle, Ballayonnage
<i>Form/Type</i>	Earthwork/Treen and quarterland boundary
<i>Site name</i>	Cranstal I / Balywaranagh / Kyrke Bryde treen boundary
<i>NGR</i>	NX 4510 0231 to 4585 0210 (linear)
<i>Refs</i>	OS 1869; Wood 1867; Kneen 1929 maps
<i>Period</i>	?Medieval/-; Post-medieval/-
<i>Description</i>	A treen boundary shown on Kneen's and Wood's maps, but is difficult to plot exactly at a larger scale, especially around Lough Cranstal.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>60</b>
<i>Treen</i>	Balywaranagh / Kyrke Bryde
<i>Quarterland</i>	Ballayonnage, Ballamooar, Lough Cranstal
<i>Form/Type</i>	Earthwork/Treen boundary
<i>Site name</i>	near <i>Croit e Creggan</i> (cottage) (Site 61)
<i>NGR</i>	NX 4545 0210 to 4550 0229
<i>Refs</i>	OS 1869, Wood 1867; Kneen 1929 maps
<i>Period</i>	?Post-medieval/-
<i>Description</i>	A treen boundary shown on Kneen's and Wood's maps, but it is difficult to plot precisely at a larger scale. It joins Site 59 at the north end.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>61</b>
<i>Treen</i>	Balywaranagh
<i>Quarterland</i>	Kyrke Bryde
<i>Form/Type</i>	Standing building/cottage
<i>Site name</i>	<i>Croit-e-Creggan</i>
<i>NGR</i>	NX 4570 0218
<i>Refs</i>	OS 1869; Madelene Hendy, Isle of Man DoLGE, pers comm
<i>Period</i>	?Post-medieval/pre-1869, ?c1600-1700
<i>Description</i>	A cottage shown on the OS 1869 map and the current edition. The rear wall is of cob/daub construction, possibly indicating that this cottage was of similar date to Bridge Cottage and Cranstal Cottage (Site 62). DoLGE have no immediate plans to register this building.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>62</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballafayle
<i>Form/Type</i>	Standing building/cottage, thatched
<i>Site name</i>	Cranstal Cottage
<i>NGR</i>	NX 4587 0212
<i>Refs</i>	OS 1869; Isle of Man Government 1983, Number 'Bride 3'
<i>Period</i>	?Post-medieval/pre-1869, ?c1600-1700
<i>Description</i>	A cottage shown on the OS 1869 and current edition maps. It is adjacent to the A16 road. This thatched cottage is a Registered Building (Number Bride 3) under the Manx Town and Country Planning Act 1999.
<i>Assessment</i>	The setting of the cottage is adjacent to the only access road to the site, and only c100m from the junction of this access with the A16 road. There is consequently a risk of damage to it during transportation of construction materials.

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<i>Site number</i>	<b>63</b>
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<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballacondra
<i>Form/Type</i>	Farmstead/site of
<i>Site name</i>	<i>Dhooon Field</i> 'steep field'
<i>NGR</i>	(centred) NX 4603 0226
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	A farmstead, or perhaps two, separated by the present A16 road. In 1869 it comprised (north of the road) a building on the verge of and parallel to the road, another was set back behind this, and a smaller building; (south of the road) comprised two structures at right angles to the road. These were joined along their long side, and another was parallel to this, but set back and to the east. Of all of these, only the first of the buildings south of the road is still extant.
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>64</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballachrink
<i>Form/Type</i>	Farmstead/site of
<i>Site name</i>	Ballachrink
<i>NGR</i>	(centred) NX 4613 0228
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	In 1869 Ballachrink farm comprised four buildings, of which only one is shown on the present edition. The surrounding field boundaries are also not shown on the current map edition.
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>65</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Farmstead/site of; well/site of
<i>Site name</i>	Ballacowle Beg
<i>NGR</i>	(centred) NX 4622 0240
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	Two buildings parallel to the A16 road, and a well at the road-side in the north-west corner of the enclosure, are shown on the OS 1869 map, but none are now shown.
<i>Assessment</i>	The site will not be affected by the development proposal.

<i>Site number</i>	<b>66</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Farmstead/site of
<i>Site name</i>	Dolphin Cottage; <i>Pollin</i> (field name; ?meaning)
<i>NGR</i>	(centred) NX 4624 0252
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	A building on either side of the A16 road, two ponds c30m to the south, and a further pair of small buildings on the site now occupied by Dolphin Cottage, are shown on the OS 1869, but are no longer extant. A field boundary between the north-east corner of Dolphin Cottage's enclosure and the corner at Theleme was also shown in 1869.
<i>Assessment</i>	The site will not be affected by the development proposal.



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<i>Site number</i>	<b>67</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar
<i>Form/Type</i>	Farmstead/?farmhouse, site of
<i>Site name</i>	Ballamooar
<i>NGR</i>	(centred) NX 4572 0264
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	Five buildings are shown on the OS 1869 at Ballamooar, of which an L-shaped building in the north-west corner is the only survivor. Either a building adjoining this at right angles, to the north-west, or a large building to the north-east (both are missing on the current edition) may have been the farmhouse.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>68</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballafayle
<i>Form/Type</i>	Farmstead/?farmhouse, site of
<i>Site name</i>	Ballafayle
<i>NGR</i>	NX 4596 0257
<i>Refs</i>	OS 1869; Wood 1867; MM P M C Kermodé's annotation on 1870 6": 1 mile
<i>Period</i>	?Medieval/-; ?Post-medieval/pre-1869
<i>Description</i>	Two buildings on the western side of the farm appear to survive from 1869, but a c10m square building, possibly the farmhouse, just south of the present north-east barn, is not now shown. Kermodé's annotation reads 'Ch. Caley', probably referring to an owner. William Callister was the owner in 1867 (Wood).
<i>Assessment</i>	The access road to the proposed development, running through the farm, directly crosses the site of this building, which could have medieval origins.

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<i>Site number</i>	<b>69</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballacondra
<i>Form/Type</i>	Farmstead/outbuilding, site of
<i>Site name</i>	Ballacondra
<i>NGR</i>	NX 4604 0264
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	Three buildings are shown on the OS 1869 at Ballacondra, of which the largest two survive. A small outbuilding adjacent to the treen boundary (Site 16) has disappeared.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>70</b>
<i>Treen</i>	Cranstal II
<i>Quarterland</i>	Ballaherd
<i>Form/Type</i>	Military/Radar Communication Site; Military building/accommodation block (converted to house)
<i>Site name</i>	Kerrowdhoo Beg ('Little Kerrowdhoo'), part of Chain Home Bride
<i>NGR</i>	NX 4617 0269
<i>Refs</i>	Cleary 2000, 9 and photo 12
<i>Period</i>	Post-medieval/c1941
<i>Description</i>	Two accommodation blocks, part of Chain Home Bride radar communications site, they have been converted into a house.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>73</b>
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<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Lough Cranstal
<i>Form/Type</i>	Standing building/?field-barn, site of
<i>Site name</i>	near Lough Cottage
<i>NGR</i>	NX 4566 0233
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	A small square building on edge of narrow part of Lough, c100m west of Lough Cottage, is shown on OS 1869, but not on current edition.
<i>Assessment</i>	The site will not be affected by the development proposal.

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<i>Site number</i>	<b>74</b>
<i>Treen</i>	Cranstal I
<i>Quarterland</i>	Ballamooar and Lough Cranstal
<i>Form/Type</i>	Standing building/?farmstead or field-barns, site of
<i>Site name</i>	<i>Rheath</i> (field name) 'wasteland'
<i>NGR</i>	(centred) NX 4513 0259
<i>Refs</i>	OS 1869
<i>Period</i>	?Post-medieval/pre-1869
<i>Description</i>	Three small buildings on edge of wide part of Lough, c200m south-east of site of Greenland farmstead (Site 55). They are shown on the OS 1869 map, but not on the current edition.
<i>Assessment</i>	The site will not be affected by the development proposal.

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### APPENDIX 3 TOOL ASSEMBLAGE

Artefact Type	Number	Finds No.s
Microliths	1	68
Single Platform Core	21	167, 216, 396, 305, 003, 493, 179, 497, 421, 420, 161, 260, 255, 479, 473, 468, 552, 414, 406, 412, 429
Multi platform core	3	301, 312, 530
Discoid cores	8	494, 064, 189, 528, 552, 444, 435, 383
Amorphous cores	22	205, 398, 399, 093, 102, 111, 364, 513, 481, 491, 537, 547, 531x2, 529, 543, 427, 530, 534, 551, 348, 385
Flaked pebbles	32	177, 509, 005, 200, 269, 382, 363, 356, 134, 515, 523, 532, 531, 545, 535, 427, 542, 548, 544, 551 x2, 536, 546 x3, 552, 437, 355, 428, 405, 433, 431
Retouched blades	13	196, 221, 013, 070, 338, 257, 381, 259, 531, 529, 542, 354, 404
Retouched flakes	4	192, 289, 262, 531
Bann points	2	171, 552
Concave Saws	3	530, 526, 388
Blades	7	212, 160, 488, 467, 461, 552, 457
Blade scrapers	9	110, 197, 133, 250, 477, 466, 532, 545, 415
Humped back scraper	2	366, 384
Bladelet	6	222, 340, 129, 486, 440, 432
Micro Burin	1	530
Reused core	1	425
Transverse arrowhead	1	403
Borer	1	374
<b>Total</b>	<b>137</b>	
<b>Total Cores</b>	<b>88</b>	
<b>Total tools</b>	<b>49</b>	

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## ILLUSTRATIONS

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- Fig 1 Ballafayle Location Map
- Fig 2 Ballafayle Desk-Based Site Plan
- Fig 3 Ballafayle Total Lithic Assemblage
- Fig 4 Ballafayle Artefact Distribution

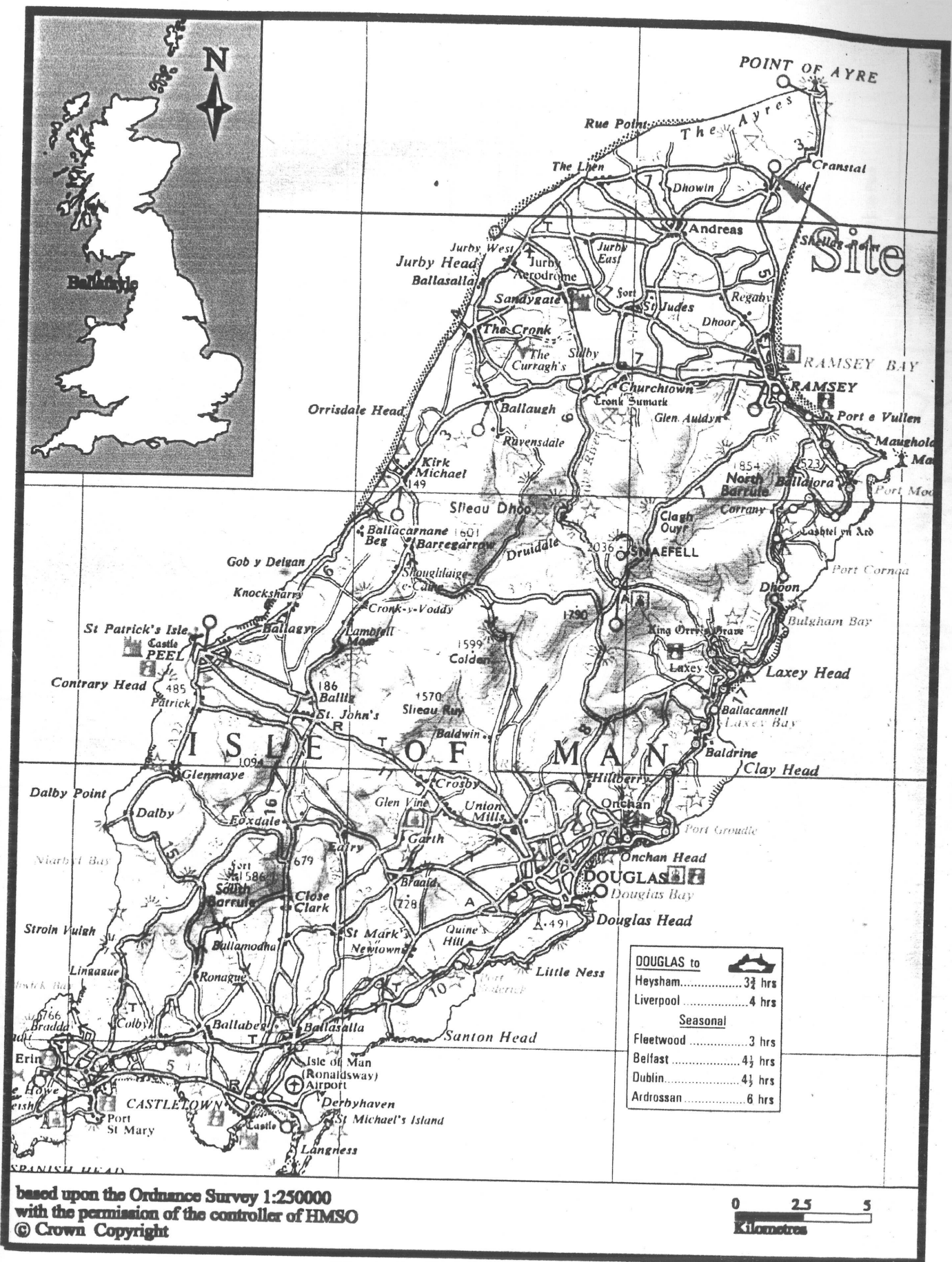


Fig 1: Ballafayle Location Map

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PROJECT:  
**BALLAFAYLE**  
 Bride  
 Isle of Man

DRAWING No: **2**  
 Basemap.dwg



DRAWN BY: JQ and DE  
 DATE: August 2000  
 NOTES:

KEY

- 17 Linear / Localised Sites
- ▨ Study area
- ▨ 39 Artefact Survey Areas

TITLE:  
 Desk-Based Site Plan

COMMISSIONED BY:  
 Countryside Planning and  
 Management Ltd

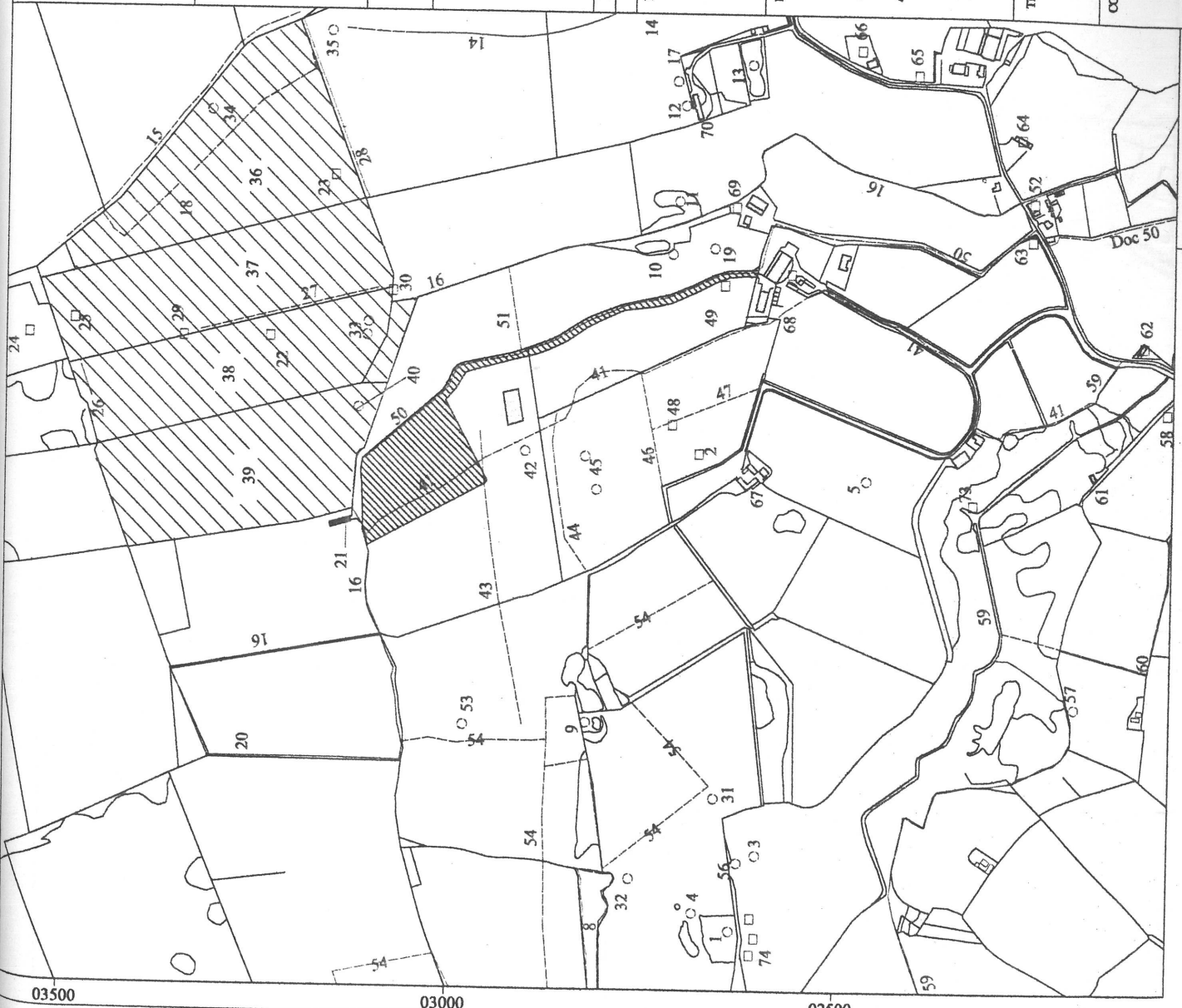


Fig 2 Ballafayle Desk-Based Site Plan

LANCASTER UNIVERSITY  
ARCHAEOLOGICAL UNIT

STONEY INSTITUTE  
MORTONDALE HOUSE LANE  
LANCASTER  
LA1 1YF  
TEL: 01524 840666



PROJECT:

**BALLAFAYLE**  
Bride  
Isle of Man

DRAWING No: 3

Fig3.dwg



0 100m

DRAWN BY: JQ  
DATE: August 2000  
NOTES:

- KEY
- Core
  - Waste
  - Blade
  - Retained Blade/Flake
  - Other tool/fragments
  - Scarp
- Site 41 boundary bank
- Study area boundary

TITLE:

Total Assemblage

COMMISSIONED BY:

Countryside Planning and  
Management Ltd

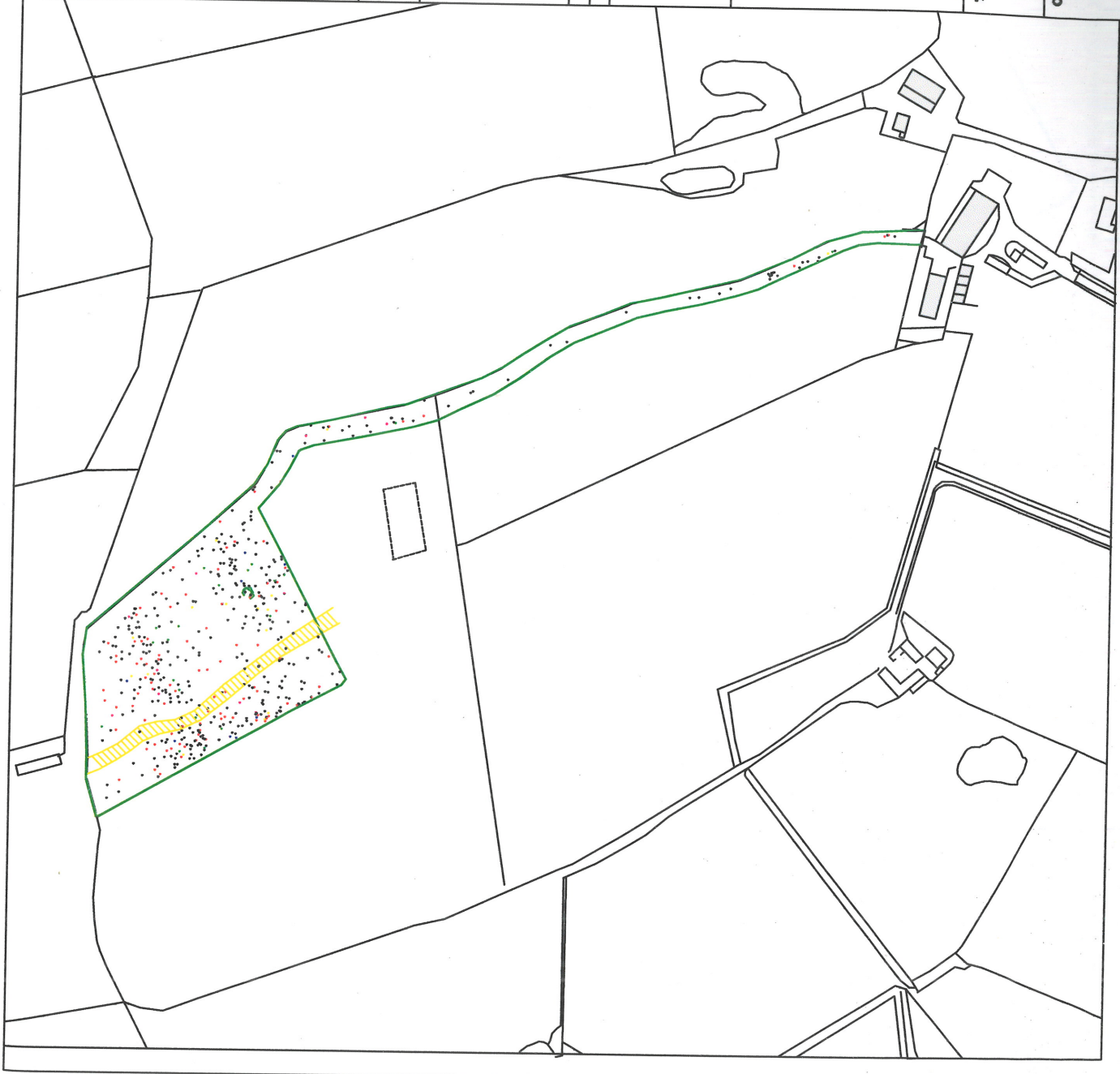


Fig 3: Ballafayle Total Lithic Assemblage



**Fig 4: Ballafayle Artefact Distributions**



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## PLATES

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- Plate 1 The access road from the south looking north
- Plate 2 General shot of the proposed development area showing the mound to the south
- Plate 3 The broad lynchet bank (Site 41) running north
- Plate 4 The burnt area

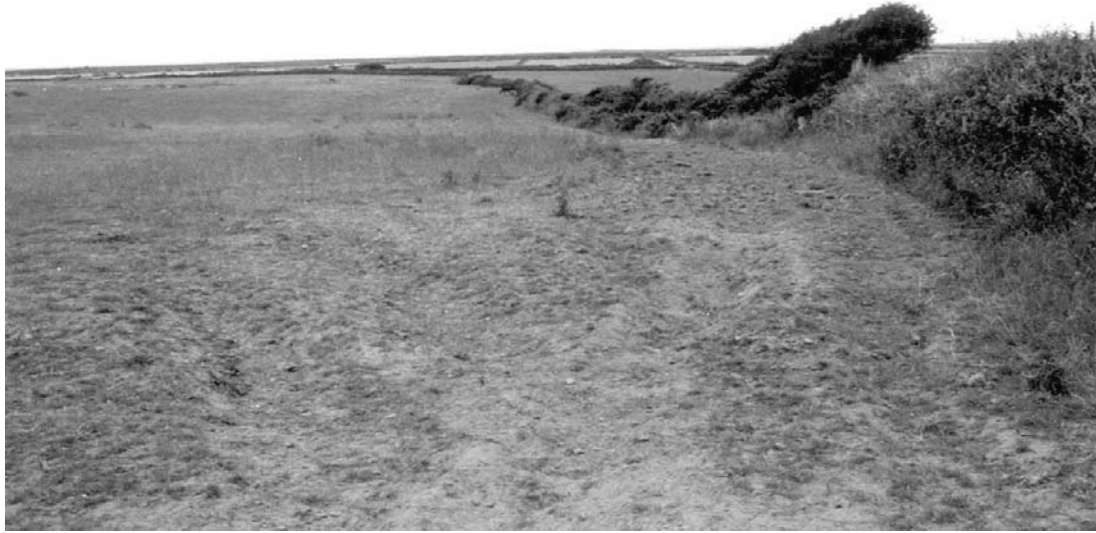


Plate 1 The access road from the south looking north



Plate 2 General shot of the proposed development area showing the mound to the south



Plate 3 The broad lynchet bank (Site 41) running north



Plate 4 The burnt area