GLAMORGAN-GWENT ARCHAEOLOGICAL TRUST CONTRACTS SECTION

ARCHAEOLOGICAL DESK-TOP STUDY PROPOSED WIND-FARM BLAENRHONNDA, MID GLAMORGAN

MAY 1993

REPORT NO. 93/034 PROJECT NO. A124

BLAENRHONNDA WIND-FARM

CONTENTS			
Summary		3	
Acknowledgements			
 Introduction Physical environment Summary of archaeological resource Impact of proposals on archaeological resource Recommendations 			
Appendix One:	Specification	11	
Appendix Two:	Summary of information on the county Sites and Monuments Record		
Appendix Three:	Cartographic and documentary evidence	16	
Appendix Four:	Aerial photograph evidence	20	
Appendix Five:	Previous fieldwork in the area	21	
Appendix Six:	Site visit	22	
Appendix Seven:	Sources consulted	24	
Appendix Eight:	Catalogue of research archive	25	
Bibliography	Dlaw of managed describerant asset	26	
Figure One:	Plan of proposed development area		

Summary

EcoGen Ltd are preparing an Environmental Statement to accompany a planning application for a proposed wind-farm site at Blaenrhonnda, Mid Glamorgan. EcoGen commissioned the Glamorgan-Gwent Archaeological Trust (Contracts Section) to undertake an archaeological desk-top study of the impact of the proposal. The study identified two sites which are Scheduled Ancient Monuments and are protected by statutory powers, and two archaeological sites in the area which should be excluded from any groundworks, but elsewhere it is considered unlikely that the proposal will have a significant impact since the area has been afforested.

Acknowledgements

This report was prepared by M Locock BA AIFA (Projects Manager (Assessments), Glamorgan-Gwent Archaeological Trust), with the assistance of J J Hall BSc AIFA, P Wilkinson BA AIFA and GGAT staff.

The author is grateful to EcoGen Ltd, the Forestry Commission, and the staffs of the West and Mid Glamorgan Record Offices and the Central Register of Air Photography for Wales for their help during the research.

1. Introduction

1.1 Development proposal and commission

EcoGen Ltd intends to submit a planning application for the use of the ridge of Mynydd Blaenrhonnda as the site of a wind-farm. EcoGen commissioned the Glamorgan-Gwent Archaeological Trust (Contracts Section) to undertake a desk-top study of the archaeological implications of the proposal, for submission as part of an Environmental Statement in support of the application.

1.2 Specification for the report

The specification for the study was drawn up to fulfil the brief prepared by Glamorgan-Gwent Archaeological Trust (Curatorial Section), acting as archaeological advisers to the local planning authority. The specifications are given in full below (see Appendix One): the work includes collation of information on the county Sites and Monuments Record; study of documentary and map sources; checking of aerial photograph coverage; and a site visit.

1.3 Layout of the report

The report describes the physical layout of the site (Section 2), and then summarises the archaeological resource (Section 3). An assessment of the likely impact of the proposal is made (Section 4) and appropriate mitigatory measures are identified (Section 5). Detailed data is given in a series of Appendices.

1.4 Abbreviations used in the report

Sites previously recorded in the county Sites and Monuments Record are referred to by their Primary Record Number (PRN) and National Grid Reference (NGR). References to documents and published works are given in brackets: the full titles will be found in the bibliography.

2. Physical environment

2.1 Topography

The ridge of Mynydd Blaenrhonnda runs north-south from Mynydd Beili-glas to Cefn Nant-y-gwair, on the west side of the valley of the Afon Rhonnda Fawr; to the west, the land drops into the valleys of tributaries of the Afon Afan. The ridge has a broad, flat summit with steep slopes on each side; the north and east slope has exposed rock faces.

2.2 Surface geology

The ridge of Craig-y-llyn is of Pennant sandstone (BRG 1970); the summit is covered by sandy soil, with blanket peat development 0.15m - 1.0m deep.

3. Summary of archaeological resource

3.1 General

The Sites and Monuments Record records the presence of numerous sites of archaeological interest in the general area. However, in view of the likely impact of the current land use (intensive forestry plantation) on the condition of any archaeological sites, there is likely to be a significant difference between the quality of the resource as it was in 1960 and its quality now. The following summary presents the probable nature of the resource in 1960, and then goes on to suggest its probable condition at present.

3.2 Prehistoric

The earliest evidence for human activity is the large number of Mesolithic flints found throughout the upland area: over 14 such find-spots have been identified in the development area and the immediate vicinity. The only settlement site to hav been located is that of Craig-y-llyn (468m). A similar, though smaller, body represents the Neolithic period, although evidence settlements have been located. A number of mounds and cairns on the ridge have been identified as Bronze Age round barrows and burial sites, with a varying degree of certainty: excavations have shown many of these supposed prehistoric features to be of post-medieval date. The mound at Bachgen Casrreg, at the south end of the area, is a Scheduled Ancient Monument. The major hoard from Llyn Fawr is of Bronze Age/Iron Age date, indicating continuing activity into later prehistory; an Iron Age occupation site lies to the east of the area (19m). Alongside this direct evidence for human activity, indirect evidence is provided by the palaeoenvironmental data (particularly pollen sequences) preserved in the peat deposits that are found in places throughout the area.

3.3 Roman

Roman activity in the Neath valley is represented by the fort at Nidum (Neath) and other military sites. The identification of the track A54 as a Roman road has not been confirmed by excavation, and the route was certainly in use in post-medieval times. It seems that Roman occupation of the area had little impact on the indigenous population and culture. It is improbable that substantial Roman sites on the ridge remain to be discovered.

3.4 Early Medieval and Medieval

The dyke of Ffos Toncenglau (2261m) is a Scheduled Ancient Monument, and runs north-south across the ridge, to the south of Llyn Fawr. These dykes are common in the Glamorgan uplands, and are interpreted as early medieval features intended to control access to the mountain pasture (RCAHMW 1976b, 5-6). The use of the area for pasture continued in the medieval period, when it came under the control of Neath and Margam Abbeys. These Cistercian houses operated a complex economic system, based on farm units with surrounding fields (granges) in the valleys, and large-scale sheep-rearing for wool on the uplands. It is probable that many of the ridge-routes were used for medieval sheep-farming, and it is possible that some of the structures found in the surrounding area are of this date (e.g. 2061w, 2062w), as are the longhouses on the west of the ridge (1735m, 1736m).

3.5 Post-medieval

There are few recognised post-medieval sites in the area, reflecting the continuing low intensity of exploitation. The Rhonnda Tunnel (D25a) runs beneath the ridge at the south end of the site.

3.6 Known archaeological sites in the affected area

The known archaeological sites are shown on Fig. 1. Further details will be found in Appendix One.

PRN	Description
917m 1686w 1784m 1980w 2078w	Finds, Meso Finds, Meso Find, Meso Finds, Meso Finds, Meso
1773m 1780m	Finds, Neo
713w 719w 720m 1478m 1480m	Round barrow, BA Round barrow, BA Round barrow, BA (Scheduled Ancient Monument) Mound, BA Mound, BA
1046m	Find, prehistoric
A54	?Roman road
2261m	Dyke, DA (Scheduled Ancient Monument)

712w 1839m Natural feature Undated find

FF

Site of pollen column

3.7 Probable condition of the archaeological resource at present

Modern forestry techniques have a substantial impact on the archaeological resource. Archaeological deposits occur in the zone between the modern topsoil and the drift geology, and therefore any activity that cuts down to the subsoil is likely to disturb any archaeological sites. In the process of forestry planting, a range of such activities are undertaken, including the deep-ploughing of drainage channels, drilling for planting, and track construction. In addition, tree root systems are known to damage archaeological deposits. Most of the finds that have been recovered from the area were in fact brought to the surface by the forestry planting, indicating that disturbance was occurring. It is probable, therefore, that any archaeological site in the area has been significantly degraded by afforestation. Further disturbance will be caused by the clearfelling of the plantation. The mound sites (713w, 719w, 720m, 1478m, 1480m) that have not been planted have survived in good condition.

The limited archaeological resource within the development (apart from the known sites) has been significantly degraded in the recent past, and it is unlikely that undisturbed deposits survive, with the exception of possible palaeoenvironmental and related deposits in areas of deep peat growth.

4. Impact of development proposals on archaeological resource

4.1 Nature of the impact

The construction of a wind-farm will have a series of impacts affecting the below-ground deposits, including the building of footings and mountings for masts, cables, roads and other structures. However, it is unlikely that this type of impact will be greater than that of the existing forestry regime, especially if the existing unforested areas and roads are excluding from new groundworks.

4.2 Sites with statutory protection

The Scheduled Ancient Monuments of Bachgen Carreg round barrow (720m) and Ffos Toncenglau dyke (2261m) lie on the edge of the proposed area. Any proposal affecting these sites or their setting would require Scheduled Monument Consent from Cadw: Welsh Historic Monuments. The northeast part of the site has been defined as a Site of Special Scientific Interest.

4.3 Other known sites

Of the other known sites, one of the presumed Bronze Age features (713w) and mound 712w may be degraded by further development. The two mounds (1478m, 1480m), Carn-y-wiwer (719m), pollen site (FF) and the road (A54) are unlikely to be degraded by further development.

4.4 Possible sites

There may have been other sites in the area, but it is considered unlikely that they now survive.

5. Recommendations

5.1 Sites with statutory protection

It is strongly recommended that the sites and settings of the Scheduled Ancient Monuments of Bachgen Carreg and Ffos Toncenglau are excluded from the proposals. It is advised that the proposal should be discussed with Cadw: Welsh Historic Monuments at an early stage in the design of the proposals.

5.2 Other known sites

It is strongly recommended that the sites and vicinity of Carn Foesen (713w) and Carn Goch (712w) are excluded from any proposed groundworks.

Other known sites require no special mitigatory measures.

5.3 Unknown sites

In view of the present land-use, it is considered unlikely that significant unknown deposits survive, and so no mitigatory measures are considered necessary.

5.4 Personnel

Any further arcaheological work should be carried out by qualified archaeological personnel.

Appendix One: Specification

Archaeological Desk-Top Study Specifications

BLAENRHONNDA PROPOSED WIND-FARM

Definition of Study

The project will conform to the draft Standard in British Archaeology for Archaeological Desk-Based Studies, issued by the Institute of Field Archaeologists in September 1992, and will be carried out in accordance with the GGAT Contracts Guidelines for the Execution of Assessment Projects, and the brief prepared by GGAT (Curatorial Section).

1. Objectives

- 1.1 Assessment of existing information to determine the extent, character and significance of archaeological interests, in local, regional, and wider contexts, and the likely effects of the proposed development on such interests, by means of documentary study and field visit.
- 1.2 Identification of areas or features requiring further assessment where present archaeological knowledge is insufficient for informed decisions to be made during the planning process.

Documentary Searches

- 2.1 Collation of information about sites recorded in County Sites and Monuments Record (SMR).
- 2.2 Search of cartographic sources for additional archaeological information, and collation of information relating to archaeological interests.
- 2.3 Analysis of aerial photographic coverage held by the Central Register of Air Photography for Wales for additional archaeological information, and collation of information relating to archaeological interests.
- 2.4 Analysis of relevant primary historic documents and published sources for additional archaeological information, and collation of information relating to archaeological interests.
- 2.5 Analysis of borehole data, geotechnical studies, etc., for additional information, and collation of information relating to archaeological interests.

Fieldwork

- 3.1 Site visit to check the present condition of archaeological features identified by 2.1 - 2.5, and to assess factors that may have influenced the condition or visibility of these features.
- 3.2 Identification of previously-unknown archaeological features.
- Rapid recording of archaeological features (e.g. sketch plotting and photographs).

4. Assessment

- 4.1 Assessment of the information acquired from the execution of 2 and 3.
- 4.2 Assessment of the impact of the development proposals on the defined archaeological interests.

5. Reports

The results of the study will be reported in a series of reports.

- Client A bound report comprising a synthesis of data gathered through the execution of 2-4, placing the archaeological resource within its wider context, with supporting evidence in appendices, and identification of features of archaeological interest onto scale drawings, or listing of such features by eight-figure National Grid References. The identification of legal constraints (e.g. scheduled ancient monuments, listed buildings) relating to archaeological interests. A copy of this report will be deposited with the county Sites and Monuments Record.
- 5.2 Academic A digest report of significant archaeological information in an appropriate outlet (e.g. regional/national academic journal).
- 5.3 Other Initial notification to Cadw of sites which may satisfy the Secretary of State's criteria for national importance, which are a prerequisite for statutory protection.

6. Archive

- 6.1 Preparation of an ordered archive of records made during the assessment in accordance with NMR cataloguing procedures.
- 6.2 Deposition of the assessment archive with an appropriate organisation (usually **GGAT Contracts** records).

6.3 Submission of a copy of the report for inclusion in the county SMR, within 6 months of the completion of the work.

7. Staff

7.1 The project will be managed by the Principal Archaeological Officer (Contracts), AG Marvell BA MIFA, and Projects Manager (Assessments), M Locock BA AIFA, and carried out by one of the Trust's Project Officers, all of whom have wide experience of such work.

8. Insurance

8.1 GGAT Contracts holds insurance cover for all risks involved in this type of project, including substantial Professional Indemnity cover.

9. Scope of the work

9.1 The work outlined in this specification will be carried out to the highest professional standards, and the conclusions drawn will be based on a considered review of the evidence available. However, the archaeological resource is unpredictable, and the encountering of unexpected archaeological deposits on the site cannot be ruled out.

Appendix Two: Sites listed on the county Sites and Monuments Record, held at GGAT, Swansea

PRN	NGR		Description
A54 D25a1 E15			Road, ?Roman * Railway, PM * Dyke, DA: SAM Gm 118 (RCAHMW 1976c no. 802) *
18m 19m	SN 9230 (SN 9218 (Cairnfield, BA Settlement, IA: SAM Gm 101 (RCAHMW 1976b
23m 26m 27m 468m	SN 9178 (SN 9196 (SN 9187 (SN 917 (SN	0303 0113	no. 711) Finds (Llyn Fawr hoard), BA/IA Finds, Meso (Savory 1961) Round barrow, BA (RCAHMW 1976a no. 124) ?Settlement, Meso (Savory 1961; RCAHMW
576m 577w	ST 0017 9 SN 8984 0	9496	1976a no. 25) Round barrow, BA (RCAHMW 1976a no. 356) Round barrow, BA (RCAHMW 1976a no. 118):
712w 713w	SN 9056 (0168	SAM Gm 235 Natural feature (RCAHMW 1976a no. x) * Round barrow (Carn Foesen), BA (RCAHMW
719w	SS 9020 9		1976a no. 120) * Round barrow (Carn y Wiwer), BA (RCAHMW 1976a no. 345) *
720w	SS 9082 9		Round barrow (Bachgen Carreg), BA (RCAHMW 1976a no. 346): SAM Gm 234 *
721w 810w	SS 9095	9737	Round barrow (Pebyll), BA (RCAHMW 1976a no. 348): SAM Gm 330 Round barrow, BA (RCAHMW 1976a no. 247)
818w 917w	SN 9074 (Round barrow, BA (RCAHMW 1976a no. 119): SSSI Finds, Meso *
918w		003	Finds, Meso
919w	SN 895	035	Finds, Meso
		035	Finds, Meso: SSSI
		029	Finds, Meso (GCH 1984, 85)
1043m		998	Finds, undated flints
1046m 1047m		025 033	Finds, prehistoric: SSSI *
1047m		019	Finds, prehistoric: SSSI Finds, prehistoric
1052m		018	Finds, prehistoric
1476m		032	Finds, prehistoric: SSSI
1478m	SN 9114	0305	Mound, BA: SSSI *
1480m	SN 9095	0300	Mound, BA: SSSI *
1586m		03	Find, BA
1653m		022	Finds, Neo
1686W		028	Finds, Meso *
1687w 1688w		037 033	Find, IA: SSSI
1735m	SS 9118		Find, prehistoric Longhouse, M (RCAHMW 1982, 54)
1736m	SS 9175		Longhouse, M (RCAHMW 1982, 54)
1748m	SS 9186		Enclosure, M/PM (RCAHMW 1982, 67)

```
Misplaced Neo site, actually at SN 932
        SN 928
                 025
1764m
                         024 (outside assessment area)
                         Finds, Neo
1765m
        SN 925
                 025
                         Finds, Meso
        SN 9165 007
1766m
                         Finds, Meso
1771m
        SN 9165 008
        SN 917
                         Finds, Meso
                 800
1772m
                         Finds, Neo *
        SN 912
                 019
1773m
                         Finds, Meso
        SN 917
                 001
1774m
                         Finds, Meso *
1780m
        SN 914
                 003
                         Finds, Neo
        SS 909
                 988
1781m
                         Finds, Meso *
        SN 913
1784m
                 024
                         Finds, Meso/Neo
        SN 915
1785m
                 021
                         Finds, Meso/Neo
        SN 918
                 020
1786m
                         Finds, Neo?
        SS 918
                 972
1794m
                         Finds, undated *
1839m
        SN 9150 0275
1868m
        SS 981
                 937
                         Finds, Meso
        SS 910 993
                         Find, Prehistoric
1875m
                         Find, Neo *
        SS 902 990
1980w
                         Enclosure, ?M/PM (RCAHMW 1982, 66)
Enclosure, ?M/PM (RCAHMW 1982, 66)
        SN 8910 0080
2061w
        SN 8950 0140
2062W
                         Finds, Meso *
        SS 902 992
2078w
                         Dwelling, PM
        SS 915 990
2151m
        SN 91
                         Dyke, DA (= E15) *
2261m
                 01
```

Abbreviations and periods

```
*
        within affected area
BA
        Bronze Age (2000 BC - 700 BC)
        Dark Age (400 AD -1100 AD)
DA
        Iron Age (700 BC - 100 AD)
IA
        Medieval (1100 AD -1500 AD)
M
Meso
        Mesolithic (8000 BC - 4000 BC)
        Neolithic (4000 BC - 2000 BC)
Neo
        Post medieval (1500 AD -1900 AD)
PM
        (43 AD - 410 AD)
Roman
SAM
        Scheduled Ancient Monument
        within Site of Special Scientific Interest
SSSI
        (as suffix to PRN) Mid Glamorgan
        (as suffix to PRN) West Glamorgan
```

Appendix Three: Cartographic and documentary evidence

The affected area is divided between the modern parishes of Rhigos, Mid Glamorgan, and Glyncorrwg and Blaengwrach, West Glamorgan. Glyncorrwg and Blaengwrach were part of the medieval parish of Glyncorrwg, in the lordship of Avon Wallia and the hundred of Neath. Rhigos lies within the medieval chapelry of Ystradyfodwg, in the parish and hundred of Llantrisant (Rice Merrick 1983 ed.) and the lordship of Glynrhonnda.

All relevant documents held by the Mid Glamorgan Record Office and the West Glamorgan Record Office were examined, in addition to secondary sources and printed editions.

1543

The parish of Glyncorrwg was a single unit, with a small population (Phillips 1925, 646).

1671

By this date, the Hearth Tax returns show that the parish of Glyncorrwg had been subdivided into the townships or hamlets of Glyncorrwg proper and Blaengwrach (Phillips 1925, 635).

1728

Lordship of Avon Wallia

"from rents in Glyncorrwg

£2 11s 11 3/4 d"

This is a small value compared to other lordships.

In the early 18th century, the valleys of Ystradyfodwg were used for intensive cattle-raising, and even upland farms had clover fields. The market centre for the cattle was Llantrisant Fair (GCH 1974, 323; 356; 357).

1763

The parish of Glyncorrwg contained 35 families (Guy 1991, 33). Ystradyfodwg was a chapel within the large parish of Llantrisant, which had 250 families (Guy 1991, 64-64).

1787

 $\underline{\underline{A} \ \underline{book}} \ \underline{\underline{Charles}} \ \underline{\underline{Containing}} \ \underline{\underline{actual}} \ \underline{\underline{surveys}} \ \underline{\underline{or}} \ \underline{\underline{plans}} \ \underline{\underline{of}} \ \underline{\underline{the}} \ \underline{\underline{estates}} \ \underline{\underline{of}}$

This early set of accurate estate plans shows all of the proposal area as belonging to Charles Edwin. The ridge is divided into blocks held by the various farms: Cefn Nant-y-gwair is part of Abergwenfi Farm (tenant David Lewis) (Map XL); Cefn Tyle-brych is part of Blaencorrwg Farm (Map XLIII); Blaenrhonnda Hill and Troed Hirew Rees Farm are part of the unnamed farm in the Garreg Lwyd valley (Map XLIV).

early 19th century

In Blaenrhonnda there was some charcoal burning, creating characteristic platforms (<u>aelwyd gols</u>) (Lewis 1959, 24). There was also some early coal-mining on a domestic scale (Lewis 1959, 38).

1847

Glyncorrwg tithe map and apportionment (WGRO P/72/1,2)

This map shows many topographic details, although it is primarily intended to define land-ownership units. The route of Cefn fford is shown as a track from Neath to Merthyr Tydfil. Most cairns on the parish boundary are shown as such; the round barrow site of Pebyll, to the south of the affected area, is shown as a cairn with a surrounding bank.

Field	Owner	Occupier	Field name
2 3 95 311 312	Earl of Duni Rees Jenkins Earl of Duni	raven Rees Jenkins raven Rees Jenkins s Himself raven Rees Jenkins sey John Jenkins	Mountain Coed cae tyle bygh Twyn tyle trawst ancllest Mountain Mynydd Blaengwifi

All fields were noted as "pasture".

The summit area was clearly used for rough grazing. The continued maintenance and demarcation of the boundary-cairns suggests that the grazing rights were still of some value.

Ystradyfodwg tithe map (MGRO P/67: no apportionment held)

This map divides the Mid Glamorgan side of the ridge into six large fields, corresponding to those in the 1787 estate book (Field nos. 1190, 1191, 1239, 1265, 1409 and 1444).

1869

Parliamentary enclosure award, Hirwain Common, Ystradyfodwg (MGRO Q/DP 337)

When this area was enclosed, the land to the southwest (Mynydd Beili-glas) was still part of the Dunraven estate.

1870

Ordnance Survey, 25" to 1 mile, 1st edition

Sheets 10.15, 17.3, 17.7

These maps form the first detailed topographic survey of the area. Some of the cairns are labelled using the Gothic typeface, indicating their supposed status as ancient monuments (Carn y Wiwer, Carn Moesen (= Foesen) and Carn Goch). Other are shown simply as "pile of stones"; Bryn Bach is labelled "pile of sods". All these features lie on the parish (now the county) boundary. The summit is shown throughout as rough grazing, marked as "moss" on the south sheet. There are no settlements on the ridge. In the area of Cefntyle-brych (SN 904 014), two connected walled enclosures are shown, presumably sheep pens.

The Blaenrhonnda valley was still rural between the isolated farms (Lewis 1959, 197).

1964

Ordnance Survey, 6" to 1 mile, 2nd edition

At the time this was surveyed, the west side of the ridge (Cefntyle-brych and Panwaun Pen-coetgae) had been planted with forestry: soon afterwards, the rest of the ridge was planted.

Discussion

The historic land-use of the area can be defined with some confidence. The ridges were used in medieval times as pasture, and were probably at that time parish commons. The boundary cairns demarcating the division between the parishes are likely to have been created at this time, perhaps re-using any pre-existing landmarks. In post-medieval times, it seems that the lord of the manors enclosed the land and restricted the right of common; as is usual, this was carried out by individual agreement rather than parliamentary act; the parish commons were probably re-located in the valley-bottoms. Certainly, in the Neath valley the riverside meadows were parish commons until the 19th century. The consolidated ownership in the 1787 estate maos suggests that

enclosure had only recently occurred: by 1847, parts of the estate had been sold on to tenants. The importance of owning the land, of relatively low agricultural value, may lie in the mineral rights: certainly, this was the case of Hirwaun Common, to the east. Thus, from medieval times onwards the are was probably used for rough grazing. This use continued until modern forestry planting. On the valley slopes and floors, cattle farming was supplemented by, and eventually replaced by, industrial exploitation of the coal deposits.

Appendix Four: Aerial photograph evidence

The aerial photographs held by the Central Register of Air Photography for Wales were examined for possible additional sites by P Wilkinson BA AIFA (Project Officer, GGAT) and M Locock.

The sorties from 1967 onwards post-date the afforestation of the area, and were studied in less detail. Unfortunately, the 1947 sortie prints were of a poor quality, rendering stereoscopic study difficult. Despite these problems, a substantial number of photographs were examined. No unrecorded features were identified.

Coverage checked	Date	
RAF sorties CPE/UK 1997 540/525 58/3506	1947 1951 1960	(not checked - no prints held)
58/RAF 9412	1969	nera)
OS sorties OS 67-186	1967	
Commercial J A Storey	1985	(colour)

Appendix Five: Previous fieldwork in the area

The area of Mynydd Blaenrhonnda, Craig-y-llyn and Llyn Fawr has produced a substantial proportion of the evidence for prehistory in the old county of Glamorgan.

This has included the substantial collections of flint implements recovered from fieldwalking of the forest-planted areas, of Mesolithic and Neolithic date (see Appendix Two); settlement sites of this date have been suggested nearby at Craig-y-llyn (468m) and Cefn Glas (1477m). The Iron Age village of Garreg Lwyd lies to the east of the affected area (19m).

In addition to the specifically archaeological studies, the peat formations on the Craig-y-llyn ridge have provided important palaeoenvironmental evidence. A section across the bog east of Ffos Ton Cenglau has shown the changes in pollen reflecting the varying tree-cover, which decreases markedly at the end of Zone VII, presumably marking the human clearance of the area (Hyde 1940). More recently, a pollen column from the Cefn Ffordd site (Fig. One, FF) has been studied (Chambers 1982), dating the growth of blanket peat to the early Bronze Age in the locality, following artificial tree clearance.

In 1992, GGAT carried out an assessment and subsequent excavation north of Craig-y-llyn at Cefn-yr-Esgyn (Lawler 1992a; 1992b). Work by Fox and Fox in the 1930s had identified two groups of cairns on a slight ridge to the northeast of Llyn Fawr, totalling some 30 or 40 cairns (Fox and Fox 1935, 420; 1936, 94). The cairns were interpreted by Fox and Fox as burial mounds, with cist chambers surrounded by piles of stones. The cairn groups were subsequently surveyed by the Ordnance Survey in the 1950s. Following forestry planting, a site visit in 1960 could loacte only 13 cairns surviving, of which 4 had been damaged. A further visit in 1982 concluded that the cairns were probably created by field clearance. The excavation of the cairns, in 1992, confirmed this interpretation: it also showed that the cairns had been severely disturbed by the process of forestry planting (Lawler 1992b).

Appendix Six: Site visit

The site was visited and inspected in order to assess the present condition of the known archaeological sites in the affected area. Because the forestry planting is now mature, access to the area off the tracks was impossible; fortunately, all known sites apart from individual finds-spots were accessible.

1478m Mound

This area is not forested. Numerous ground features of apparently modern origin were found, but no convincing individual mound could be located.

1480m Mound

This area is not forested. The site could not be located.

A54 ? Roman road

This route, used until at least the late 18th century as the ridge path between Neath and Merthyr, now lies under one of the Forestry Commission gravel tracks. It is unlikely that any sensitive deposits survive.

713w Carn Foesen

This cairn has been left outside the area of tree-planting, and survives as a large grass-covered mound, with a small pile of stones on top. An iron boundary post marked "Corrwg/Fechan" is on the west side of the pile of stones.

712w Carn Goch

This site now consists of a small modern stone cairn on the east of a boundary post, similar to that at Carn Foesen. The Forestry Commission track runs west of this, and has apparently cut through an area of loose stone covered by grass, which may be the original cairn.

719w Carn-y-wiwer

This site could not be found on the ground. A small scatter of stones was located in a square enclosure (apparently post-medieval) to the east of the Forestry Commission track, which may be the recorded cairn. Alernatively, the site may lie in the wooded area. In either case, it is unlikely that any possible sensitive deposits would survive.

720w Bachgen Carreg

This site survives as a large, oval grass-covered mound, capped by a small stone cairn.

2261m Ffos Tonconglau

The Scheduled Ancient Monument is just to the east of the Forestry Commission planting, and is at present under grass.

No new sites were identified.

Appendix Seven: Sources consulted

In accordance with the draft <u>Standard in British Archaeology: Archaeological Desk-based Studies</u>, issued by the Institute of Field Archaeologists in 1992, the sources consulted are listed below.

SOURCES CONSULTED

County Sites and Monuments Record, Swansea (see Appendix Two)
Published sources (see Bibliography)
OS maps held by the West Glamorgan Record Office and the Mid
Glamorgan Record Office (see Appendix Three)
Tithe maps (see Appendix Three)
Estate maps and other documents (see Appendix Three)
Air photographs held by the Central Register of Air Photography
for Wales, Cardiff (see Appendix Four)
Site visit (see Appendix Six)

SOURCES NOT CONSULTED

Documentary and cartographic sources

Collections held by the Public Record Office, National Library of Wales (Aberystwyth) and other record offices were not consulted, since sufficient data was obtained from the Mid Glamorgan and West Glamorgan County Record Offices and published works. The 2nd edition OS 25" maps were not consulted because WGRO and MGRO did not hold them.

Pictorial sources

No unpublished pictorial sources were examined.

Aerial photograph collections

No further collections were consulted since the Welsh Office Central Register contained adequate coverage.

Geotechnical information

No geotechnical data was available.

Secondary sources

No further secondary sources were consulted, since sufficient primary data was obtained to allow conclusions to be drawn.

Appendix Eight: Catalogue of research archive

The research archive is held at GGAT, Swansea, classified according to the NMR archive material categories, and includes the following:

- A. Copy of the report
- B. Notes from site visit
- C. Photocopies of OS maps at various scales, annotated by researcher
- D. Photographs from site visit
- G. Notes made during research, including transcripts of relevant documents and notes from secondary sources
- I. Annotated drafts of the report
- L. Brief and specification for the report
- M. Correspondence and notes from meetings with specialists

There is no material for classes E, F, H, J, K and N.

Bibliography

BRG	1970	British Regional Geology: South Wales (3rd edition).
Chambers, F M	1982	"Two radiocarbon-dated pollen diagrams from high-altitude blanket peats in south Wales", <u>Journal</u> of <u>Ecology</u> 70, 445-459.
Fox, A and Fox, C	1935	"Field survey of Glamorgan", Bulletin of the Board of Celtic Studies 7, 220-223; 338-341; 418-420.
Fox, A and Fox, C	1936	"Cairn cemeteries", <u>Bulletin</u> of the Board of <u>Celtic</u> Studies 8, 92-93; 274-275.
GCH	1974	Glamorgan County History, Vol. 4: Early Modern Glamorgan (Glamorgan County History Trust, Cardiff).
GCH	1984	Glamorgan County History, Vol. 2: Early Glamorgan: Prehistory and early history (Glamorgan County History Trust, Cardiff).
Guy, J R	1991	The Diocese of Llandaff in 1763 (South Wales Record Society, 7, Cardiff).
Hyde, H A	1940	"On a peat bog at Craig-y-llyn, Glamorgan", New Phytologist 39, 226-233.
Lawler, M	1992a	Proposed Ffyndaff Extension South: Preliminary Archaeological Assessment (GGAT, Swansea, May 1992).
Lawler, M	1992b	A Cairnfield at Cefn-yr-Esgryn, Mid Glamorgan: Fieldwork undertaken in advance of the Ffyndaff opencast extension (GGAT, Swansea, December 1992).
Lewis, E D	1959	The Rhonnda Valleys (University College Cardiff Press, Cardiff).
Phillips, D R	1925	The History of the Vale of Neath (privately printed, Swansea).
RCAHMW	1976a	Royal Commission on Ancient and Historical Monuments in Wales: An Inventory of the Ancient Monuments in Glamorgan, Vol. 1: Pre-Norman, part i: The Stone and Bronze Ages (HMSO, Cardiff).

RCAHMW	1976b	Royal Commission on Ancient and Historical Monuments in Wales: An Inventory of the Ancient Monuments in Glamorgan, Vol. 1: Pre-Norman, part ii: The Iron Age and Roman Occupation (HMSO, Cardiff).
RCAHMW	1976c	Royal Commission on Ancient and Historical Monuments in Wales: An Inventory of the Ancient Monuments in Glamorgan, Vol. 1: Pre-Norman, part iii: The Early Christian Period (HMSO, Cardiff).
RCAHMW	1982	Royal Commission on Ancient and Historical Monuments in Wales: An Inventory of the Ancient Monuments in Glamorgan, Vol. 3: Medieval, part ii: Secular, Non-defensive (HMSO, London).
Rice Merrick	1983	Morganiae Archaiographia: A book of the antiquities of Glamorganshire (B Ll James ed.) (South Wales Record Society, Barry Island).
Savory, H N	1961	"Mesolithic site on Craig y Llyn", Bulletin of the Board of Celtic Studies, 19 ii, 163-165.

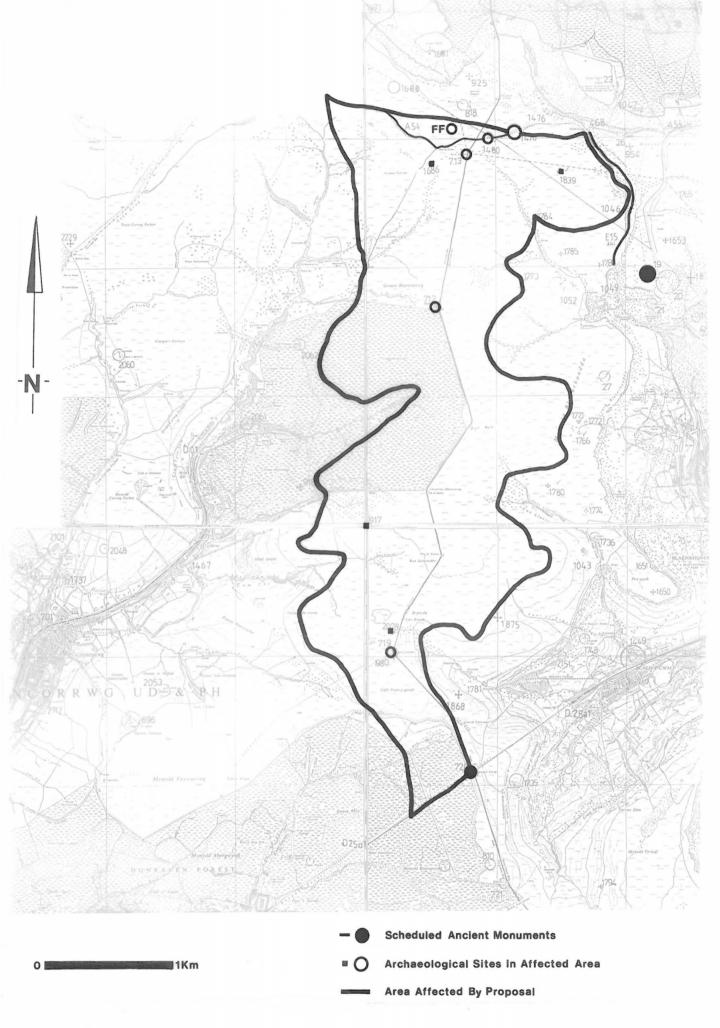


Figure One: Plan of proposed development area