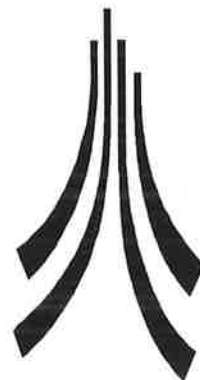


LANCASTER
UNIVERSITY
ARCHAEOLOGICAL
UNIT



April 1999

**STRIBERS BANK WIND FARM,
BACKBARROW,
CUMBRIA**

Archaeological Assessment Report

Stribers Bank Wind Farm,
Backbarrow,
Cumbria

Archaeological Assessment

Report no 1998-99/ 054/AUA/7880

Checked by Project Manager. Date
Passed for submission to client. Date

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April 1999

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SUMMARY

An archaeological assessment has been undertaken in March 1999 of the proposed wind farm at Stribers Bank, to the south of Backbarrow, Cumbria (centred at NGR SD 360 815) (Fig 1) by Lancaster University Archaeological Unit (LUAU), on behalf of Dulas Ltd.

The desk-based study established that this upland area was the subject of parliamentary enclosure, in the late eighteenth / early nineteenth centuries, and prior to this the area was open common. The desk-based study identified a number of sites around the edges of the study boundary, including a barkpeeler's hut and a charcoal pitstead, but only one site was documented within the study area, a gravel pit (Site 05).

The identification survey identified 10 sites across the study area, including a small cultivated plot and two isolated putative clearance cairns. Although these features are inherently undatable, there is a possibility that they had a prehistoric origin. There is also the possibility that there are further archaeological features below ground.

Only a tentative layout of the proposed turbines was available, but the proposed position of turbine 1 will be only 33m away from a possible clearance cairn.

It is recommended that the layout of the turbines, roads, and power cables be designed so as to respect the identified archaeological resource. Evaluation trenching should be undertaken to examine the potential for below ground archaeological features within the area of each turbine and an archaeological watching brief should be undertaken during the topsoil strip for the linear communication systems.

ACKNOWLEDGEMENTS

LUAU would like to thank Peter Newland and Ruth Whitehouse of Dulas Ltd for their assistance and for enabling access to the sites. LUAU is grateful to Bette Hopkins of Cumbria County Council for providing Sites and Monuments Record information and access to aerial photography collections. LUAU would also like to thank Chris Chandler of the National Monuments Record, Swindon (archaeology) and the staff of the Cumbria Record Offices at Kendal and Barrow.

Thanks are also due to the landowners, Allan and Anthony Riley, who permitted access to their land.

The documentary research was undertaken by Caron Newman, of the Egerton Lea Consultancy, and the field survey by Chris Scurfield, assisted by Neil Wearing. The report was written by Caron Newman and Chris Scurfield and edited by Jamie Quartermaine (Project Manager) and Rachel Newman (Deputy Director). The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 An archaeological assessment has been undertaken of the proposed wind farm at Stribers Bank, to the south of Backbarrow, Cumbria (centred at NGR SD 360 815) (Fig 1) by Lancaster University Archaeological Unit (LUAU), on behalf of Dulas Ltd. The assessment was undertaken in March 1999, and examined 0.5sqkm of moorland comprising Stribers and Speel Bank Allotments.
- 1.1.2 The assessment was undertaken to identify the archaeological resource within the impact study area and involved a desk-based study combined with an identification field survey. The archaeological assessment utilised information contained in the Cumbria Sites and Monuments Record (SMR), maintained by Cumbria County Council, and it also examined published and unpublished records held by the Cumbria County Record Offices in Barrow (CROB) and Kendal (CROK).
- 1.1.3 The identification survey involved a systematic examination of the ground surface of the study area by field walking. The results of both elements of the survey were augmented within the project gazetteer (*Appendix 2*).
- 1.1.4 This report sets out the results of the work in the form of a short report which outlines the findings, followed by a statement of the archaeological potential of the area, and an evaluation of the impact of the proposed development. This is complemented by a gazetteer of sites, both new to the record and formerly known, and a bibliography.

2. METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 A project design (*Appendix 1*) was submitted in January 1999 by LUAU in response to a request from Dulas Ltd, for an archaeological assessment in advance of the construction of a proposed wind farm at Stribers Bank, Cumbria.
- 2.1.2 The project design provided for archaeological assessments involving a desk-based study, a rapid identification survey, and written report, which interpret the data discovered during the project and assess the implications of the development. The assessment has been carried out in accordance with the project design.

2.2 DESK-BASED SURVEY

- 2.2.1 Existing archaeological information was obtained from the Cumbria Sites and Monuments Record (SMR). Manuscript maps and selected other documents were studied in the CROB and the CROK, along with published antiquarian sources. The quantity of manuscript maps in both Kendal and Barrow Record Offices was very small and was limited to the Ordnance Survey 1st edition map of Cartmel (6 inches to one mile, OS 1850, CROB) and the enclosure map of 1809 (CROK WPR 89/Z3). There was little relevant evidence contained in original documents in either Record Office, but a list of the documents which were consulted is given at the end of this report (*Section 7*).

2.3 IDENTIFICATION SURVEY

- 2.3.1 A systematic surface inspection of the Stribers Bank area was undertaken to ensure complete coverage of the ground. The majority of the study area was open pasture, but also included a small area of plantation; the ground was walked on 30m transects to identify earthworks and extant surface features. The archaeological detail, as well as significant topographical detail, was mapped to an accuracy of +/- 0.5m, using differential Global Positioning System (GPS) techniques, which use electronic distance measurements along radio frequencies to satellites to enable a fix in Latitude and Longitude, which were subsequently converted mathematically to Ordnance Survey National Grid.

2.4 GAZETTEER OF SITES

- 2.4.1 All of the information concerning archaeological sites in the affected area has been collated into a gazetteer (*Appendix 2*), which provides details of their location, origin, and character. Locations are given as eight-figure National Grid References where possible. A summary description of each site is provided in conjunction with a reference to the source of the information (SMR, cartographic, documentary, field inspection) with references as appropriate and an assessment has been given of the interpretation and archaeological potential of the site. The sites have been marked onto a digital map showing their positions (Fig 2). Other sites beyond the extent of

the study area, which were considered to be of background relevance, are mentioned in the text with appropriate SMR references.

2.5 ARCHIVE

- 2.5.1 A full archive of the desk-top study and the field inspection has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited in the Cumbria Record Office (Kendal) with a copy to the Cumbria Sites and Monuments Record and a copy will be available for deposition at the National Monuments Record.

3. TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

3.1 LOCATION AND GEOLOGY

4. ASSESSMENT RESULTS

4.1 HISTORICAL BACKGROUND

4.3 IDENTIFICATION SURVEY (FIG 2)

4.3.1 The survey area spans three distinct topographical and vegetation areas. Heanings Wood sloping to the east is characterised by deciduous woodland with good access and visibility; Hampsfield Fell, which forms a wedge, shaped segment of land to the middle of the study area. Hampsfield fell was open moorland with occasional deciduous woods but in more recent times (20-30 years) has been planted with stretches of coniferous woodland, Hampsfield Allotment to the east of the study area has also been planted with coniferous woodland on top and inbetween limestone pavements which further restricted access and visibility of the survey.

4.3.2 A total of nine sites were indentified from the study area of which two (**Sites 02 & 08**) are also identified in the documentary survey. Seven of the nine sites are quarries which range in size from localised pits (**Site 05**) to extensive quarries (**Sites 07, 08 & 09**). Site 05 comprises a series of small quarries for the probable construction of drystone walls marking out allotment divisions. Medium sized quarries with working faces and spoil heaps are noted in **Site 03 & 02** where the amount of stone quarried might be interpreted as providing walling and building materials. The larger quarries (**Sites 01,07,08 & 09**) are characterised by long exposed working faces, internal trackways and large spoil heaps. The bare rock surfaces and non-earthfast spoil heaps appear to testify to a copmaratively recent date, certainly within the last 50 years. This notion is supported by the marked change in vegetation over these quarries which appears to be naturally seeded deciduous trees (e.g.alder & birch).

These sites cluster to the north of Hampsfield Allotment around the northern end of the limestone scar this area is serviced by good trackways which incorporate 'switch backs' which maintain a gradual gradient helpful in the transportation of heavy loads. NB to the north-east of these larger quarries outside the study area is the Lime Kiln (SMR 12524).

To the south-west of High Hampsfield Farm is a quarry (SMR 15454) which has recently been extended north up to the farm itself. The upper limestone strata appears to have been removed possibly for ornamental garden features, leaving the more intact strata below exposed.NB the provides a notable change in quarrying techniques in the Hampsfield area.

4.3.3 A sample rubbish heap was recorded as **Site 04**. These heaps were noted through out Heaning Wood all close to trackways probably as a result of farm discard and provide a facinating insight into 20th c. life.

4.3.4 **Site 06** consists of two upright limestone slabs that appear to have been artificially erected as a way marker or possible a political land division

5. DISCUSSION

5.1 ARCHAEOLOGICAL POTENTIAL

- 5.1 There is little documentary evidence for significant archaeological activity within or close to the assessment area. In general it was open common land until the early nineteenth century and was used only as poor-quality grazing land. The majority of the sites relate to the enclosure of the land or clearly post-date it. However, there is a small number of sites that would appear to pre-date the enclosure and three of these are potentially of prehistoric origin (**Sites 09, 14 and 16**). The presence of plots of cleared ground and clearance cairns reflect an attempt to improve an area of marginal upland. Such activity is normally associated with the Bronze Age or Medieval periods and is very prevalent on the marginal uplands of the Lake District, usually below the 300m contour. Typically such sites would be directly associated with other similar clearance features, and the scattered nature of the identified monuments may potentially be an indication that there are further features or archaeological deposits obscured beneath the areas of upland blanket peats.
- 5.2 The site of the barkpeeler's hut (**Site 03**) and the site of the charcoal pitstead (**Site 04**) lie to the north of the assessment area, within woodland known as High Stribers Wood (Ordnance Survey 1st edition map (1850)). Holker was traditionally a well-wooded area (Farrer and Brownbill 1914, 276), serving a number of industries including the provision of charcoal for the iron furnace at Backbarrow (Farrer and Brownbill 1914, 277). There were certainly woods at *Stribus* in the seventeenth century, as they were mentioned in the will of Robert Rawlinson in 1665 (Farrer and Brownbill 1914, 274).

6. ARCHAEOLOGICAL IMPACT AND RECOMMENDATIONS

6.1 IMPACT

- 6.1.1 This assessment has highlighted the archaeological resource within and around the study area at Stribers Bank. Ten sites with surface expressions have been identified by field walking and only one of these was previously identified from documentary sources within the development boundary. In general the archaeological material has the potential to be of local importance, comprising typical examples of post-medieval agricultural features and also gravel quarrying. There is, however, a limited number of sites that are potentially of pre-enclosure date and may be of greater archaeological significance.
- 6.1.2 The generalised impact of the construction of the turbines can be assessed, albeit in broad terms. The individual turbines will have a relatively small footprint, but it is anticipated that the site preparation and clearance of the ground cover will involve disturbance of the ground over an area of about 16-20m diameter. The proposed turbine configuration for Stribers Bank will potentially have some impact upon the identified archaeological resource. Turbine 1 is to be positioned close to the putative clearance cairn - **Site 16**. Turbines 2 and 3, however, are remote from any identified archaeological features.
- 6.1.3 In addition to the turbines, the greatest overall ground disturbance will result from the construction of access roads, which will link the turbines. Similarly the excavation of trenches for power cables may have a direct impact upon archaeological monuments. At present the layout of the communications has not been designed, but the layout should allow for any archaeological constraint.

6.2 RECOMMENDATIONS

- 6.2.1 It is strongly recommended that, as the first option, the monuments identified by the present assessment be preserved *in situ*. The code of conduct for the Institute of Field Archaeologists states that members should seek to achieve as the first option, the preservation of archaeology *in situ*, and only if this is neither possible nor practical then is it appropriate in some cases to undertake further work to mitigate the effect of development. Defined below are a series of options for mitigating and evaluating the archaeological resource in advance of and during the proposed development.
- 6.2.2 **Avoidance Options:** the size of the area, coupled with a relatively low density turbine distribution, provides for a considerable latitude in the siting of individual turbines and roads. It is therefore considered that the most expedient and economic conservation option for the archaeology of the area is avoidance. For the most part the sites are individual entities and therefore avoidance of the individual monument is an adequate solution. In these instances turbine and road construction should be at least 30m away from the edge of an identified monument to ensure that both the monument and its topographic context are undisturbed. With industrial groups or archaeological landscapes, however, each individual monument is only one element of an interrelated complex, and any construction within the group will damage the contextual and topographic relationships that define the broad archaeological landscape. It is therefore necessary that each monument group is treated as a whole rather than a collection of independent entities.

- 6.2.3 None of the turbines represent an immediate conflict of interest with the archaeology, all sites or potential sites being at least 30m away. **Site 16**, however, is only just beyond the exclusion area surrounding Turbine 1 (c33 metres) and it is recommended that the separation should be increased. If this is not possible the **Site 16** should be fenced off during construction to ensure that it is not disturbed in any way.
- 6.2.5 **Mitigation Survey:** if any sites are affected by the final design of roads or turbine construction, they should be surveyed in detail, to create a record of their current extent and features as mitigation for their eventual destruction. In conjunction with this cartographic recording an oblique photographic record of the site should be generated.
- 6.2.6 **Evaluation:** there is the potential for surviving below ground archaeological features, particularly associated with **Site 09**, and it is recommended that the turbine footprints be evaluated by trial trenching. This would be necessary to establish the nature, extent, date and detailed character of any sites or buried features. It is possible that this work may demonstrate the need for further recording and should be discussed with the county archaeological curator. If further evaluation is required this should be conducted in sufficient time to allow for final recording of sites of particular significance prior to construction.
- 6.2.7 **Watching Brief:** the survey has demonstrated that there is the potential for prehistoric sub-surface sites within the extent of the study area and it is recommended that a watching brief be undertaken during any topsoil stripping for the construction of the turbines and roads.

7. BIBLIOGRAPHY

7.1 PRIMARY SOURCES

7.1.1 *Barrow Record Office (CROB)*

Z280, 1833 Harper Gaythorpe's extract of the grant of the Manor of Cartmel 1641
Z1680, 1963 Parish surveys in Furness and Cartmel, notes and maps by W Rollinson

7.1.2 *Kendal Record Office (CROK)*

WPR 89/Z3, 1809 Plan of the ancient Inclosures in the Division of Upper Holker and part of the Allotments Within the Parish of Cartmel, T Hornor, 6½ inches to 1 mile

7.2 CARTOGRAPHIC SOURCES

OS, 1850 6": *1 mile map, Sheet 12, Cartmel*, 1st edn, Southampton
OS, 1973 1:10,000, *Sheet SD 38 SE*, Southampton
OS, 1987 1:25,000 *Pathfinder 626*, Southampton

7.3 SECONDARY SOURCES

Baines, E, 1870 *The History of the County Palatine and Duchy of Lancaster by the Late Edward Baines Esq*, ed Harland, J, London
Birch, W, de Gray, 1885 *Cartularium Saxonicum I*
Britton, J, 1807 *The Beauties of England and Wales*, Lancashire, London
Dickinson, JC, 1980 *The Land of Cartmel: a history*, Kendal
English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn, London
Ekwall, E, 1922 *The Place-Names of Lancashire*, Manchester
Farrer, W and Brownbill, J, 1914 *The Victoria History of the County of Lancaster*, **8**, London
Mills, A D, 1991 *A Dictionary of English Place-Names*, Oxford
Moseley, F (ed), 1978 *The Geology of the Lake District*, Yorkshire Geol Soc, Occ Pap **3**
Quartermaine, J and Leech R, forthcoming *Upland settlement of the Lake District*
Richardson, J, 1986 *The Local Historian's Encyclopedia*, New Barnet
Stockdale, J, 1872 *The Annals of Cartmel*, Ulverston
Wyld, HC, 1911 *The Place-Names of Lancashire*, London

APPENDIX 1 PROJECT DESIGN

APPENDIX 2 SITE GAZETTEER

Site number 01
Grading 3
Site name Hampsfield Allotment
NGR
Site type Quarry
Period 18/19th c.
Source Identification Survey 1999

Description Located on the edge of a north facing limestone scarp this site represents an extensive area of quarrying 70 x 12 metres. This quarry extends from the drystone field boundary (oriented NW-SE) and features a possible central trackway which would have provided access to the working face. The working face is aligned north-east to south-west and associated spoil heaps (min 6) are sited to the north-west and stand up to 2m. There are four principal spoil heaps comprising of limestone blocks up to 1.2 x 0.5 metres. The quarry has prevented plantation of the area and is marked by deciduous woodland.

Assessment the site is within the study area.

Site number 02
Grading 3
Site name Hampsfield Allotment
NGR
Site type quarries

Period 18/19th c.
Source Identification Survey 1999. Aerial Photo site
Description .
Assessment the site is within the study area.

Site number 03
Grading 3
Site name Heaning Wood
NGR
Site type quarries
Period 18/19th c.
Source Identification Survey 1999
Description Located on north-west slope. It is a 2 bayed quarry with the west facing working faces 1.5 metres high. The spoil heaps are represented by apparently levelled earthfast platforms projecting to the west. Access to the quarry would have been facilitated by the close proximity (10m) of three track ways (OS 1848) currently marked as just a north-south path to the east of intersecting field boundaries on the edge of the study area.
Assessment the site is within the study area.

Site number 04
Grading 3
Site name Heaning Wood
NGR
Site type rubbish heaps
Period 20th c.
Source Identification Survey 1999

Description Located sporadically throughout the wood always close to trackways. This particular dump is typical there are two closely spaced heaps both approximately 5 metres in diameter. They consist of: milk pails, tin buckets glass bottles earthenware storage jars, plastic bottles, cistern floats, butcher's bike and a tin bath all items characteristic of farm refuse.

Assessment the site is within the study area.

Site number 05

Grading 3

Site name Hampsfield Fell

NGR

Site type quarries

Period 19/20th c.

Source Identification Survey 1999

Description There are a series of at least 3 neat circular hollows with a c.6m diameter sited 5-6 meters to the north of the wall. To the south and closely paralleling the east-west field boundary which divides Hampsfield from Longlands Allotments are a further series of 4 further quarries of similar dimensions which parallel the wall. They would seem to represent local quarries for the extraction for wall material.

Assessment the site is within the study area.

Site number 06

Grading 3

Site name Robin Hood and Little John, Heaning Wood

NGR

Site type Standing Stones

Period unknown

Source Identification Survey 1999, OS 1848, OS 1909

Description A pair of large limestone uprights 2m high x 1.5m wide. They display 'clints and grikes'- natural erosion features which are now upside down. Located on the break of slope they provide good way markers or political boundary markers and may have been repositioned to reflect this use. Down the slope to the west are two further erratic limestone blocks. This site appears to represent repositioned limestone erratics.

Assessment the site is within the study area.

Site number 07

Grading 3

Site name Hampsfield Allotment

NGR

Site type quarry

Period 19/20th c.

Source Identification Survey 1999

Description Large well defined circular quarry (dia = 40m) with a large central spoil heap so positioned as to allow vehicular access right round the quarry face. The spoil heap is non-earfast and its sides closest to the working face have been revetted by up to 5 courses of large angular boulders which appear to be eroded upper limestone. This technique of removing the upper rocks to reveal the more regular lower strata characterises the quarries in this area (**Sites 08 & 09**).

NB located on one trackway below a working face is a free standing timber shed (8 x 6ft) which may testify to use of the site until quite recently.

Assessment the site is within the study area.

Site number 08

Grading 3

Site name Hampsfield Allotment

NGR

Site type quarry

Period 19/20th c.

Source Identification Survey 1999

Description A large quarry with a 45 m working face 1.5m high which faces south-west. It is visible from Site 07 at a distance of around 50m to the north-east. It has one trackway extending along the foot of the working face with two principal spoil heaps to the west and south-west which are non-earthfast and composed medium to large limestone blocks. The trackway currently features large limestone blocks positioned possibly for reduction and removal.

Assessment the site is within the study area.

Site number 09

Grading 3

Site name Hampsfield Allotment

NGR

Site type quarries

Period 19/20th c.

Source Identification Survey 1999

Description The quarry appears as a north-south linear scar in the limestone scarp. The working face is up to 1.75m high and extends up to 70m, north-south, it faces west where there is in parallel irregular non-earthfast spoil heaps for a further 20m(to the west) which rise up to 2m.

Sites 07,08 & 09 appear to be associated with noe roughly contemporary phase of quarrying with a probable extraction route along the marked trackway to the north exiting the study area in the vicinity of Fell Busk.

Assessment the site is within the study area.

ILLUSTRATIONS

- Fig 1 Stribers Bank wind farms site location plan
- Fig 2 OS 1st edition 1;10650 map of the study area
- Fig 3 Stribers Bank site plan

PLATES

- Plate 1 Site 08 - Sheep fold (looking south-east)
- Plate 2 Site 09 - Agricultural Plot (looking south-west)
- Plate 3 Site 10 - Area of recent tipping
- Plate 4 Site 11 - Blocked gateway (looking west)
- Plate 5 Site 12 - Hollow way (looking north-west)
- Plate 6 Site 13 - Natural hollow erosion marks
- Plate 7 Site 14 - Circular Cairn (looking north-east)
- Plate 8 Site 05 - Gravel Quarry (looking west)

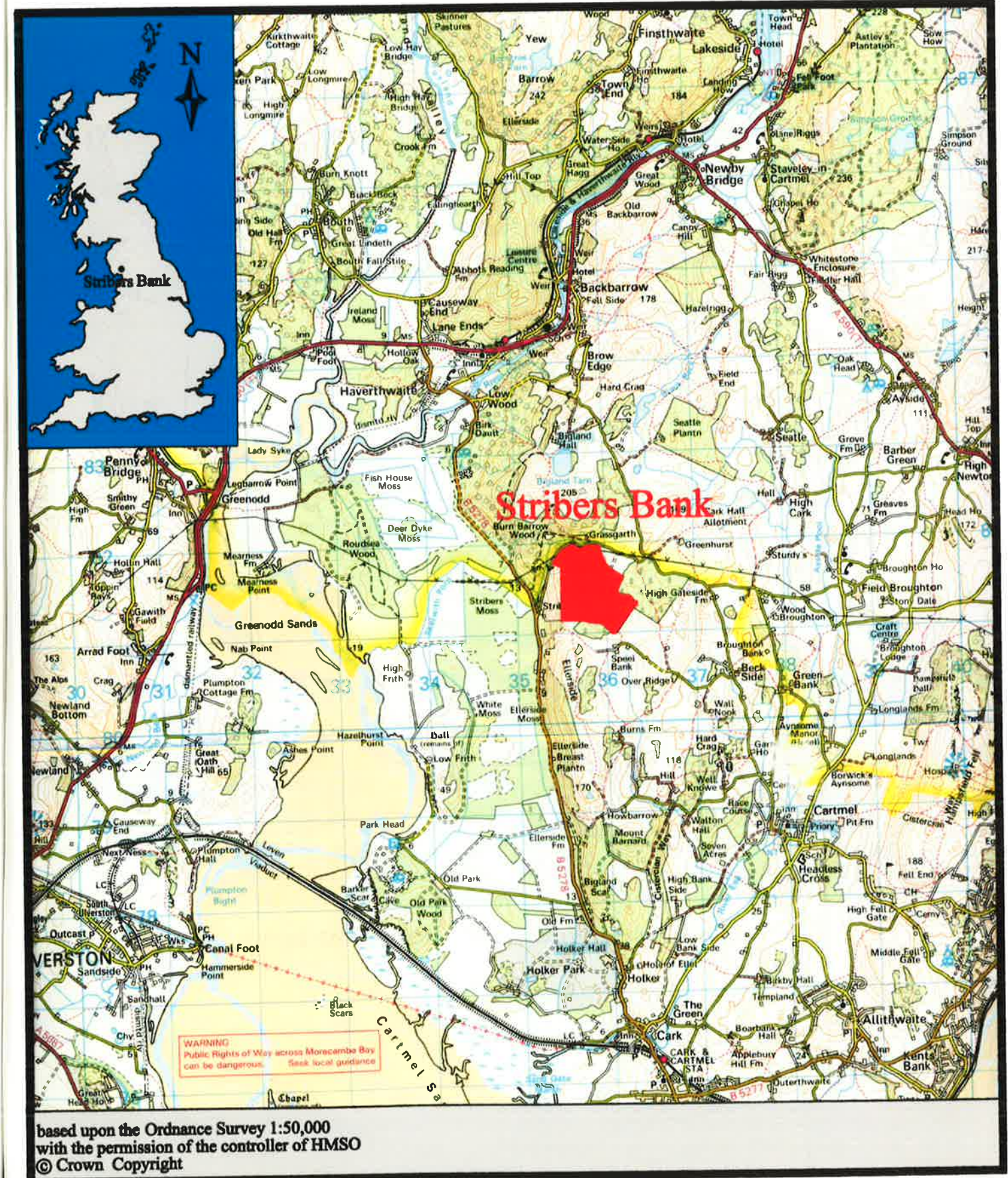


Fig 1: Stribers Bank, Cumbria Location Map

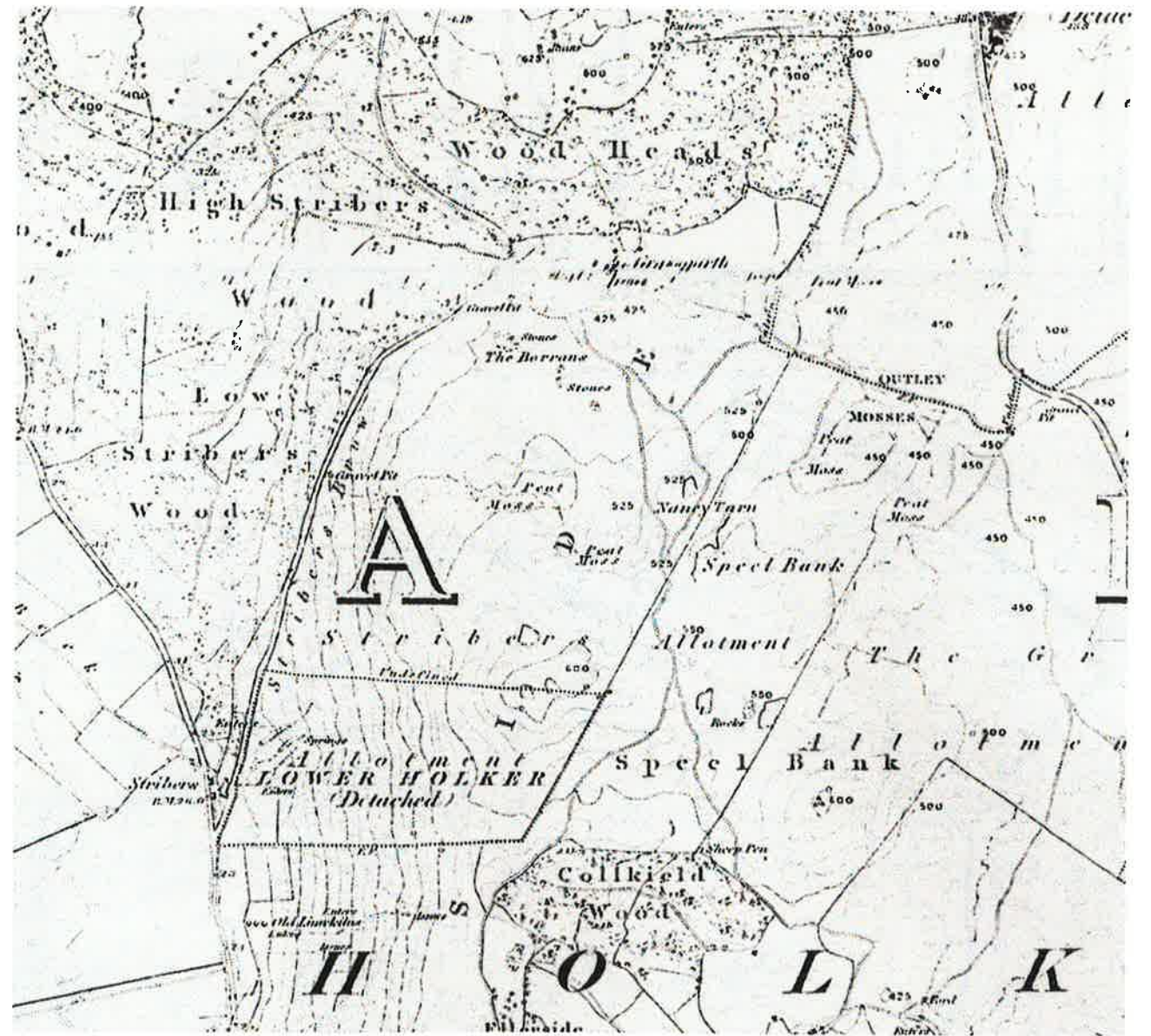
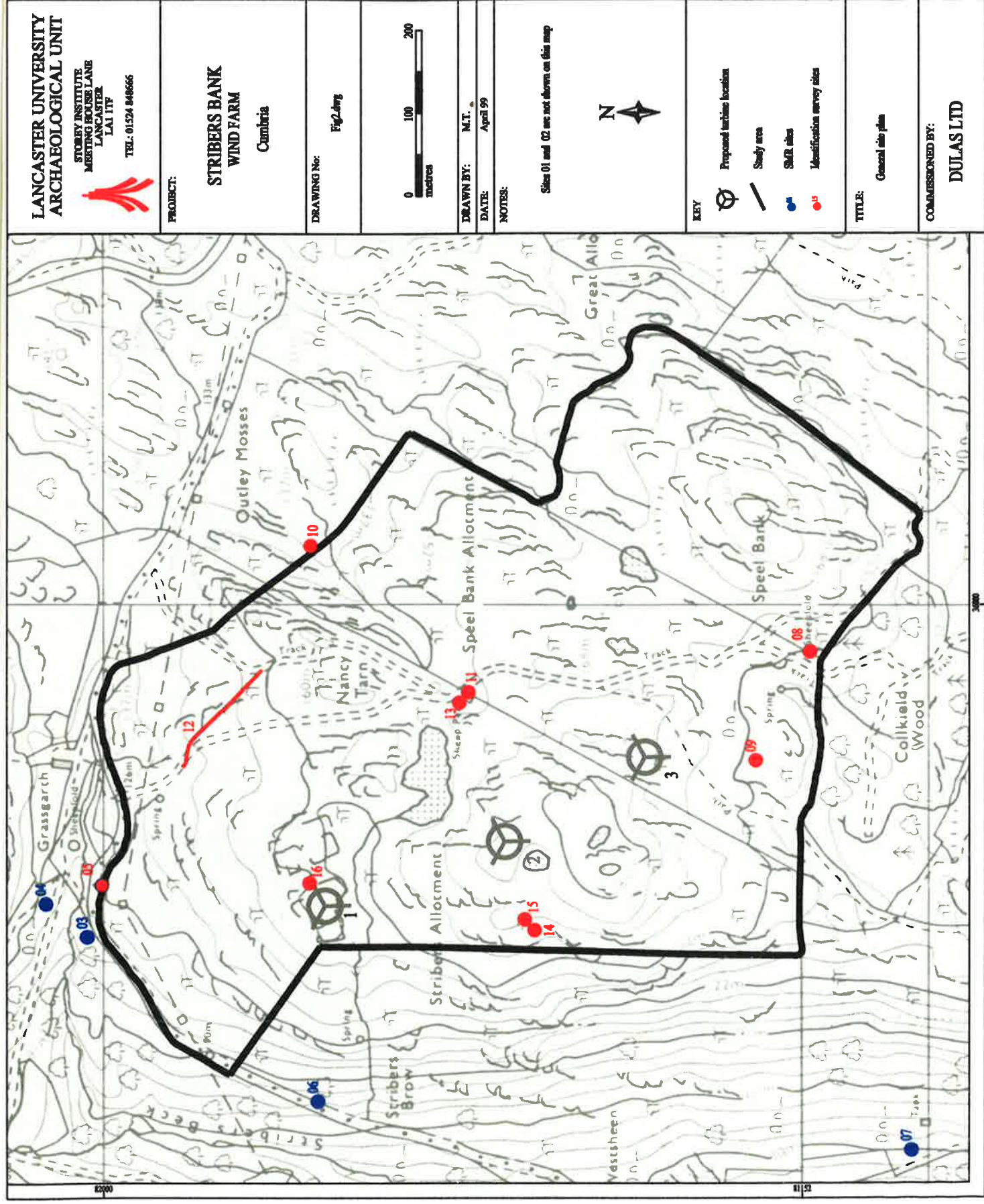


Fig 2 OS First Edition Map (1850) of the study area



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PROJECT:

STRIBERS BANK
WIND FARM
 Cumbria

DRAWING NO:

Fig 2.dwg



DRAWN BY: M.T.

DATE: April 99

NOTES:

Sites 01 and 02 are not shown on this map



KEY

- Proposed turbine location
- Study area
- SMH sites
- Modification survey sites

TITLE:

General site plan

COMMISSIONED BY:

DULAS LTD

Figure 3: Stribers Bank Site Plan



Plate 1: Site 08 Sheep Fold (looking south-east)



Plate 2: Site 09 Agricultural Plot (looking south-west)



Plate 3: Site 10 area of recent tipping



Plate 4: Site 11 Blocked gateway (looking west)



Plate 5 Site 12 Hollow way (looking north-west)



Plate 6: Site 13 natural hollow erosion marks



Plate 7: Site 14 Circular Cairn (looking north-east)



Plate 8: Site 05 Gravel quarry (looking west)