

Cross Ridge Dykes of Southeast Wales

Survey and excavation

December 2006

A report for Cadw
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Contents	Page
Summary	4
Acknowledgements.....	4
Copyright notice.....	4
1. Introduction	5
1.1 The dykes of Southeast Wales	6
1.2 Topography and geology	7
2. Methodology.....	8
3. Selected cross-dykes of Southeast Wales.....	10
3.1 Individual sites	10
PRN 02261.0m Ffos Toncenglau SAM Gm 118.....	10
PRN 02262.0m Bwlch y Lladron.....	14
PRN 02263.0m Dyke 315m east of Tyla-glas Farm SAM Gm 260.....	17
PRN 02264.0m Cefn Gelligaer SAM Gm 261.....	20
PRN 02265.0m Bwlch Yr Afan SAM Gm 246.....	23
PRN 02266.0m Bedd Eiddil SAM Gm 285 (descheduled 2005).....	26
PRN 02267.0m Bwlch Y Clawdd SAM Gm 500.....	36
PRN 02268.0m Cefn Eglwysilan Cross Dyke West SAM Gm 452.....	39
PRN 02269.0m Cefn Eglwysilan Cross Dyke East.....	42
PRN 02415.0m Twyn Hywel Cross Ridge Dyke SAM Gm 456.....	43
PRN 02789.0w Tor Clawdd.....	45
PRN 02790.0w Cefn Morfydd Dyke SAM Gm 264A.....	48
PRN 02791.0w Clawdd Mawr (Bwlchgarw) SAM Gm 231.....	51
PRN 04513.0g Garreg Las Cross Dyke SAM Mm 260.....	54
PRN 04736m Senghenydd Dyke.....	58
PRN 05039g Mynydd Llwyd – Twyn Calch.....	61
4. Discussion and conclusions	64
Bibliography	65
Printed sources.....	65
Cartographic sources.....	65
Appendix I.....	66
Inventory of contexts	66
02261.0m SAM Gm 118 FFOS TONCENGLAU	66
02262.0m BWLCH Y LLADRON	66
02263.0m SAM Gm 260 DYKE 315M E OF TYLA-GLAS.....	67
02264.0m SAM Gm 261 CEFN GELLIGAER.....	68
02266.0m SAM Gm 285 (now descheduled) Bedd Eiddil.....	69
02790.0w SAM Gm 264A Cefn Morfydd Dyke.....	71
04513g SAM Mm 260 Garreg Las Cross Dyke.....	71
Figures	
Figure 1: Ffos Toncenglau Dyke 02261.0m.....	12
Figure 2: Bwlch y Lladron Dyke 02262.0m.....	15
Figure 3: Dyke east of Tyla-glas Farm 02263.0m.....	18
Figure 4: Cefn Gelligaer Dyke 02264.0m	21
Figure 5: Bwlch Yr Afan Dyke 02265.0m	24
Figure 6: Bedd Eiddil Dyke 02266.0m.....	29
Figure 7: Topographic survey of Bedd Eiddil Dyke 02266.0m	30

GGAT 83 Cross Ridge Dyke survey and excavation

Figure 8: Plan and section of Trench 1. Bedd Eiddil Dyke 02266.0m	31
Figure 9 and 10: Plan of excavated ditch (top) and stone cladding (bottom). Bedd Eiddil Dyke 02266.0m	32
Figure 11: Bwlch y Clawdd 02267.0m.....	37
Figure 12: Cefn Eglwysilan Cross Dyke West 02268.0m, Cefn Eglwysilan Cross Dyke East 02269.0m and Tywn Hywel Cross Ridge Dyke 02415.0m.....	40
Figure 13: Tor Clawdd Cross Ridge Dyke 02789.0w	46
Figure 14: Cefn Morfydd Cross Ridge Dyke 02790.0w.....	49
Figure 15: Clawdd Mawr, Bwlchgarw Cross Ridge Dyke 02791.0w	52
Figure 16: Garreg Las Cross Ridge Dyke 04513.0g	56
Figure 17: Senghenydd Dyke 04736m.....	59
Figure 18: Mynydd Llwyd – Twyn Calch Dyke 05039g	62

Plates

Plate 1: View to southeast of Ffos Toncenglau Dyke (02261.0m). 2m scale in shot.	13
Plate 2: View to west of revetted wall. Ffos Toncenglau Dyke (02261.0m). 2m scale in shot.	13
Plate 3: View to northwest of linear earthwork bank (02262.0m) showing the gap for the coastal path. 2m scale in shot.....	16
Plate 4: View to south of linear earthwork bank (02262.0m). 2m scale in shot.....	16
Plate 5: View to west of Dyke east of Tyla-glas Farm (02263.0m). 2m scale in shot.....	19
Plate 6: View to west of damaged ditch belonging to Dyke east of Tyla-glas Farm (02263.0m). 2m scale in shot.....	19
Plate 7: View to southwest of the east section of Cefn Gelligaer Dyke showing bank and ditch (02264.0m).....	22
Plate 8: View to northeast of the west section of Cefn Gelligaer Dyke showing bank and ditch (02264.0m).....	22
Plate 9: View to east of Bwlch Yr Afan Dyke (02265.0m) showing twin banks and central ditch. 2m scale in shot.....	25
Plate 10: View to west of Bwlch Yr Afan Dyke (02265.0m) showing damaged area west of the modern track. 2m scale in shot.....	25
Plate 11: View to west of Bedd Eiddil Dyke (02266.0m) showing damaged area. 2m scale in shot.....	33
Plate 12: View to south of Trench 1 through Bedd Eiddil Dyke (02266.0m). 2m scale in shot.....	33
Plate 13: View to south of excavated ditch and slumped bank of Bedd Eiddil Dyke (02266.0m). 2 x 1m scales in shot	34
Plate 14: View to north of the exposed earthwork bank of Bedd Eiddil Dyke (02266.0m). 2 x 1m scales in shot.....	34

GGAT 83 Cross Ridge Dyke survey and excavation

Plate 15: View to the east of the excavated earthwork bank of Bedd Eiddil Dyke (02266.0m). 2m and 1m scales in shot	35
Plate 16: View to the east of the excavated ditch and slumped earthwork bank of Bedd Eiddil Dyke (02266.0m). 2m and 1m scales in shot.....	35
Plate 17: View to the southwest of Bwlch y Clawdd Dyke (02267.0m). 2m scale in shot	38
Plate 18: View to the south of damaged area of Bwlch y Clawdd Dyke (02267.0m). 2m scale in shot	38
Plate 19: View to the northeast of Cefn Eglwysilan Cross Dyke West (02268.0m). 2m scale in shot.....	41
Plate 20: View to the northeast of vehicular damage on Cefn Eglwysilan Cross Dyke West (02268.0m). 2m scale in shot.....	41
Plate 21: View to the northeast of the south section of Twyn Hywel Cross Ridge Dyke (02415m). 2m scale in shot.....	44
Plate 22: View to the northeast of the north section of Twyn Hywel Cross Ridge Dyke (02415m). 2m scale in shot.....	44
Plate 23: View to the northeast of Tor Clawdd Cross Ridge Dyke (02789w). 2m scale in shot	47
Plate 24: View to the southeast of Tor Clawdd Cross Ridge Dyke (02789w). 2m scale in shot.....	47
Plate 25: View to the east of Cefn Morfydd Cross Ridge Dyke (02790.0w). 2m scale in shot.....	50
Plate 26: View to the southwest of eroded 20m section through Cefn Morfydd Cross Ridge Dyke (02790.0w). 2m scale in shot	50
Plate 27: View to the southwest of Clawdd Mawr (Bwlchgarw) Cross Ridge Dyke (02791.0w), showing motorcycle scarring. 2m scale in shot.....	53
Plate 28: View to north of Clawdd Mawr (Bwlchgarw) Cross Ridge Dyke (02791.0w). 2m scale in shot	53
Plate 29: View to the northeast through the central gap of Garreg Las Cross Ridge Dyke (04513.0g). 2m scale in shot.....	57
Plate 30: View of socketed stone at the western end of Garreg Las Cross Ridge Dyke (04513.0g). 2m scale in shot.....	57
Plate 31: View to northwest of Senghenydd Dyke on Cefn Eglwysilan (04736m). 2m scale in shot.....	60
Plate 32: View to northwest of Senghenydd Dyke on Mynydd Meio (04736m). 2m scale in shot.....	60
Plate 33: View to southeast of Mynydd Llwyd – Twyn Calch Dyke (05039g). 2m scale in shot.....	63
Plate 34: View to northeast of Mynydd Llwyd – Twyn Calch Dyke (05039g). 2m scale in shot.....	63

Summary

During the spring and early summer of 2006 a survey was undertaken of all known cross-ridge dykes in Glamorgan and Gwent. Cross-ridge dykes are a distinctive monument class in Southeast Wales, particularly in upland Glamorgan. Most of the ridges of the Glamorgan uplands are crossed by short lengths of earthwork banks, possibly designed to control access along these natural route ways. The date of these features is not clear, although it has been suggested they originated in the 8th or 9th centuries AD.

A desk-based assessment identified 23 sites listed in the regional Sites and Monuments Record (SMR) as dykes, these were further reduced to sixteen with the removal of sites that did not meet the monument criteria; of the remaining group ten sites are protected as Scheduled Ancient Monuments. One of the principle aims of the fieldwork was establish their current condition and the extent to which these monuments survive. It was envisaged that the sites would be augured and the earthwork features of one site evaluated through excavation. Permission was obtained to augur seven of the sixteen sites and one of these sites, Bedd Eiddil (PRN 02266.0m), was chosen for excavation. The remaining sites were subjected to a condition survey only. Each of the sites investigated produced results establishing that these monuments are situated on ferric stagnopodzols, built not long after the Ericaceae pollen had reached its maximum, the soil structure being a sol brun acide, forming since the early-medieval period, on a podzol that started forming in the Bronze Age.

A recurring feature of all the dykes surveyed is the continual damage caused by motorised vehicles, especially motorcycles. Fly-tipping is a problem identified on several of the scheduled monuments, especially those in more secluded locations such as those on Gelligaer Common and at the head of the Rhondda Valleys. Cross-ridge dykes are not a common feature of Southeast Wales and consideration must be given for added protection to those monuments found to be particularly at risk.

Acknowledgements

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The project was managed by Richard Roberts BA, the report was researched and prepared by Richard Lewis BA of the Glamorgan-Gwent Archaeological Trust, Contracts Division. The illustrations were prepared by Richard Lewis, Rob Dunning BSc and Paul Jones (Senior Illustrator). The fieldwork was undertaken by Richard Lewis, Scott Bradburn BSc MA and Jim Toseland BA.

We are grateful to the numerous landowners, tenants and secretaries of commoners' associations who gave permission for access to the various sites.

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1. Introduction

During the spring and early summer of 2006 a survey was undertaken of all known cross-ridge dykes in Glamorgan and Gwent. Cross-ridge dykes (*cloddiau*) are a distinctive monument class in Southeast Wales, particularly in upland Glamorgan. Most of the ridges of the Glamorgan uplands are crossed by short lengths of earthwork banks, possibly designed to control access along these natural route ways. The date of these features is not clear; although it has been suggested they originated in the 8th or 9th centuries AD (Fox and Fox 1935; Crampton 1966; RCAHMW 1976).

A desk-based assessment identified 23 sites listed in the regional Sites and Monuments Record (SMR) as dykes. These were further reduced to sixteen with the removal of sites that did not meet the monument criteria; of the remaining group ten sites are protected as Scheduled Ancient Monuments. These monuments are vulnerable to a variety of natural, animal and human threats and one of the principle aims of the fieldwork was to establish their current condition and the extent to which these monuments survive above and below ground, the latter where possible through sample auguring and excavation.

During the initial stages of the fieldwork permission was obtained to augur seven of the sixteen sites and one of these sites, Bedd Eiddil (PRN 02266.0m), was chosen for excavation. The remaining sites were subjected to a condition survey only, as the permission to augur could not be obtained from the landowners. Access to these sites, however, was provided by the new Open Access initiative.

Table of dykes

PRN	SAM Ref	NAME
02261.0m	GM118	FFOS TONCENGLAU
02262.0m	None	BWLCH Y LLADRON
02263.0m	GM260	DYKE 315M EAST OF TYLA-GLAS
02264.0m	GM261	CEFN GELLIGAER
02265.0m	GM246	BWLCH YR AFAN
02266.0m	None	BEDD EIDDIL (GM285 now descheduled)
02267.0m	GM500	BWLCH Y CLAWDD
02268.0m	GM452	CEFN EGLWYSILAN CROSS DYKE WEST
02269.0m	None	CEFN EGLWYSILAN CROSS DYKE EAST
02415.0m	GM456	TYWN HYWEL CROSS RIDGE DYKE
02789.0w	None	TOR CLAWDD
02790.0w	GM264A	CEFN MORFYDD DYKE
02791.0w	GM231	CLAWDD MAWR (BWLCHGARW)
04513.0g	MM260	GARREG LAS CROSS DYKE
04736m	None	SENGHENYDD DYKE
05039g	None	MYNYDD LLWYD – TWYN CALCH

1.1 The dykes of Southeast Wales

Silvester and Hankinson (2002) have recently produced a study of the short dykes of Mid and Northeast Wales, which includes a broad history of dykes in Britain; it is therefore not intended to repeat that information here. However, some discussion on the cross ridge dykes of Southeast Wales is pertinent to the present study. There is little doubt that communication routes used during the Roman times continued to be used into the early-medieval period. The Roman roads that connected the main military establishments west from Usk, Caerleon and Cardiff to Neath, Loughor and Carmarthen; and also north to Coelbren, Gelligaer, Penydarren and Brecon would have remained important routes in the early-medieval period (Pearson 2002; Evans and Sherman 2004). However, with the demise of centralised Roman government and the consequent lack of maintenance many smaller and less used roads fell out of use. This prompted the re-use of the many prehistoric routes that were once positioned along the ridge-tops of Southeast Wales.

In addition to the Roman roads still in-use in the lowlands of Gwent and the Vale of Glamorgan, seventeen tracks comprising twelve or thirteen routes across and along the ridges have been suggested (RCAHMW 1976, 3). These can be loosely divided into several groups; those that extended west from Neath and Loughor towards Llandovery, and those which branch north from Caerphilly, Gelligaer, Cowbridge (via the Ogmere Valley) to Sarn Helen and north and eastwards to Brecon and Bronllys. Positioned in very specific places along the routes of these roads, usually between the mountains or ridges and occupying defensible saddles and scarps, are earthwork monuments called cross ridge dykes (in English) or *cloddiau* (plural of *clawdd* in Welsh). These monuments in the past have been called a variety of names including short-dykes (Fox and Fox 1935), cross dykes and dikes in English, and *ffos* (*ffosydd*), *bwlch* (*bylchau*) in Welsh but for consistency the terms cross ridge dyke and *clawdd* are currently recognised in Wales as the standardised terminology.

Cross ridge dykes (*cloddiau*) were first investigated and their importance recognised by Sir Cyril and Lady Fox in the early part of the last century (Fox and Fox 1935; Fox 1937). They argued for an 8th or 9th century AD provenance for these earthworks based on their form, situation on known early-medieval routes and their association with early-Christian inscribed stones (RCAHMW 1976). Confirmation of their origins through more scientific methods was established in the 1960s through environmental analysis. Crampton (1966) has shown a selection of dykes to have been built not long after the *Ericaceae* pollen had reached its maximum, the soil structure being a ferric stagnopodzol, some areas with thin iron panning, over Palaeozoic sandstone bedrock, forming since the early-medieval period, on a podzol that started forming in the Bronze Age. One particular dyke, Clawdd Mawr (Bwlchgarw PRN 02791.0w) is suggested to have been built appreciably earlier than the three other dykes investigated, Bwlch yr Afan (PRN 02265.0m), Ffos Toncenglau (PRN 02261.0m) and Bedd Eiddil (PRN 02266.0m), based on its construction before or just as the *Ericaceae* pollen had reached its maximum (Crampton 1966, 381).

It should be noted that Offa's Dyke has been purposely removed from the present study because it does not conform to the monument criteria for cross ridge dykes, these being short lengths of linear earthworks, often with flanking ditches, spanning the route-ways found on upland ridges. In addition, Offa's Dyke now only survives as footpath with no visible earthworks, where it passes from Gloucestershire through the very eastern portion of Monmouthshire.

1.2 Topography and geology

The study area falls within several geological zones (George 1970). Much is occupied by Upper Palaeozoic rocks. The Coal Measures extend over the greater part of the uplands, mainly comprising sandstones but with more limited exposures of coarser grits and conglomerates. The Coal Measures immediately overlie (in sequence) Millstone Grit and Carboniferous Limestone. Both of these latter formations outcrop in a narrow band that surrounds the Coal Measures, extending in an anticlockwise arc from Llantrisant, Risca and Pontypool to Merthyr Tydfil. The scarp of the South Wales Coalfield, from near Newport to Abergavenny (and continuing northwards), marks the eastern boundary of the Coal Measures. Old Red Sandstone is the dominant formation beyond this boundary, as well as westwards from Newport, where it outcrops in a band that becomes increasingly narrow and discontinuous as it extends westwards.

Soils vary widely across the study area, reflecting the different geology and topographies. The upland areas of the Coalfield tend towards thin, loamy, often permeable soils, with thin peat horizons (Soil Survey of England & Wales 1983). The monuments surveyed are generally situated on Ferric stagnopodzols, mainly upland soils with a peaty topsoil and periodically wet, faintly mottled bleached subsurface horizon overlying an iron-rich layer, some areas with a thin iron pan, over Palaeozoic sandstone bedrock.

2. Methodology

A desk-based assessment identified 23 sites listed in the regional Sites and Monuments Record (SMR) as dykes. These were further reduced to sixteen with the removal of sites that did not meet the monument criteria; of the remaining group ten sites are protected as Scheduled Ancient Monuments. During the initial stages of the fieldwork permission was obtained to augur seven of the sixteen sites and one of these sites, Bedd Eiddil (PRN 02266.0m), was chosen for excavation. The remaining sites were subjected to a condition survey only, as the permission to augur and/or excavate could not be obtained from the landowners. Access to these sites, however, was provided by the new Open Access initiative.

A written and photographic record was made of all archaeological features and deposits in accordance with the GGAT *Manual of Excavation Recording Techniques*. Contexts were recorded using a single continuous three digit numbering system (indicated in bold e.g **100**) and are summarised in Appendix I. All classes of finds have been retained, cleaned, and catalogued and remain in temporary store until arrangements for final deposition are agreed, in line with the requirements of the Institute of Field Archaeologists' *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (2001). When substantial quantities of modern material were recovered, an on-site policy of record and discard was implemented.

The principal method of recording was through photography and annotated drawings (plans and sections) by detailed measurement, supplemented by written notes. All test pits were photographed using a Concord 3040 AF digital camera, resolution 2048/1536. The areas examined were located in relation to published boundaries (OS grid) and additional national grid references, where stated, were taken using a Garmin 76 GPS handheld receiver. Levels are to Ordnance Survey Datum and were related to the BM located on Bedd Eiddil at 401.66m OD. All remaining levels not to Ordnance Survey Datum were taken from the present ground surface.

All environmental samples were taken by the Cadw appointed palaeoenvironmental and scientific dating co-ordinator, Astrid Caseldine of Lampeter University. All deposits with a high potential for the preservation of palaeoenvironmental material were sampled by column for subsequent analysis.

Information recorded on the regional SMR and National Monuments Record (NMR) was assessed. Cartographic and documentary sources were studied, along with relevant published information. Current data and information on Scheduled Ancient Monuments and registered landscapes was obtained from Cadw and additional information requested from the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW).

Of the sources examined, historic map data were the most generally useful, and provided information for all areas. Only map sets giving a full coverage of the area (tithe and OS) were used. All historic maps, Ordnance Survey 1st, 2nd, 3rd, and 4th edition maps were used; these were scaled at 1/10,650 and 1/25,000. The high-resolution digital geo-referenced aerial photograph coverage, supplied by GetMapping under licence granted by Cadw, provided further useful information. Published and unpublished material was of varying degrees of usefulness, and the most useful are listed under the bibliography.

The project archive will be deposited with an appropriate receiving organisation, in accordance with the UKIC and IFA Guidelines. This archive will comprise the site archive, research archive, artefacts (excepting those that may be subject to the Treasure Act) and ecofacts, subject to the agreement of the site owners. A copy of the archive index will be deposited with

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the National Monuments Record, Royal Commission on the Archaeological and Historical Monuments of Wales (RCAHMW), Aberystwyth.

3. Selected cross-dykes of Southeast Wales

The sites are arranged in numerical order listed by their PRN. Each site is divided into several fields: a description field, containing all pertinent information about the site and comments from the present survey; augur and excavation fields, which detail the results of those practices if carried out on each site, however, not all sites were investigated in this way; conservation and management recommendations followed by a detailed contour plan (earthworks in red and ditches in blue) and photographs from the present survey. Details on all contexts derived from the survey and excavation can be found in Appendix I.

3.1 Individual sites

PRN 02261.0m Ffos Toncenglau SAM Gm 118

NGR: Northern end SN 91733 03023, Central gap SN 92049 02483,
Southern end SN 91877 01980

DESCRIPTION

Ffos Toncenglau dyke (Figure 1; Plates 1 and 2) is a long gently curving earthwork situated on Mynydd Belli-glas, on a ridge between the head of the Rhondda Fawr valley and Craig Llyn, a steep escarpment above the Llyn Fawr. The ridge here narrows to 1km in width and is traversed by a marshy saddle that was recently under modern forestry. The ground to the west rises to a steep natural scarp, c15m in height, along which the dyke has been positioned. The dyke extends for the entire width of the ridge with a short break at its centre, where the scarp is lowest, which is now used as a forestry track. This interruption to the dyke appears to be original (RCAHMW 1976, 7). The dyke forms an obstacle for passage along the ridge followed by the ancient trackway known as Cefn Ffordd. However, the ancient road now crosses the line of the dyke at the northern end, ascending the scarp by a terrace, rather than through the centre as is implied by the RCAHMW (1976, 7). The northern end of the dyke is situated at 530m OD and descends to 450m OD at its southern end where it falls into the steep sided Garreg Lwyd; the central hollow in the dyke lies at 485m OD. Both the northern and southern ends of the dyke terminate on precipices.

The dyke was originally interpreted as being formed by a bank of earth about 4.3m wide, revetted on the east side with a fairly massive dry-stone wall standing about 1.2m high and having grass-grown ends to the north and south respectively (RCAHMW 1976, 7). During the present survey a small section of revetted wall was identified in the south section of the dyke, a short distance from the central gap, exposed to c1m in height and composed of large sandstone blocks (Plate 2). Elsewhere along the dyke, and particularly along the northern stretch of the earthwork, these large sandstone blocks naturally outcrop and may have given rise to an impression of structure where none exist.

The present condition of the dyke is relatively good, a Cadw field monument warden report in 2004 noted damage to the northern section of the earthwork by agricultural/forestry vehicles but no indication of this was recorded at the time of the visit. The northern section has a little used modern path on top of the earthwork running its full length but damage here appears restricted to occasional areas devoid of vegetation, which are susceptible to weathering. It is difficult to distinguish earthwork from scarp along this northern length of dyke because of the rocky nature of the terrain, however, the presence of a false crest or step on the upper slope of the scarp indicates the actual location of the dyke. The southern section has experienced less erosion of the bank and has good vegetational cover. The revetment here is clearly visible in places and quite substantial standing c1m high and c5m wide. In places, the height of the bank

survives at a height of 4m, but these areas are currently under grass and how much of this is intact revetment or natural scarp is unclear.

RCAHMW reference 802 (1976, 7).

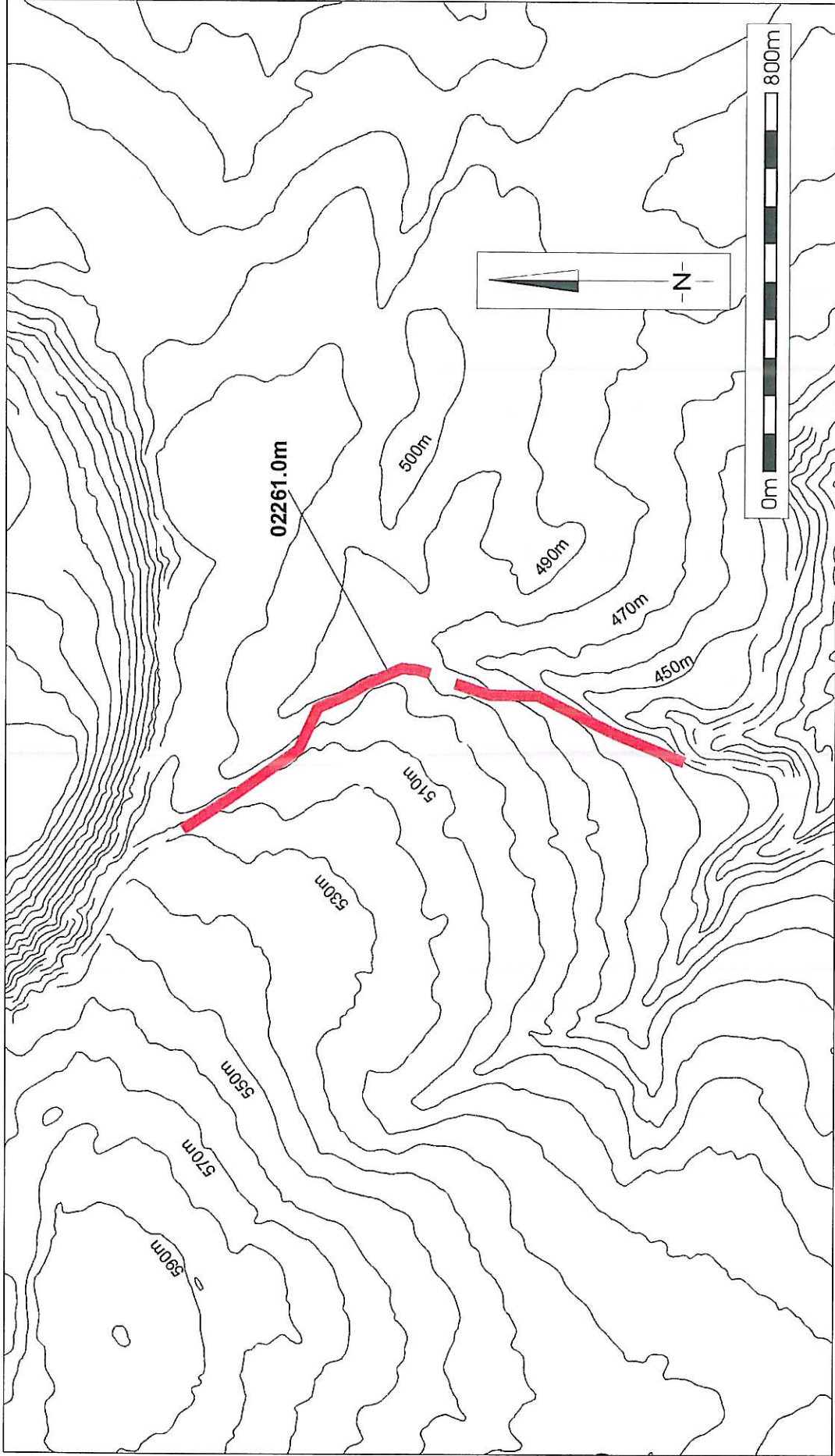
AUGUR RESULTS

The auguring along the entire length of the dyke was impeded by the presence of stone in the subsoil, of the many boreholes taken only three produced tolerable results. An investigation by Crampton (1966, 384-85) has shown the dyke to have been built not long after the *Ericaceae* pollen had reached its maximum, the soil structure being a *sol brun acide*, forming since the early-medieval period, on a podzol that started forming in the Bronze Age, possibly with some gleying from poor drainage above an iron pan deposit. The organic rich (peaty) loam parent material (100, 200, 300) belonging to the podzol group of soils was found in all three boreholes over illuvial clayey-silts (201). All three boreholes terminated on a stone obstruction.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke is in a relatively stable condition, erosion would appear to be at a minimum and threats from vehicles are restricted to the metalled forestry road. Sections of the southern length of dyke, now under rough grazing, are the best-preserved and will almost certainly include parts of original sandstone revetting. The northern length has more visual impact with the greater height of the scarp but because of the nature of the local geology distinguishing earthwork from scarp remains problematic. A series of targeted trenches placed on this northern section would reveal the nature and composition of dyke if the revetting does indeed continue along this length as it does to the south.

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Figure 1: Ffos Toncenglau Dyke 02261.0m

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Plate 1: View to southeast of Ffos Toncenglau Dyke (02261.0m). 2m scale in shot.



Plate 2: View to west of revetted wall. Ffos Toncenglau Dyke (02261.0m). 2m scale in shot.

PRN 02262.0m Bwlch y Lladron

NGR: SN 94653 03357

DESCRIPTION

Bwlch y Lladron (Figure 2; Plates 3 and 4) is a small interrupted linear earthwork situated on an elevated ridge between the summits of Hirwaun Common to the west (515m OD) and Mynydd Cefn y gyngon (512m OD) to the east. The earthwork is located on a marshy saddle (496m OD) between the escarpment of Craig y bwlch to the north and the steeply sloping course of the Nant Rhydyfelen to the south.

The dyke is composed of a long, low interrupted earthwork bank 2.1m wide and 0.45m high and completely grass covered; the internal structure recorded by RCAHMW (1976, 7-8) was not visible. The bank starts at the edge of a steep gully in the escarpment of Craig y bwlch to the north and proceeds southwards for approximately 135m along the boundary between Rhigos and Aberdare parishes, with a gap 2.4m wide for the cliff-top path to pass through. Motorised vehicles have damaged a 10m length of the earthwork near the boundary with the modern forestry. There is a modern ditch following the dyke south from the northern boundary of the forestry and traces of the earthwork dyke can be seen sandwiched between the edge of the forestry and the ditch. It fades out into marshy ground to the south from where the parish boundary coincides with Nant Rhydyfelen. No trace of an earlier ditch associated with the dyke was located. An inverted L-shaped Cloddiau field boundary lies 12m to the east of the modern ditch and may have formed part of the parish boundary during the post-medieval period. Although the situation, linking two natural obstacles, resembles early dykes in this area, the bank differs from these in having no ditch. It may have served merely to mark the boundary.

RCAHMW reference 803 (1976, 7-8).

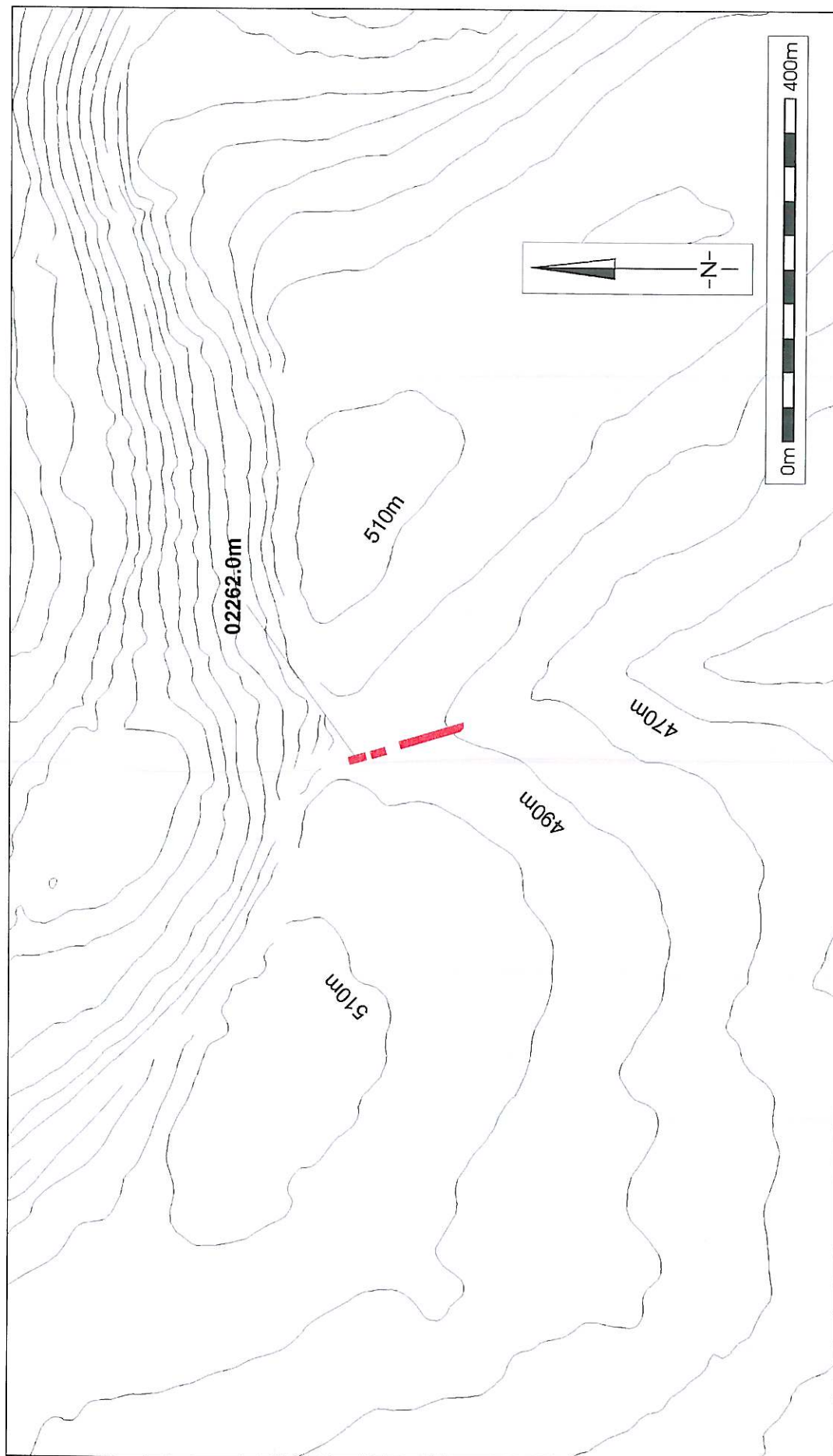
AUGUR RESULTS

Three boreholes were examined. These were placed in the sections of earthwork dyke to the north of the forestry and either side of the gap for the cliff-top path. In all boreholes an organic rich peaty loam was encountered to a depth of 0.2m to 0.29m (**100, 200, 300**), belonging to the podzol group of soils, over a friable grey silty-clay (**101, 201, 301**) that may be the surviving elluvial horizon but now with some leaching of clay particles from the overlying loam. The underlying deposits consist of a silty-clay with orange banding (**102, 202, 302**), possibly a weak iron pan or isolated deposits of ferrous oxides mobilised from the elluvial horizon, and a grey silt-clay illuvial horizon gravitating to weathered sandstone. All three boreholes terminated on a stone obstruction.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The earthwork is currently suffering severe erosion due to presence of motorised vehicles, which is unsurprising given the position of the dyke across the only ridge on Hirwaun Common. Where the vehicles have traversed the earthwork, all remnants of the bank have been obliterated. Preventing vehicles from travelling across the damaged area of the dyke will be almost impossible given the topography and its isolated location and any attempt to stop them will only encourage erosion to migrate to the unaffected areas immediately to the north. The coastal path is little used and the modern path appears to follow the route of the motorised vehicles, avoiding the gap in the earthwork dyke.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 2: Bwlch y Lladron Dyke 02262.0m

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 3: View to northwest of linear earthwork bank (02262.0m) showing the gap for the coastal path. 2m scale in shot.



Plate 4: View to south of linear earthwork bank (02262.0m). 2m scale in shot.

PRN 02263.0m

Dyke 315m east of Tyla-glas Farm

SAM Gm 260

NGR: western end SO 11023 201245, eastern end SO 11174 01319

DESCRIPTION

A long linear earthwork bank approximately 170m in length with a shallow ditch to the north, one of two dykes (02263.0m) situated on Gelligaer Common (Figure 3; Plates 5 and 6). The dyke crosses the ridge of Cefn Gelligaer about 275m north of its highest point (403m OD) on a low grass covered saddle at 385m OD. The earthwork is positioned across the route of a Roman road, which rises from Cefn Gelligaer to the summit of Mynydd Fochriw. The western end of the earthwork dyke continues for c60m from the boundary wall of the common into a pasture field and is then lost at the track to Tyla-glas Farm. The dyke is best preserved to the east of the boundary wall to the common and the modern road where the eastern end terminates (RCAHMW 1976, 8).

The section of dyke now lying inside the boundary of the common was the best-preserved and the only length to be surveyed. The earthwork bank measures 5.5m in width and 1.2m high with a ditch 3m in width and up to 0.75m in depth; mid-way along this section a modern gap has been gouged through the earthwork bank and ditch by agricultural vehicles, and the eastern end has been damaged by motorcycles utilising the bank as a ramp. The central section of ditch to the west of the modern gap has been filled in with sandstone rubble creating a metalled surface for the feeding of livestock.

RCAHMW reference 804 (1976, 8).

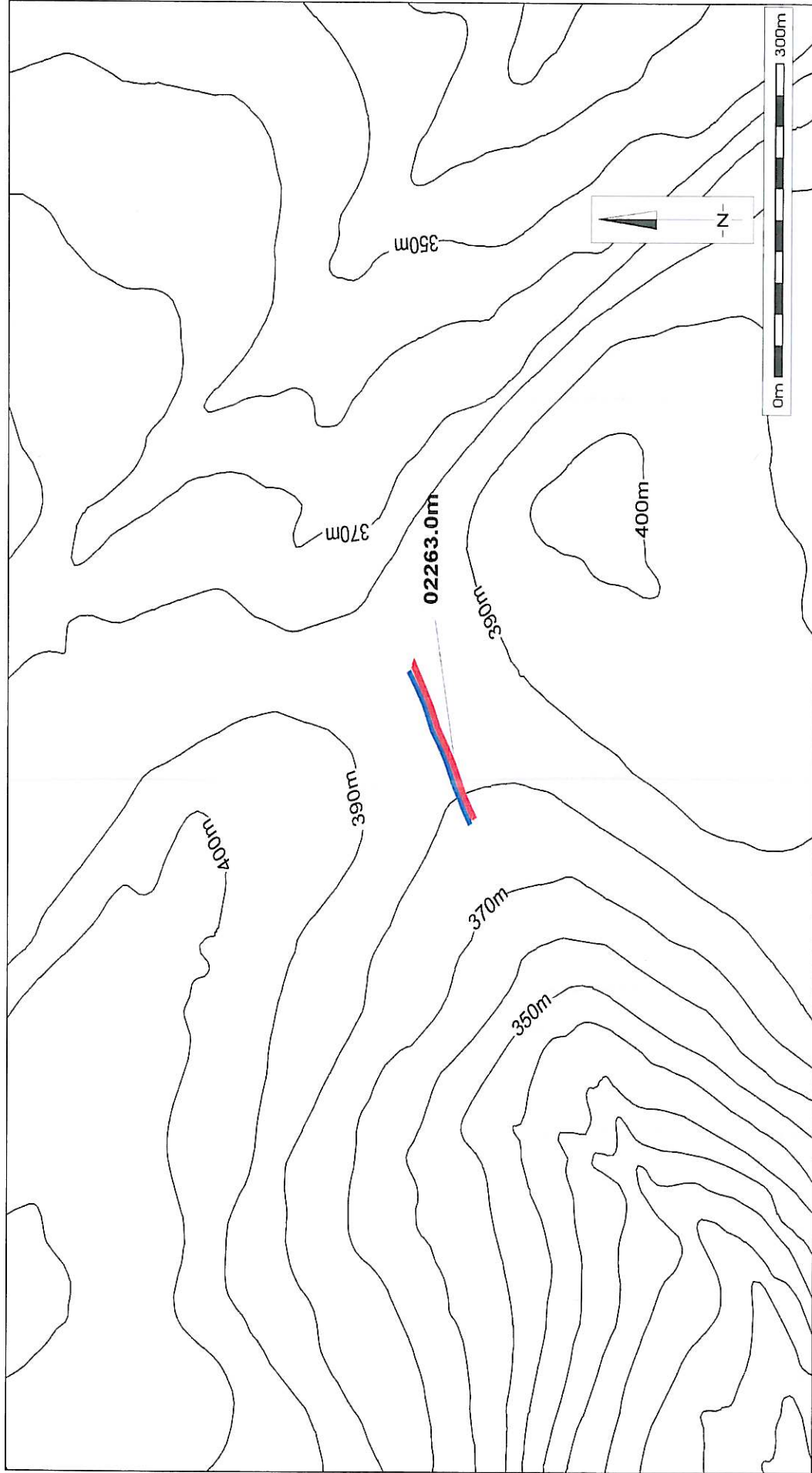
AUGUR RESULTS

A total of six boreholes were examined, these were aligned in two parallel groups across the dyke, one set to the east near the modern road and the second immediately to the south of the modern central gap. Boreholes 01 and 04 were augured into the earthwork bank, boreholes 02 and 05 were augured into the ditch and boreholes 03 and 06 were augured into the area behind the dyke to the south. Dark-brown silty-loams were encountered in the uppermost layer of the earthwork bank (**100, 400, 401**) over brown sandy- and clayey-silts (**101, 402**) and orange-brown silts (**102, 403**), the latter possibly representing a weak iron pan or deposits of ferrous oxides mobilised from overlying layers. The results from the auguring of the ditch produced an accumulation of dark-brown clay-silts (**200, 500**) over grey-brown silts (**201**) common to negative features that have naturally silted. The two remaining boreholes to the south of the earthwork bank produced a dark-brown clayey-silt loam topsoil (**300, 600**) over a weak orange clay-silt iron pan (**301, 601**) and illuvial brown and grey silts (**302, 602**) representative of imperfectly drained podzols. All boreholes terminated on stone obstructions.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke is currently protected under present legislation. However despite this, the ditch has been partially filled in with stone, a wide gap has been created by agricultural vehicles though the centre of the earthwork bank and motorcycles are using the eastern end as an obstacle course. The stone from the ditch has to be removed by hand and vehicles prevented from damaging the earthwork further, this will then ensure the long-term survival of this scheduled monument.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 3: Dyke east of Tyla-glas Farm 02263.0m

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 5: View to west of Dyke east of Tyla-glas Farm (02263.0m). 2m scale in shot.



Plate 6: View to west of damaged ditch belonging to Dyke east of Tyla-glas Farm (02263.0m). 2m scale in shot

PRN 02264.0m Cefn Gelligaer SAM Gm 261

NGR: eastern end SO 11714 00249, western end SO 11780 00286

DESCRIPTION

A short linear earthwork bank and ditch crossing the ridge of Cefn Gelligaer at c370m OD 1.2km south of Dyke east of Tyla-glas Farm (02263.0m) on Gelligaer Common (Figure 4; Plates 7 and 8). Sometimes called Clawddtrawscae Dyke, the monument is situated under grass and a dense covering of bracken; the present modern road dissects the lower western section of the dyke. The earthwork bank is c85m long and the ditch is slightly shorter on the eastern side, both ends of the dyke gradually diminish into the natural slope of the ridge. Aligned northeast-southwest the earthwork bank is c3m wide and c1m in height with a shallow ditch c2m wide and c0.75m in depth. The area around the dyke is naturally stoney, as is attested by the post-medieval quarry immediately to the north, but no internal features were exposed. The dyke gently curves southwards as it nears the road and becomes more pronounced in the section beyond it.

RCAHMW reference 805 (1976, 8).

AUGUR RESULTS

A total of seven boreholes were examined, these were aligned in three parallel groups across the dyke. Boreholes 01, 03 and 06 were augured through the earthwork bank and boreholes 02, 04 and 07 were augured through the ditch; borehole 05 was augured to the south of the earthwork bank. Dark-brown silty-loams were encountered in the uppermost layer of the earthwork bank (**100, 300, 600**) over dark-brown sandy- and clayey-silts (**101, 301**) and orange-brown clayey-silts (**601**), the latter possibly representing an illuvial horizon with a weak iron pan. The deposits are representative of imperfectly drained podzols. All three boreholes terminated on a stone obstruction.

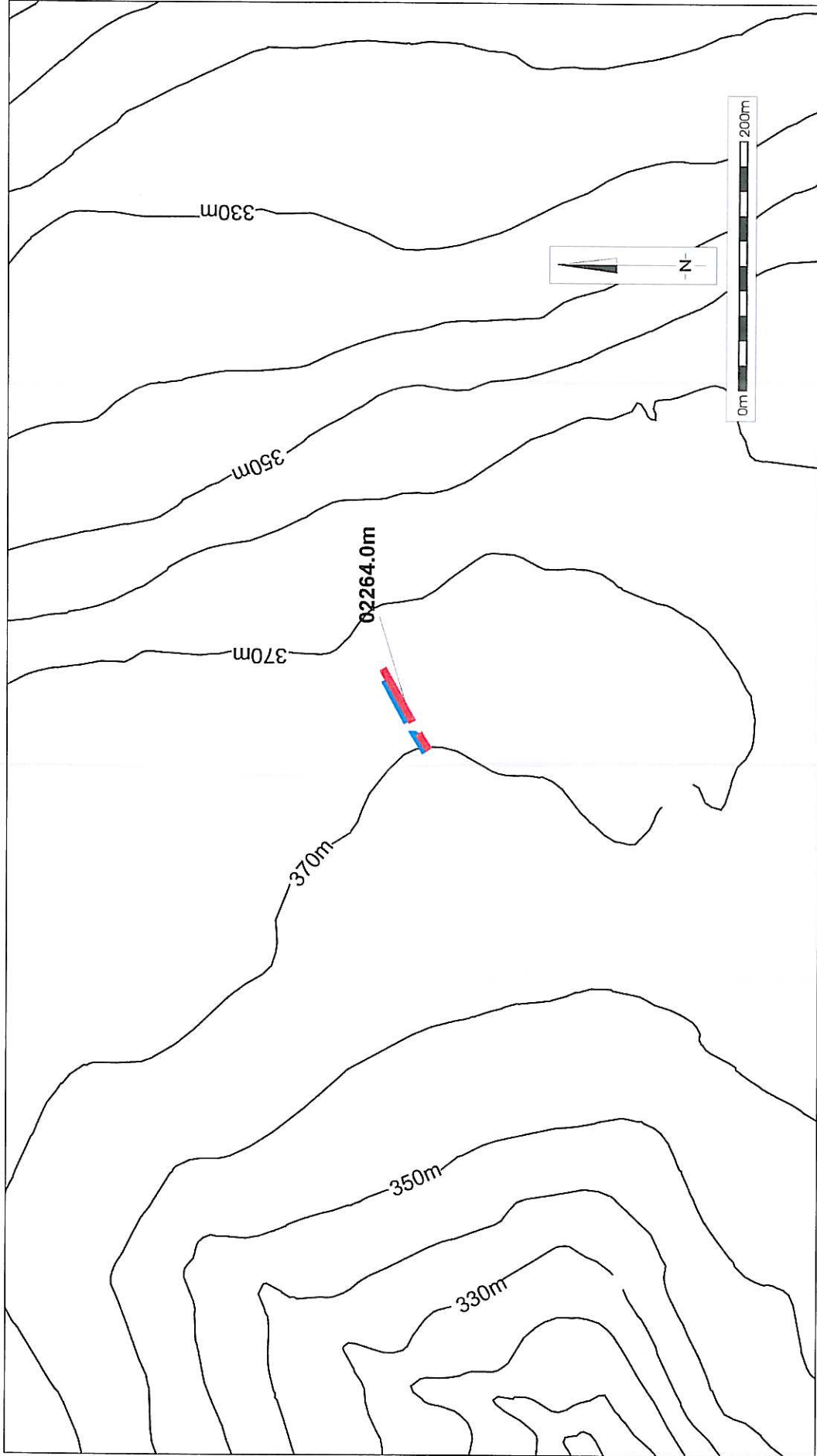
The ditch produced a uniform upper layer of dark to mid-brown clayey-silt (**200, 400, 700**); borehole 02 was very shallow and terminated on a stone obstruction. Boreholes 04 and 07 were also quite shallow (not exceeding 0.16m and 0.56m in depth respectively) but had a more complex stratigraphy. Borehole 04's penultimate layer was an organic silty-loam (**401**), over in sequence, a thin band of grey-brown silt (**402**), a mid orange-brown clayey-silt (**403**) and a clean light grey-brown silt (**404**). The top layer (**700**) of borehole 07 overlaid a series of silts; directly beneath the uppermost deposit was a clean brown sandy-clay (**701**), of which the lower part had been disturbed by an animal burrow (**702**), this void overlaid a dark-brown clay-silt (**703**) and a light-brown clayey-silt (**704**) before terminating on a stone obstruction.

The fifth borehole produced a shallow black silty-loam topsoil (**500**) over a thin clean black silt-loam (**501**) and a substantially thick mid-brown clayey-silt (**502**) before terminating on a stone obstruction presumed to be the sandstone bedrock.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The eastern end of the dyke is grass covered and forms part of a path running parallel to the road and is used by horses and motorcyclists. In this area a small amount of erosion has occurred exposing sandstone rubble, because of the way the earthwork diminishes it is difficult to distinguish any dyke structure with the shallow bedrock. Bracken covers a greater part of the earthwork bank and ditch and normally this would need to be cut back but in the event this would expose the monument to damage by the many horse riders and motorcycles. Therefore, a *status quo* is required, maintaining the bracken at acceptable levels whilst not removing too much, which would encourage people to start riding/driving over the monument.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 4: Cefn Gelligaer Dyke 02264.0m

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Plate 7: View to southwest of the east section of Cefn Gelligaer Dyke showing bank and ditch (02264.0m)



Plate 8: View to northeast of the west section of Cefn Gelligaer Dyke showing bank and ditch (02264.0m)

PRN 02265.0m Bwlch Yr Afan SAM Gm 246

NGR: western end SS 91967 95102, eastern end SS 92109 95129

DESCRIPTION

Bwlch Yr Afan dyke is situated on a narrow ridge at *c*520m OD between the summits of Werfa (568m OD) to the southwest and Twyn Crugyrafan (555m OD) to the north (Figure 5; Plates 9 and 10). The dyke is one of three (02267.0m and 02791.0w), which cross the narrow ridges, in a horizontal line several kilometres apart, at the head of Cwm Ogwr and Cwm Garw. The dyke is unusual in that it comprises two earthwork banks flanking a central ditch. The dyke is best-preserved to the west; here the twin banks stand to up to 1.5m in height and over 3m wide, the central ditch is *c*1m wide and 1m in depth; this length of dyke is *c*90m long. The western end of the dyke gradually fades out into the steep slope of Cwm Nant-ty and the northern bank and ditch becomes obscured at the line of the modern field boundary to the east. The southern bank continues beyond the eastern boundary for 23m through an area now used for fly-tipping, a modern metalled track to a communications tower on Werfa has dissected a 10m gap through the monument here. The southern bank and ditch continues east from the track for a further 22m before fading out at the modern field boundary.

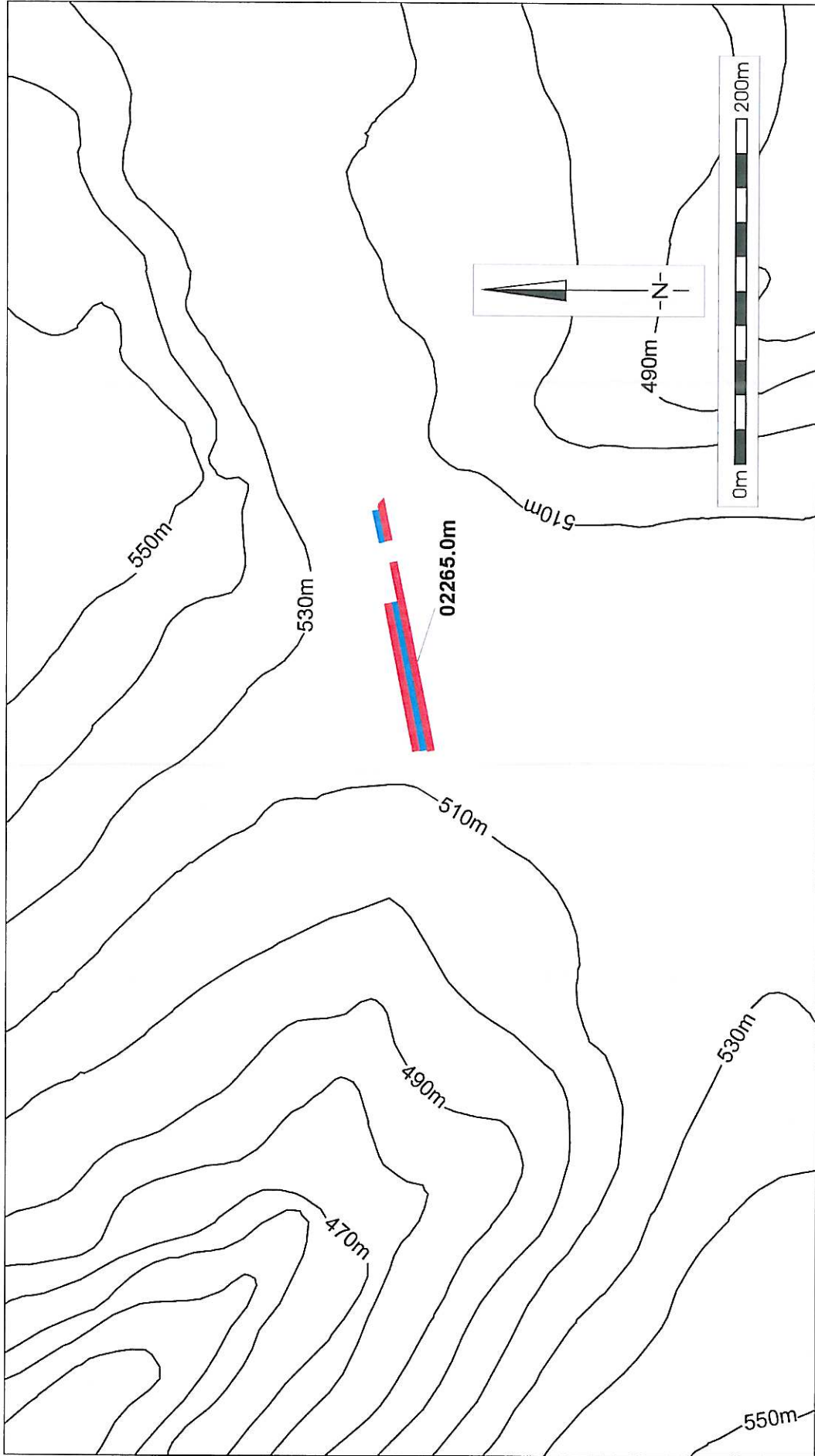
The dyke was examined by Crampton (1966, 382-4) who found a podzol over a buried podzol, the latter being the buried palaeosoil predating the construction of the dyke. Below each organic layer the soil showed the characteristic of a well drained podzol, with a contrasting light-grey eluvial horizon over a yellowish-red illuvial horizon. The ditch contained a peaty-gleyed soil that was also found on either side of the banks. Crampton suggests the presence of *Ericaceae* pollen in the palaeosoil implies a heathland existed before the dyke was constructed and that this dyke may indeed post date the construction of Bwlchgarw (02791.0w) 2km to the west.

RCAHMW reference 809 (1976, 9).

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The western section of dyke is presently under pasture and not under any immediate threat. However, the eastern end has suffered severe erosion, partly due to the new road that has obliterated a 10m section and the fly-tipping between this track and the field boundary to the west that has also nearly removed all trace of the earthwork. The 20m surviving eastern section of dyke is at present intact although fly-tipping here has started and if this continues then this portion of earthwork could suffer the same fate as the already damaged area to the west.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 5: Bwlch Yr Afan Dyke 02265.0m

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 9: View to east of Bwlch Yr Afan Dyke (02265.0m) showing twin banks and central ditch. 2m scale in shot.



Plate 10: View to west of Bwlch Yr Afan Dyke (02265.0m) showing damaged area west of the modern track. 2m scale in shot.

PRN 02266.0m Bedd Eiddil SAM Gm 285 (descheduled 2005)

NGR: western end SS 97107 99677, eastern end SS 97194 99694

DESCRIPTION

Bedd Eiddil is a relatively short earthwork dyke composed of a single bank with a ditch on its north side. The dyke is positioned broadly east-west across the ridge between Bryn Du and Carn Eiddil; the dyke rises from 390m OD in the west to 396m OD in the east (Figure 6; Plates 11-16). The ridge at this position is the lowest crossing point from Cwm Aman to Cwm Rhondda. The dyke is situated astride an ancient road, possibly Early-medieval or earlier, called Tŵyn Croesffordd (Cefn Ffordd). The road follows the mountain ridge from Twyn Y Bridallt Roman marching camp (SAM Gm 259) northwest passing Castell Nos medieval ringwork (SAM Gm 408) *en route* to Mynydd Beli-glas and the Ffos Toncenglau dyke (02261.0m).

The dyke was first investigated by Sir Cyril and Aileen Fox (Fox and Fox 1935, 282-4) who noted a central gap that was then recently widened for the Cefn Ffordd. Crampton (1966, 385) sampled the dyke for environmental analysis and found dyke to have been built not long after the *Ericaceae* had reached its maximum indicating an Early-medieval date in common with Ffos Toncenglau dyke. Exactly where along the length of the dyke Crampton sampled is unclear and there is every possibility that he surveyed the area now under the present road to the forestry car park.

The alignment of the bank and ditch is irregular with a slight bend near its centre curving to the south. The bank is reasonably wide, c3.9m to the east and c2.6m to the west but stands quite low at c0.4m to 0.9m in height; the ditch is c2.6m wide to the west and c2.9m wide to the east and quite shallow averaging c0.3m to 0.5m in depth. The dyke gradually fades into the slope of the ridge to the west terminating at the modern road by a drainage ditch; the road has obliterated any trace of the earthwork beyond it and further down the ridge into Cwm Rhondda-fach. The eastern section of the dyke terminates at the modern road leading to the recently built forestry car park and picnic area. Presumably, this road has obliterated any trace of the dyke's eastern end and the gap noted by Sir Cyril and Aileen Fox (1935, 282-4). The eastern section of the dyke has suffered severe erosion from motorcycles; wheel ruts have cut through the bank and ditch, some are 0.4m in depth, and as a result the bank and ditch has become almost flattened (Plate 11).

RCAHMW reference 810 (1976, 9-11). (The Commission notes that the dyke has a southern ditch and northern bank, when in reality the opposite is true).

AUGUR RESULTS

A total of three boreholes were examined; two were positioned through the bank, one at the damaged eastern end (BH01) and one near the centre of the dyke (BH02), and finally one through the ditch 2m north of the second borehole (BH03) (Figure 7). The first borehole produced a depth of 1.24m before terminating on a stone obstruction. The basal layers (**105**, **106**, **107**, **108**, **109**) were composed of compacted yellow-brown clean silty-clays, which represent the natural weathered sandstone. An illuvial horizon (**104**) of clean light-brown silty-clays was found above the basal layers, which was overlain by a brown silty clay-loam (**103**), which may be the original palaeosoil. The uppermost layers (**101**, **102**) represent the composition of the earthwork bank. Context **102** was an intermixed deposit of mid-brown silty-loam with orange sandy flecks and a dark-brown silty-loam with organic matter, overlain by a mid-brown silty-loam (**101**) and a dark-brown silty-loam topsoil and root mat (**100**).

The second borehole produced a similar depth of deposits (1.42m). The lower 0.87m was weathered sandstone (**202, 201**), the remaining and overlying 0.55m (**200**) was a fairly homogenous slightly plastic blackish-brown sandy silt-clay, which must represent the composition of the bank. The remaining borehole through the ditch produced the weathered sandstone at 0.87m in depth (**301**), overlaying this was a dark-brown very fine clay-silt (**300**) representative of the natural silting of the ditch.

Although the stratigraphy of the first borehole marries well with the bank deposits identified during the excavation phase (contexts **1008** to **1014**) some caution must be applied to its interpretation as this eastern end of the dyke has suffered progressive and severe erosion through scarring by motorised vehicles.

EXCAVATION RESULTS

A 10m x 1m trench (T1), aligned almost directly north-south, was excavated through the central section of the bank and ditch between SS 97153 99691 and SS 97154 99681 (Figure 7-8 and). The length of the trench was envisaged to encompass both the bank and ditch of the dyke and sufficient of the flanks either side to establish the natural stratigraphy of the area. The north and south ends of the trench were excavated onto the natural weathered sandstone (**1004**), found at 0.52m in depth to the north (392.72m OD) and 0.84m in depth to the south (392.44m OD). The natural weathered sandstone was overlain by a bright grey illuvial horizon (**1005**), a uniform clayey-silt band 0.1m in thickness to the south grading to 0.04m at the northern end of the trench. The cut of **1003** had completely removed this context (**1005**) from the width of the ditch.

An organic (peaty) silt-loam podzol parent material (**1001**) was found to overlie the illuvial horizon. Context **1001** was found to be quite uniform in thickness to the north and south of the dyke, 0.16m and 0.2m respectively, and was found to underlie the earthwork bank but had been cut by the ditch (**1003**) during its original excavation. The only stratified finds from the excavation were recovered from the base of **1001**; the first was a burnt clay ball (**SF001**), possibly deliberately fashioned, and the second was a heavily burnt prehistoric flint flake (**SF002**).

The ditch (**1003**) was cut through both the podzol parent material (**1001**) and the illuvial horizon (**1005**) to a depth of 0.34m (392.35m OD). The ditch extends 2.74m in width and is composed of a gradually sloping profile to the north, a steeply cut bowl 1.9m wide and a near vertical cut to the base of the overlying bank to the south. The base of the ditch had been cut into two shallow scoops that contained a dark-brown silty clay-loam with grey silt and orange sand mottling (**1007**); the deposit was very compacted and may indicate the deliberate back-filling of the ditch. The secondary deposit was a dark black-brown 'peaty' silty clay-loam (**1006**) and is likely to represent the natural silting of the ditch. Overlying the ditch, and indeed the entire trench, was a very friable black-brown peaty (organic) silt-loam, possibly the sol brun acide podzol described by Crampton (1966, 385). To the north of the ditch both the podzol parent material (**1001**) and the illuvial horizon (**1005**) continued; the first in a quite thick deposit and the latter in a narrow band.

The north edge of the earthwork bank (**1002**) had migrated down the steep slope of the south edge of the ditch; in the event several contexts have become interdigitised (**1008, 1009**). This may be due, in part, to the presence of stone cladding (Figure 9-10) on the upper surface of the bank (**1015**); here several large pinkish-grey sandstone flagstones have slumped into the ditch and at least one (**1016**) now lies in the ditch on the basal fill (**1007**), indicating that this process may have occurred after a period of the ditch's abandonment.

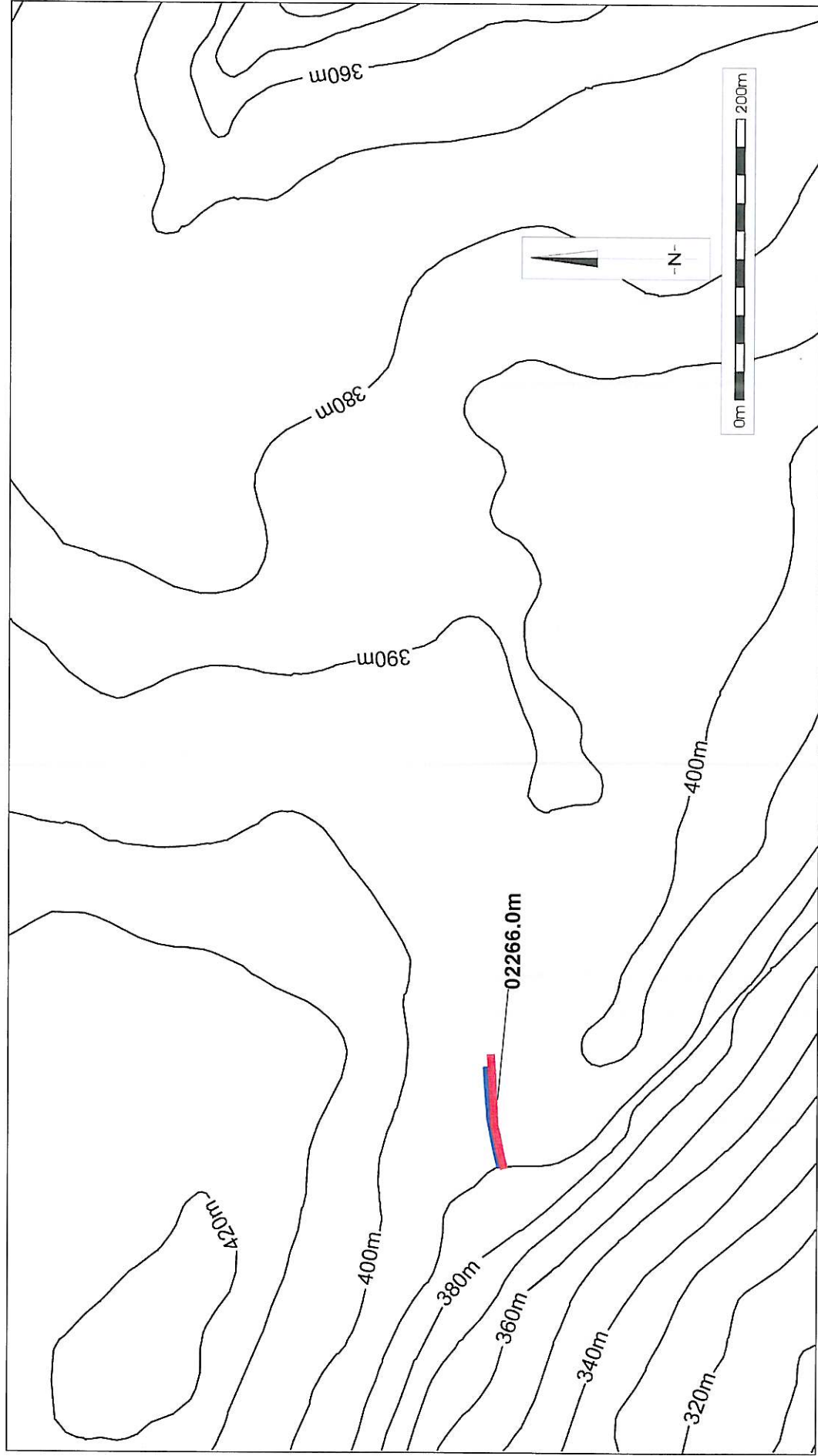
The stratigraphy of the bank was quite complex and would appear to represent distinct phases of deposition (individual tip-lines). The base layer of the bank (1009) was a friable light yellow-brown clayey-silt band with pockets of orange sand; its northern extremity has become interdigitised with 1008, whilst to the south it terminates on a large animal burrow. Overlying the base layer in sequence were several compacted deposits. The secondary layer was a light-brown sandy silt-loam with yellow and orange sand mottling (1010) containing a thin light-brown sandy-loam lens with an orange tinge (1011), which was overlain by a dark-brown silt-loam (1012) that extended the full width of the bank to the south. In the centre of the bank a short thick dark-brown sandy silt-loam with orange sand mottling was found to underlie the interdigitised deposit 1008 and the stone cladding (1015), the northern end pinched by the colluvial movement of the bank into the ditch. The southern end was overlain by the uppermost layer of the earthwork bank (1014); a light-brown loamy-sand with grey and orange sand mottling. The friable black-brown peaty (organic) silt-loam topsoil (1000) was found to overlie the whole area of the bank, including the stone cladding.

The ditch (1003) was the earliest phase of the dyke, followed immediately by the construction bank (1002); its intermixed mottled nature would appear to suggest it had been composed from the up-cast from the excavation of the ditch. The dyke had been built on the existing silt-loam podzol (1001) that Crampton (1966, 385-89) suggests began podzolization in the Bronze Age under an oak forest, which would correspond well with the recovery of the prehistoric burnt flint flake and consequently suggest a provenance for the burnt clay ball. Crampton (*Ibid*) also suggests the presence of *Ericaceae* pollen in the palaeosoil (the interface between 1001 and 1009) implies a heathland existed before the dyke was constructed and has shown the dyke to have been built not long after the *Ericaceae* pollen had reached its maximum; the subsequent soil structure being a *sol brun acide* forming since the early-medieval period.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke is at present suffering from severe erosion to its eastern end (Plate 11), here motorised vehicles have scarred the bank and ditch and in places begun to level the earthwork. The excavation has shown that a substantial bank and ditch has survived and it is therefore suggested that at least an 80m length of the dyke must be well-preserved west of the damaged area. In the short-term consultation with the forestry could provide a solution to the erosion of the dyke, possibly in the form of large tree-trunks positioned across the route taken by vehicles and therefore protecting the earthwork. Also of great benefit would be the erection of an information board placed in the well-used forestry car-park and picnic area. This would show the position of the dyke and other ancient features such as the Castell Nos medieval ringwork, Y Bridallt Roman marching camp and the Tŵyn Croesffordd (Cefn Ffordd), with a short history and position of public footpaths. The combination of education and a physical barrier may serve to provide the long-term protection of this fragile monument.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 6: Bedd Eiddil Dyke 02266.0m

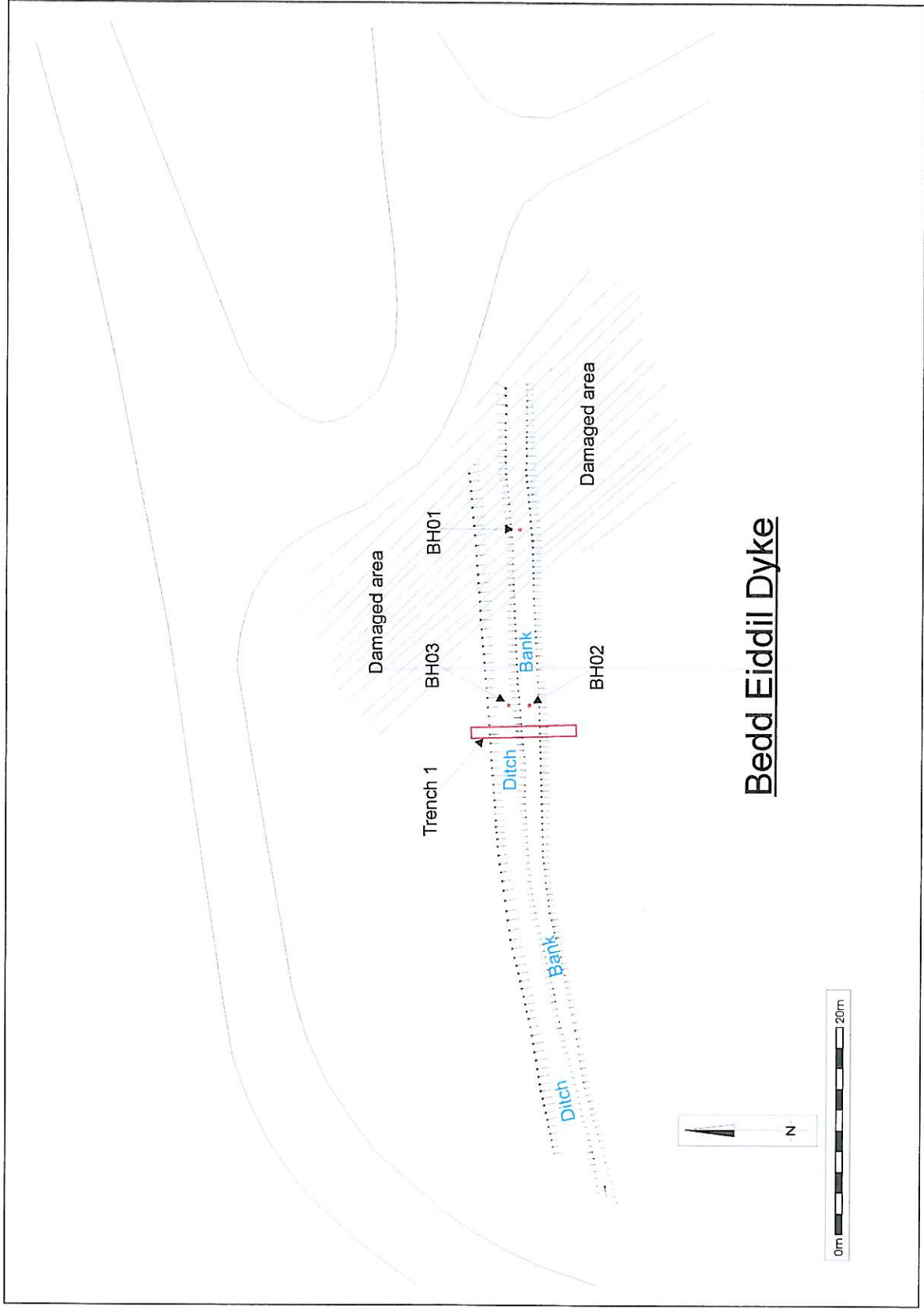


Figure 7: Topographic survey of Bedd Eiddil Dyke 02266.0m

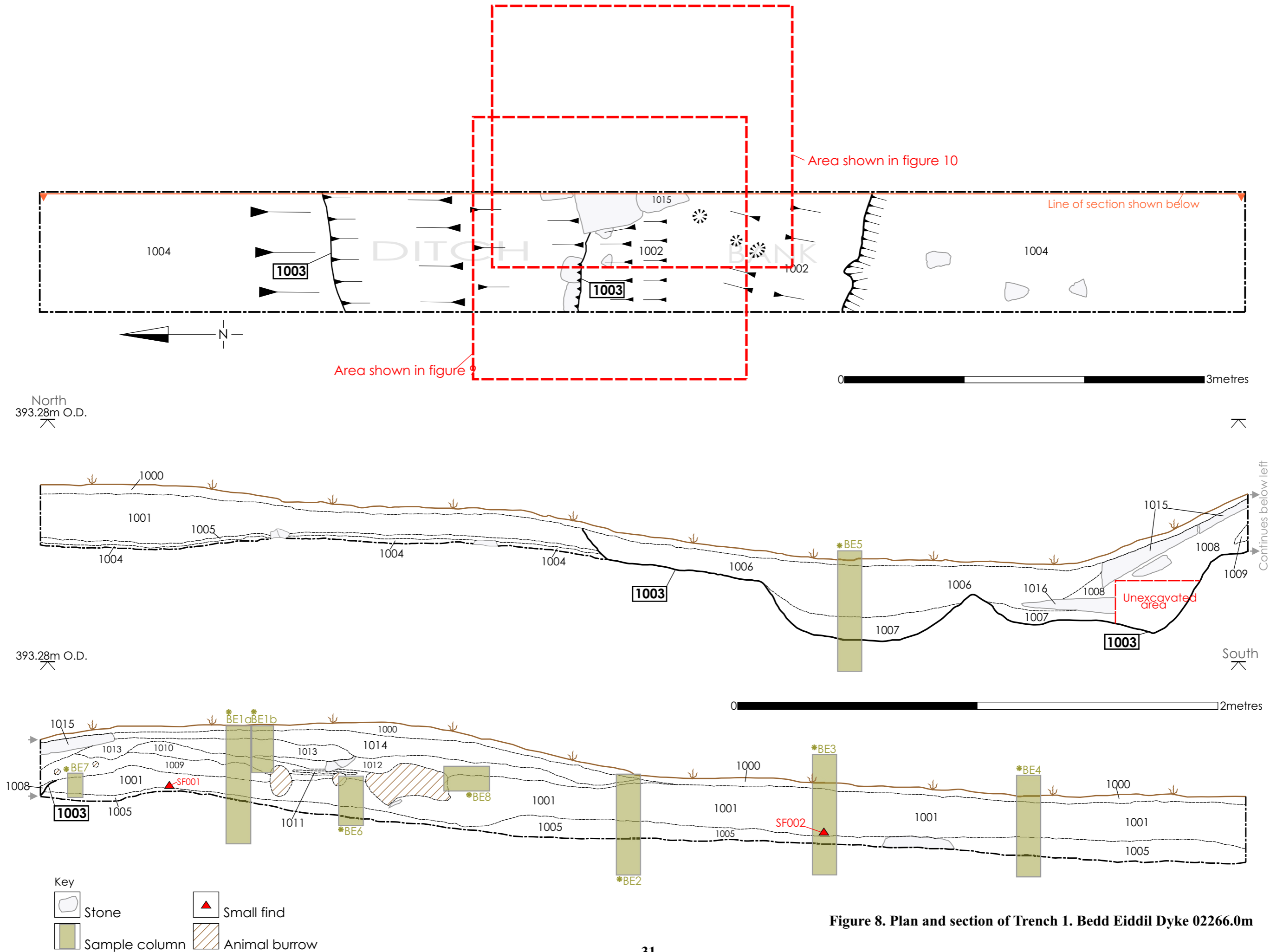


Figure 8. Plan and section of Trench 1. Bedd Eiddil Dyke 02266.0m

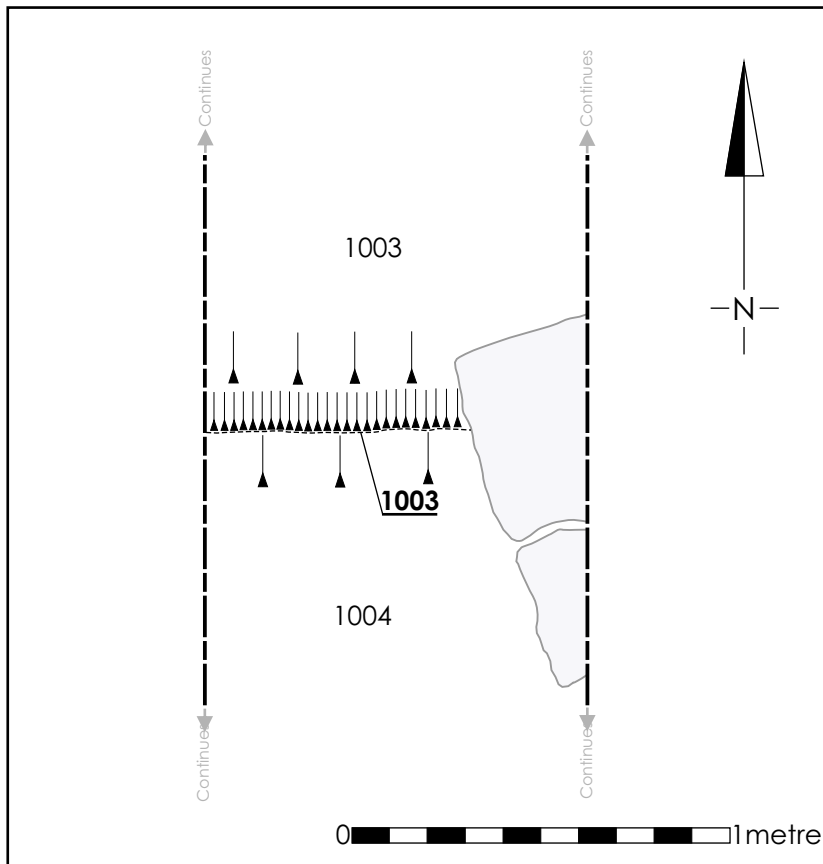


Figure 9. Plan of excavated ditch: Bedd Eiddil Dyke 02266.0m

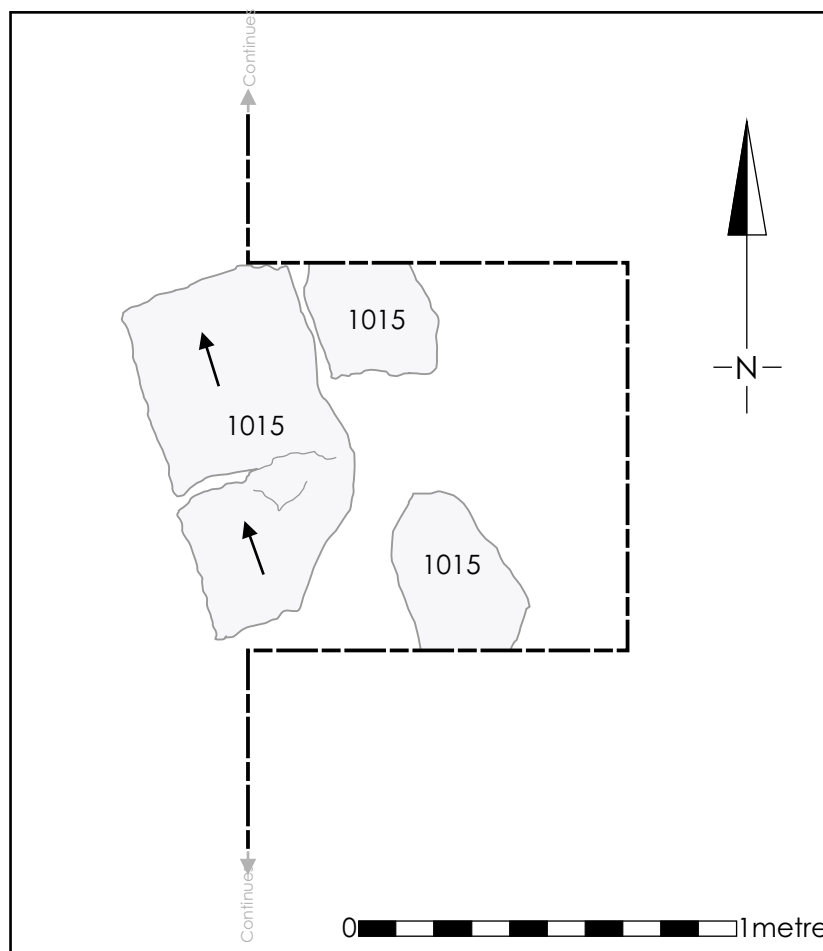


Figure 10. Plan of stone cladding: Bedd Eiddil Dyke 02266.0m

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 11: View to west of Bedd Eiddil Dyke (02266.0m) showing damaged area. 2m scale in shot



Plate 12: View to south of Trench 1 through Bedd Eiddil Dyke (02266.0m). 2m scale in shot



Plate 13: View to south of excavated ditch and slumped bank of Bedd Eiddil Dyke (02266.0m). 2 x 1m scales in shot



Plate 14: View to north of the exposed earthwork bank of Bedd Eiddil Dyke (02266.0m). 2 x 1m scales in shot

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 15: View to the east of the excavated earthwork bank of Bedd Eiddil Dyke (02266.0m). 2m and 1m scales in shot



Plate 16: View to the east of the excavated ditch and slumped earthwork bank of Bedd Eiddil Dyke (02266.0m). 2m and 1m scales in shot

PRN 02267.0m Bwlch Y Clawdd SAM Gm 500

NGR: northeast end ST 94048 94530, southwest end ST 93965 94397

DESCRIPTION

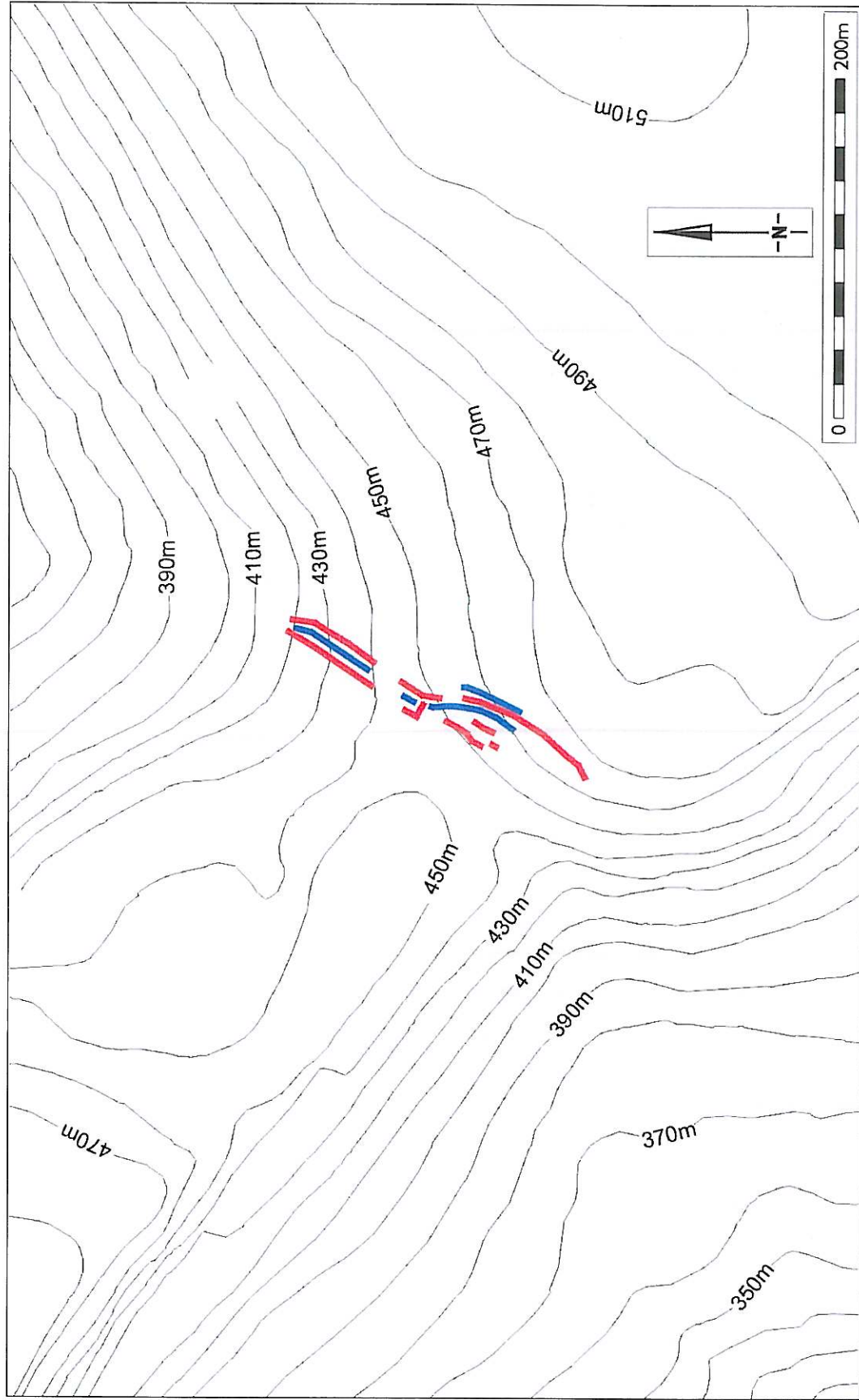
Bwlch y Clawdd (Figure 11; Plates 17 and 18) is a large dyke c180m in length straddling a low saddle (450m OD) between Mynydd Ton (535m OD) and Craig Ogŵr (520m OD). The dyke is composed of a single earthwork bank, which is aligned roughly northeast/southwest with two large curves forming an S-shape in plan. There is the slightest hint of a ditch along the east side of the bank identifiable as a shallow depression under heavy quillwort growth. The northeast end of the bank stands to c1.5m in height and is 4.3m in width; an additional bank is positioned c10m to the northwest, parallel to the bank, and is likely to be the bank recorded by the RCAHMW (1976, 11). The central section of the dyke retains the same width but the height of the bank increases westward up to c3m taking advantage of the natural scarp. In addition to the forestry road that has been built through the northern end of the dyke, there are two artificial paths cut through central section of the monument that provides motorbike access to Craig y Geifr.

RCAHMW reference 811 (1976, 10-11)

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke is currently protected under present legislation. However, despite this motorcycles have eroded several areas in the centre of the earthwork bank. Motorised vehicles must be prevented from damaging the earthwork further; this will then ensure the long-term survival of this scheduled monument.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 11: Bwlch y Clawdd 02267.0m

GGAT 83 Cross Ridge Dyke survey and excavation

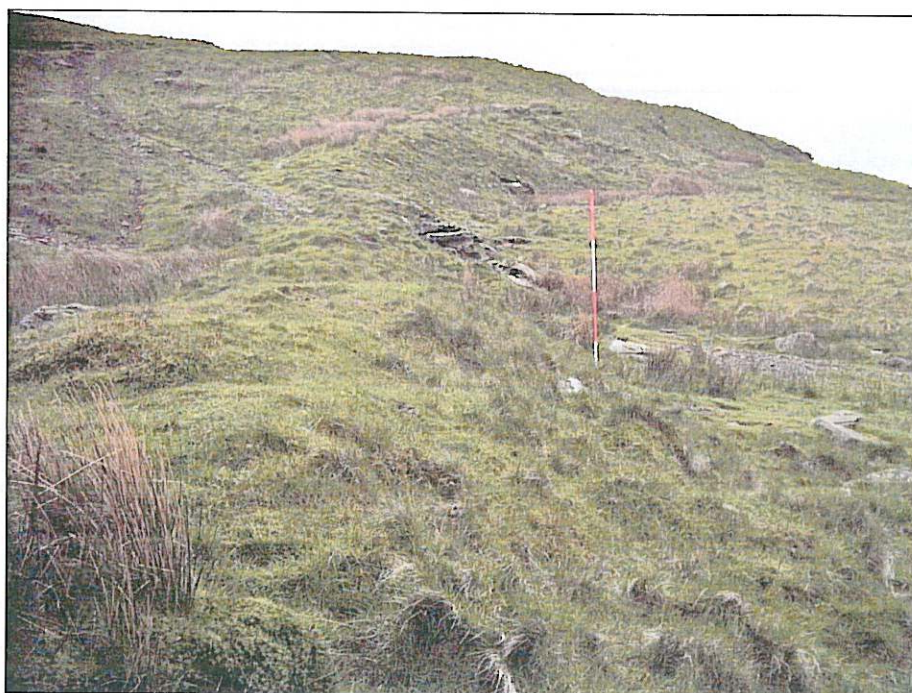


Plate 17: View to the southwest of Bwlch y Clawdd Dyke (02267.0m). 2m scale in shot



Plate 18: View to the south of damaged area of Bwlch y Clawdd Dyke (02267.0m). 2m scale in shot

PRN 02268.0m Cefn Eglwysilan Cross Dyke West SAM Gm 452

NGR: from ST 09842 90142 to ST 10250 90452

DESCRIPTION

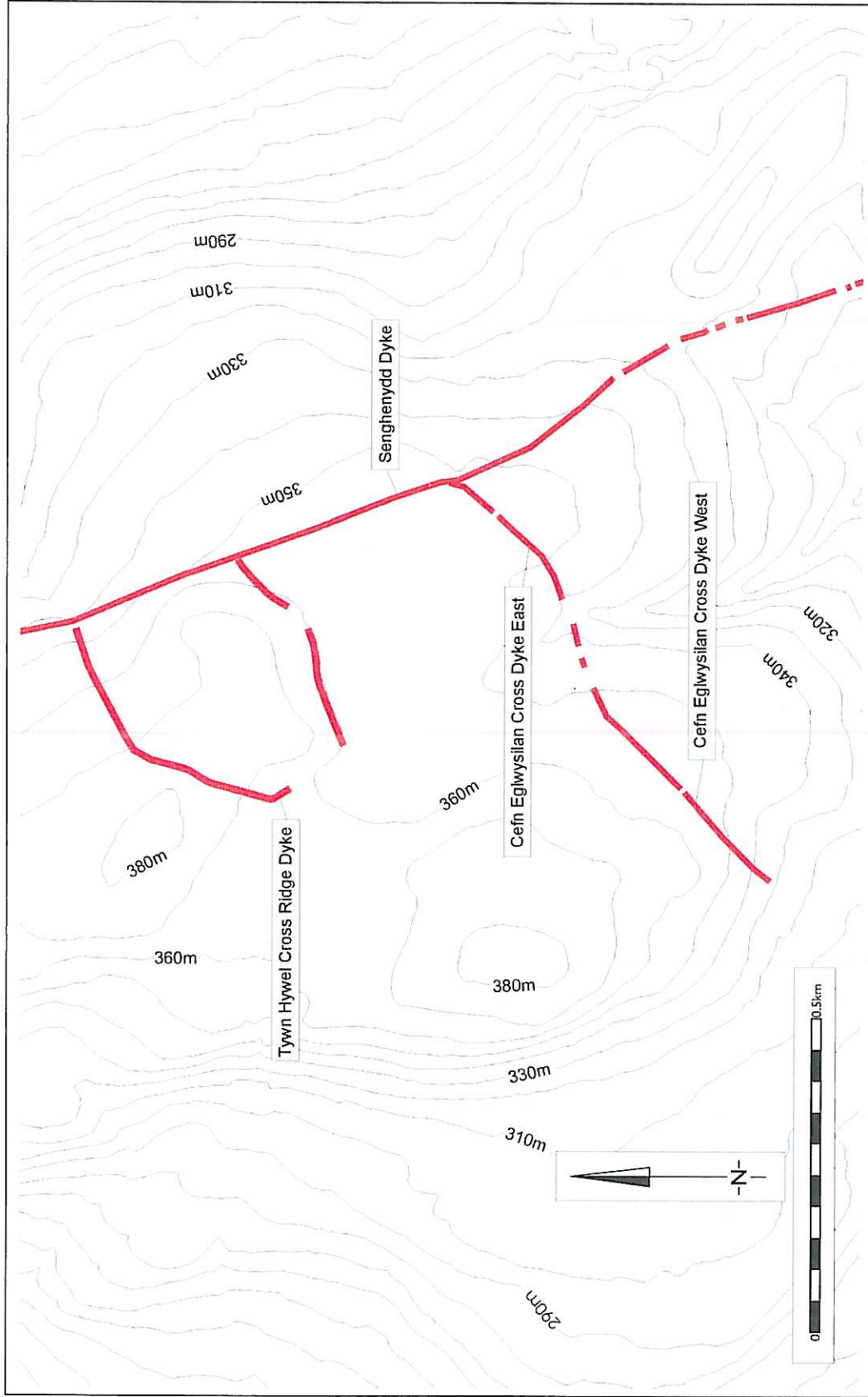
Cefn Eglwysilan Cross Dyke (Figure 12; Plates 19 and 20) occupies the southern ridge of Cefn Eglwysilan between Pant Waungorwg and Eglwysilan Road. The dyke is well-preserved, and extends for c526m with a bank and shallow ditch on the north side. The dyke is composed of two lengths of earthwork aligned north-east to south-west from a section (Cefn Eglwysilan Cross Dyke East (PRN 02269.0m) that starts at Senghenydd Dyke (PRN 04736m), passing through the small marshy valley of Pant Wauncorwg, to join the dyke after a stretch of marshy ground. This western section is more pronounced, measuring 5.2m across by 1m height. Near the highest point of the dyke there is a gap 1.8m wide, seemingly original, where a possible medieval hollow-way may have continued northwards.

RCAHMW reference 812 (1976, 10-11)

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The monument is currently under no immediate threat. However, one small section of the dyke to the east has been damaged by agricultural vehicles (Plate 19).

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 12: Cefn Eglwysilan Cross Dyke West 02268.0m, Cefn Eglwysilan Cross Dyke East 02269.0m and Tywn Hywel Cross Ridge Dyke 02415.0m

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 19: View to the northeast of Cefn Eglwysilan Cross Dyke West (02268.0m). 2m scale in shot

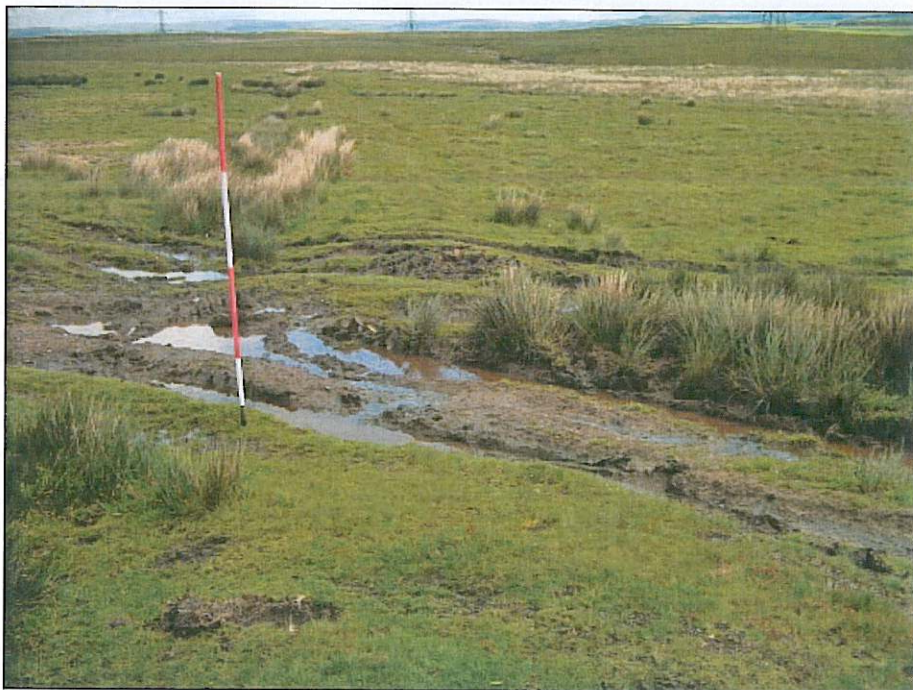


Plate 20: View to the northeast of vehicular damage on Cefn Eglwysilan Cross Dyke West (02268.0m). 2m scale in shot

PRN 02269.0m Cefn Eglwysilan Cross Dyke East

NGR: from ST 10292 90467 to ST 10473 90646

DESCRIPTION

Intermittent bank and ditch on Cefn Eglwysilan (Figure 12), running north-east to south-west from Senghenydd Dyke (PRN 04736m) to join Cefn Eglwysilan Cross Dyke (PRN 02268.0m) after a stretch of marshy ground at Pant Waungorwg. The dyke has a bank and shallow ditch on the north side, measures *c*260m in length, *c*3.4m in width and 0.5m height.

RCAHMW reference 812 (1976, 10-11)

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The monument was not located during the present visit despite an exhaustive search of the area but both the RCAHMW and Ordnance Survey have recorded the location of this feature. A low ridge was noted near the area described by the RCAHMW and Ordnance Survey but this was believed to be the 350m OD contour.

PRN 02415.0m Twyn Hywel Cross Ridge Dyke SAM Gm 456

NGR: from ST 10353 90982, ST 10058 90816, ST 09988 90899, ST 10046 91142, ST 10241 91236

DESCRIPTION

A D-shaped cross-ridge dyke enclosing the lower portion of Twyn Hywel ridge and running c950m across the moorland (Figure 12; Plates 21 and 22). The earthwork is divided in four discrete sections either side of a central gap, each with a shallow ditch on the north side. The two sections of earthwork to the south are slightly smaller (3.5m in width overall) than the northern sections (5m in width overall), but both sets are positioned to allow for a central gap aligned north/south. Both lengths of earthwork terminate at the Senghenydd Dyke (PRN 04736m) to the east. To the west the dyke follows the 360m OD contour around Twyn Hywel. A small round barrow (PRN 2416m) is located on the summit of Twyn Hywel..

Senghenydd Dyke (PRN 04736m) is known to be a Norman deer park boundary but is thought to have originated as the boundary for the Llys (royal court) of the Cantref of Senghenydd (RCAHMW 1982, 381-2). Both Senghenydd and Twyn Hywel dykes were probably built to control stock grazing on the Cefn Eglwysilan moorland.

RCAHMW reference 812 (1976, 10-11)

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The earthworks are currently in a stable condition; no footpaths or vehicular tracks dissect the monument.

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 21: View to the northeast of the south section of Twyn Hywel Cross Ridge Dyke (02415m). 2m scale in shot



Plate 22: View to the northeast of the north section of Twyn Hywel Cross Ridge Dyke (02415m). 2m scale in shot

PRN 02789.0w Tor Clawdd

NGR: from SN 66684 06235, SN66849 06411, SN 66862 06400, SN66934 06482 to SN 67257 06328

DESCRIPTION

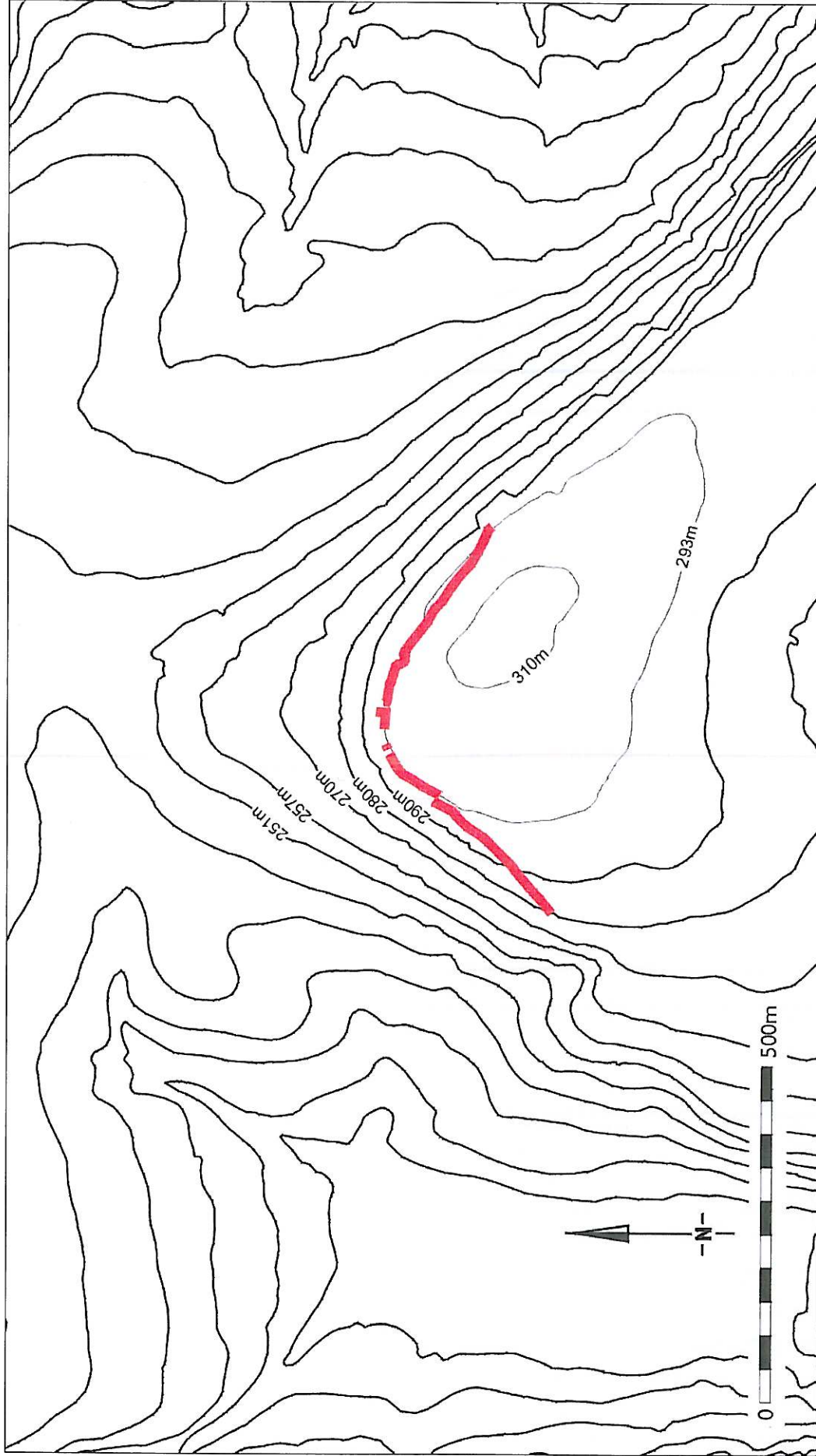
Tor Clawdd (Figure 13; Plates 23 and 24) dyke is visible as a discontinuous scarp following the 300m OD contour around the northern edge of Tor Clawdd summit. The earthwork begins at Rhyd-y-pandy Road, east of the summit of Tor Clawdd, and continues in an anticlockwise arch around the hill before descending into Cwm Darren Fawr towards the Upper Lliw reservoir. The dyke has been formed by the excavation of the scarp creating a high rampart (c2.5m to 3.5m) and ditch to the north. The ditch was accidentally exposed in 1938 showing a flat-bottomed rock-cut feature 1.2m deep and 0.9m wide (RCAHMW 1976, 6). The earthwork has been damaged by industrial activities including coal and clay extraction. Associated with the dyke is a possible early-medieval ring-work with a 17m, in diameter, 3.5m wide circular rampart and 2m wide external ditch; both the ring-work and dyke are believed to be contemporary.

RCAHMW reference 801 (1976, 6)

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke has been damaged by previous industrial activities but since these have now ceased the earthwork remains in a fairly stable condition.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 13: Tor Clawdd Cross Ridge Dyke 02789.0w

GGAT 83 Cross Ridge Dyke survey and excavation

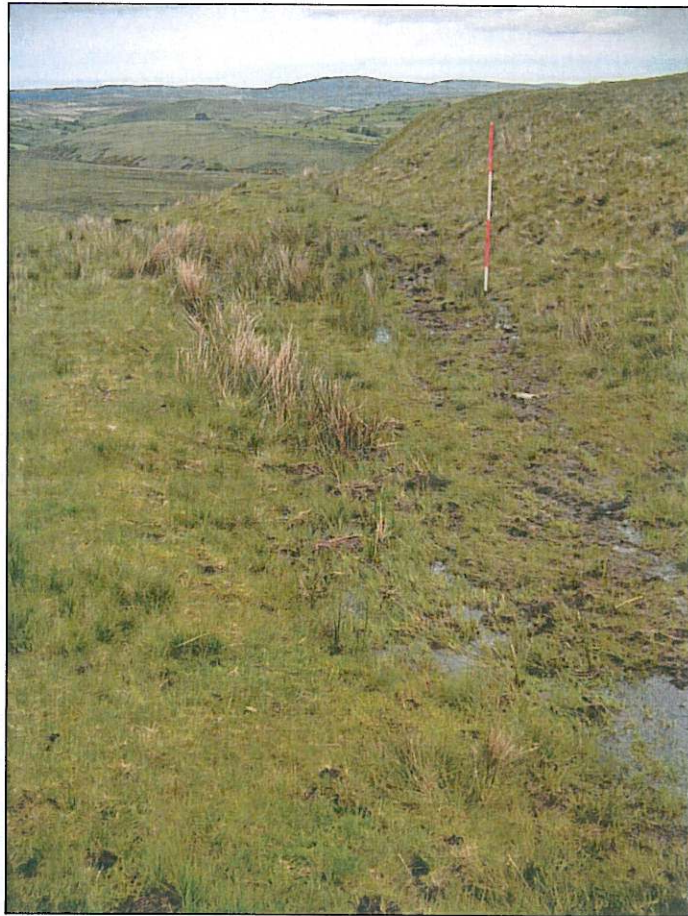


Plate 23: View to the northeast of Tor Clawdd Cross Ridge Dyke (02789w). 2m scale in shot



Plate 24: View to the southeast of Tor Clawdd Cross Ridge Dyke (02789w). 2m scale in shot

PRN 02790.0w Cefn Morfydd Dyke SAM Gm 264A

NGR: SS 78682 98180, SS78839 98043 to SS79022 98022

DESCRIPTION

Cefn Morfydd cross ridge dyke (Figure 14; Plates 25 and 26) is also known as the Tonna Cross Dyke and is thought to belong to the early-medieval period. Located at the northern end of Mynydd Cefn Morfydd, the dyke is positioned roughly east/west on a saddle between the mountain to the south and the Gwenffrwd ridge to the north. The dyke is composed of a well preserved curvilinear bank and ditch that curves gently in a north facing arch adhering to the 270m OD contour. The dyke's eastern end has been truncated by Parsons Folly (SAM Gm 447), an industrial tramroad that connected the mines at Glyncoirwg with the docks at Briton Ferry. The dyke's western end terminates near a partially destroyed earthwork enclosure, which is thought to be contemporary, although similarities in form with prehistoric domestic enclosures could also date this monument to the Iron Age.

The earthwork dyke is divided into three sections creating a continuous length from the west to a large central gap with a modern farm track through it and two smaller gaps to the east. The earthwork bank takes advantage of a natural scarp standing from 1m to 2.5m in height; a shallow ditch is positioned to the north of the bank visible as a slight depression and in several places a ditch is suggested on the south side of the bank by smaller but similar depression. The RCAHMW (1976, 8) suggests the western end of the dyke is unfinished as is the earthwork enclosure 50m to the southwest; although, the latter has had its northwestern third truncated by a modern pipeline.

A medieval house platform is situated on a north facing level terrace near the centre of the western half of the dyke and sheltered by its bank. The rectangular platform extends onto marshy ground and is roughly 12m x 10m and 1.5m high, defined by substantial walls around a rectangular depression in centre. No doorway was visible (Lewis 2003; Locock 2001).

RCAHMW reference 806 (1976, 8-9)

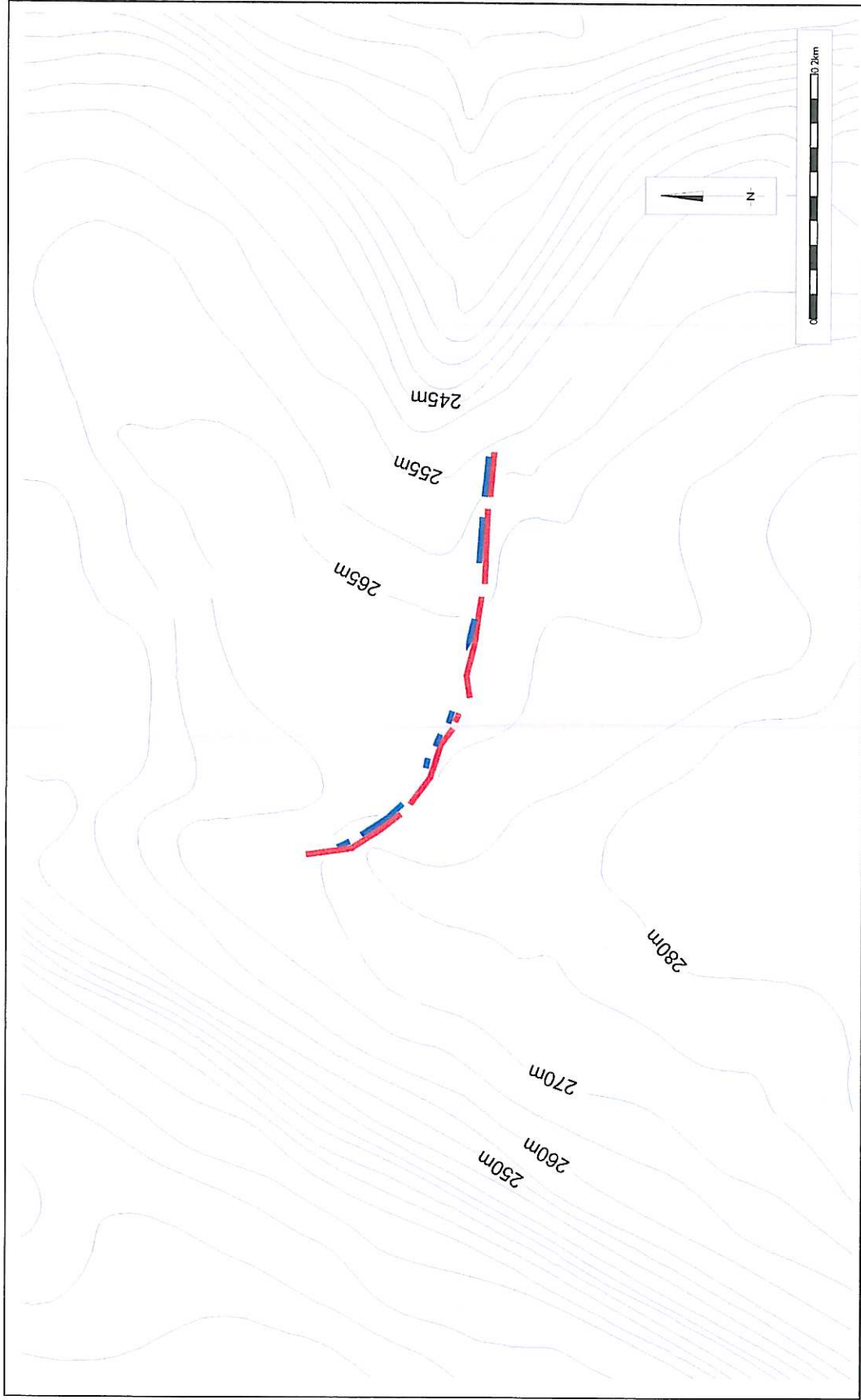
AUGUR RESULTS

A total of three boreholes were examined, each positioned through the earthwork bank; one at the western end (BH01), the second in the centre west of the central gap (BH02) and one at the eastern end (BH03). The first borehole produced a depth of 0.7m before terminating on a stone obstruction; the basal and overlying layer was found to be compacted yellow, and brown, silty-loams (103, 102), the former representing the natural weathered sandstone. The topsoil was formed by a dark-brown silty-loam with organic matter and root mat material (100). The second borehole (BH02) produced a depth of 0.49m and comprised weathered sandstone (201) under a dark-brown silty-loam topsoil. The third and final borehole (BH03) was again quite shallow reaching 0.36m in depth before terminating on a sandstone obstruction. The basal layers (303, 302) formed weathered sandstone under silt and sandy loam top- and subsoils (301, 300).

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke is eroding in several places; the most severe damage is being caused by vehicle tracks through the earthwork. Poaching from animals is also damaging the earthwork, especially to the east where a 20m section has eroded 1m into the bank (Plate 26). Vehicle access to this monument should be prevented, and where necessary the eroded sections of bank need to be stabilized and reconstituted.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 14: Cefn Morfydd Cross Ridge Dyke 02790.0w

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 25: View to the east of Cefn Morfydd Cross Ridge Dyke (02790.0w). 2m scale in shot



Plate 26: View to the southwest of eroded 20m section through Cefn Morfydd Cross Ridge Dyke (02790.0w). 2m scale in shot

PRN 02791.0w Clawdd Mawr (Bwlchgarw)SAM Gm 231

NGR: from SS 89430 94900 to SS 89530 94700

DESCRIPTION

Clawdd Mawr (Figure 15; Plates 27 and 28) is a long dyke (c200m) composed of a bank and traces of flanking ditches. The dyke, which is also known as Bwlchgarw, sits astride a low saddle on the 470m OD contour between the mountains of Y Wernfa to the northeast and Mynydd Caerau to the southwest. The overall width of the dyke is c7.5m and is composed of a stone revetted earthwork bank c1m in height and shallow (c0.2m) ditch to the southwest. The dyke has been shown to have been cut into the natural northeast facing slope with an additional ditch and the stone revetment situated on the northeast side (Crampton 1966, 381).

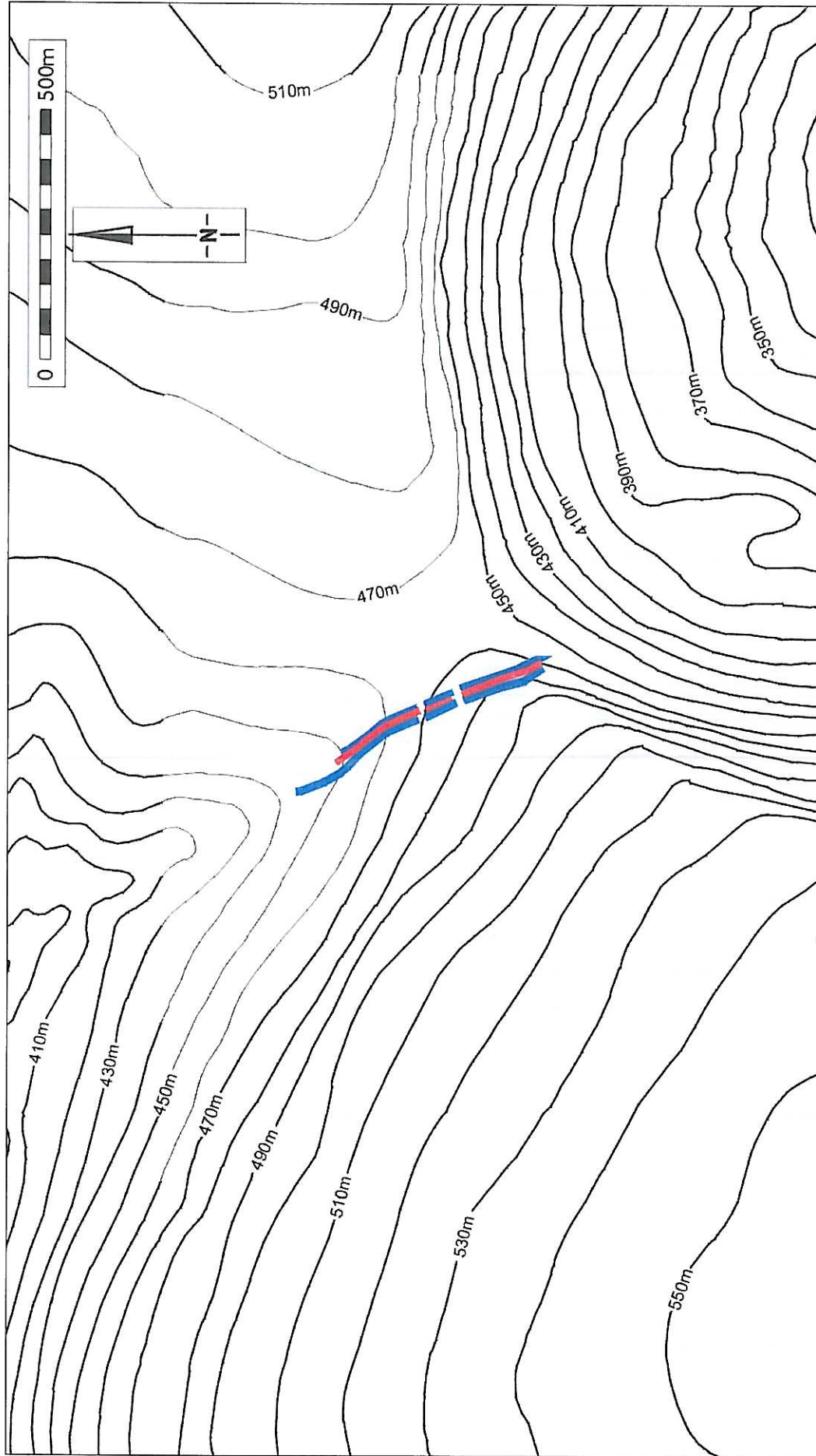
An investigation by Crampton (1966, 380-82) has shown the dyke to have been built just as the *Ericaceae* pollen had reached its maximum, the soil structure being a podzol over podzol, forming since the early-medieval period on a podzol that started forming in the Bronze Age. Based on this evidence, this particular dyke would then be appreciably earlier than the other three dykes Crampton investigated (Bwlch yr Afan, Ffos Toncenglau and Bedd Eiddil).

RCAHMW reference 808 (1976, 8)

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The dyke is currently suffering from erosion by motorcycles; in addition to the existing vehicular track several more have been created causing severe scarring to the monument. This practice must stop and the motorcycles encouraged to use the existing vehicular access through the earthwork.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 15: Clawdd Mawr, Bwlchgarw Cross Ridge Dyke 02791.0w

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 27: View to the southwest of Clawdd Mawr (Bwlchgarw) Cross Ridge Dyke (02791.0w), showing motorcycle scarring. 2m scale in shot



Plate 28: View to north of Clawdd Mawr (Bwlchgarw) Cross Ridge Dyke (02791.0w). 2m scale in shot

PRN 04513.0g Garreg Las Cross Dyke SAM Mm 260

NGR: from SO 30262 25154 to SO 30399 25060

DESCRIPTION

Garreg Las Cross Dyke (Figure 16; Plates 29 and 30) is a large stone bank spanning the west ridge of Hatterall Hill between the 500m OD contours located on the west and east sides of the ridge. The dyke takes advantage of a natural scarp (1m to 1.5m in height) and is composed of fairly large sandstone cobbles (<0.4m) with a thin covering of vegetation in places, standing up to 2m in height. No ditch is discernible on either side of the stone bank, which is c8m wide. The dyke may have been wider, suggested by the existence of a slight bank up to 6m out from either side of the stone dyke. A gap is located in the centre of the earthwork, which allows for the current footpath. The gap is 2m wide at the base with gentle sloping sides forming a V-shape profile, the top being up to 6m wide. At the western end, almost exactly on the 500m OD contour, is a socketed stone 0.55m long by 0.3m wide with a slot in the centre of the stone 0.04m wide, 0.11m long and 0.08m in depth. The exact function or date of the worked stone is unclear but its position at the very end of the dyke may suggest a marker of some kind. Also, at the western end, and c20m to the north, is a post-medieval quarry.

It has been suggested (Olding 2000, 91) that this dyke is Neolithic in date and belongs to a ritual group of monuments incorporating a henge and two satellite round barrow cairns (Garreg Las Monument Complex, PRN 08452g).

AUGUR RESULTS

A total of twelve boreholes were investigated; four through the centre of the stone bank, and a further eight divided into two groups, four on either side of the stone bank. Boreholes BH02, BH05, BH08 and BH11 were positioned equally along the centre of the stone bank, with boreholes BH01, BH06, BH07 and BH10 c5m distance on the north side and conversely boreholes BH03, BH04, BH09 and BH12 similarly located to the south.

All boreholes investigated terminated on sandstone obstructions; it should be noted that the boreholes were sited where the stone composition of the dyke was least exposed, thereby giving a continuous sequence of the substrata. The samples through the stone bank produced shallow depths (<0.23m), unsurprising given the dyke's predominantly stone content, with some weathering of the sandstone (502, 802) before substantial peat (podzol) deposits formed over the dyke (202, 501, 800). The uppermost deposit over the dyke consisted of a brown peaty-silt root-mat (200, 500, 800, 1100).

The boreholes investigated on the north and south sides of the dyke produced greater depths. To the south the boreholes exceeded 1m and to the north to just over 0.5m. There is no evidence for the presence of a ditch on the north side but the greater depth of silts and clays to the south may suggest the existence of a ditch here.

The stratigraphy on either side of the monument indicated natural weathering over the sandstone bedrock (304, 403, 701, 902, 1201). Overlying the weathered sandstone were distinct silt deposits (102, 601, 602, 1018), with those to the south at greater depths possibly representing an accumulation within a ditch (302, 303, 401, 402, 901). Clay-silts (101, 301, 400) and a peaty root-mat (100, 300, 600, 700, 900, 1017, 1200) commonly found on heathland environments formed the uppermost deposits.

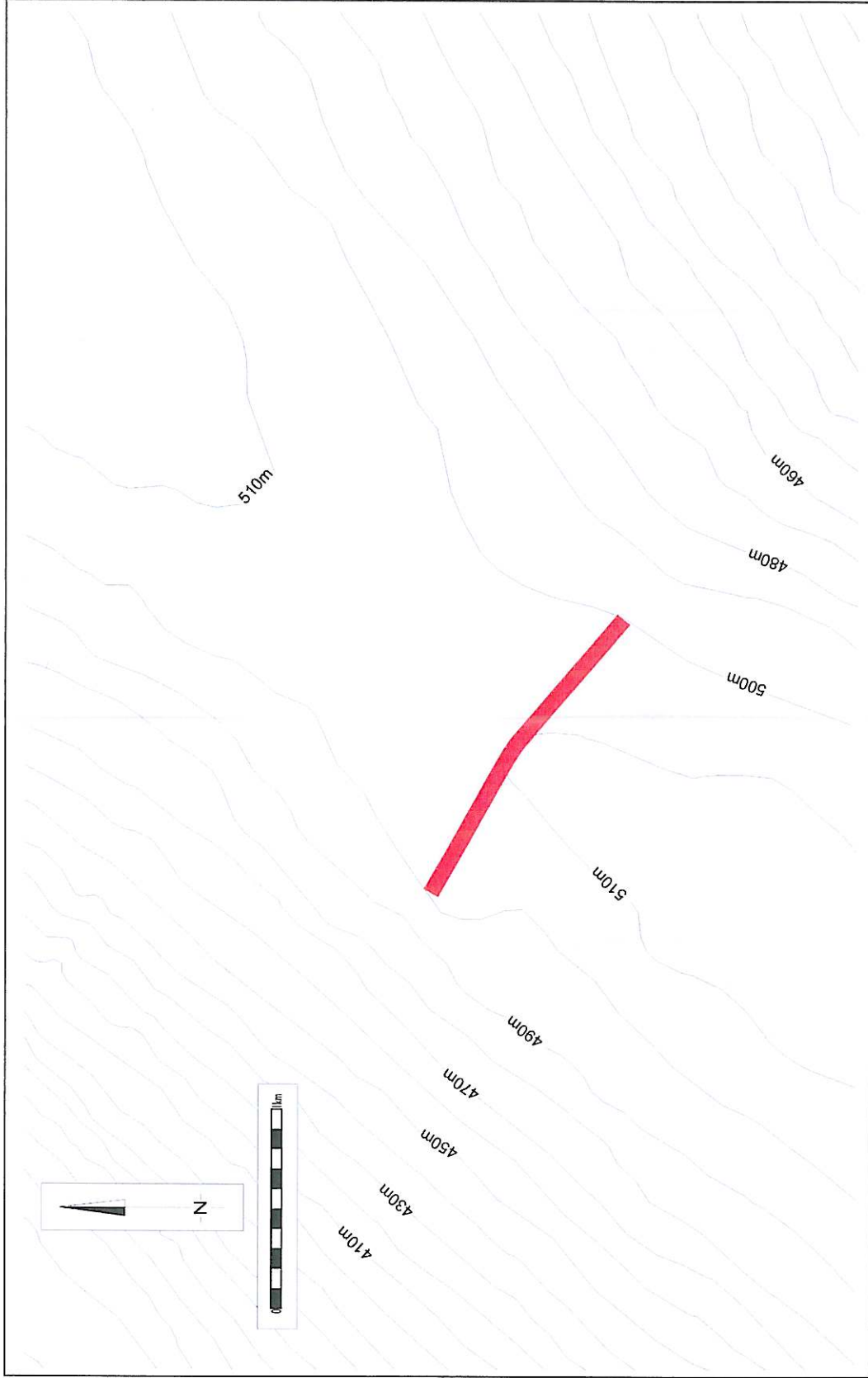
No palaeosoils were identified and the absence of any secondary podzols, either over or beside the monument, would indicate that the dyke was raised before the development of the peat. In the other upland areas included within the present study Crampton (1966) has shown the first podzol (peat) forming in the Bronze Age with the later secondary podzols forming in the early-

medieval period, which corresponds well with Olding's (2000) hypothesis of a Neolithic provenance for the dyke and its association with the Garreg Las Monument Complex.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The monument is currently stable, however, threats remain from the use of the footpath through the dyke by walkers and horses but these are judged to be minor.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 16: Garreg Las Cross Ridge Dyke 04513.0g

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Plate 29: View to the northeast through the central gap of Garreg Las Cross Ridge Dyke (04513.0g). 2m scale in shot



Plate 30: View of socketed stone at the western end of Garreg Las Cross Ridge Dyke (04513.0g). 2m scale in shot

PRN 04736m Senghenydd Dyke

NGR: ST 11970 88060, ST 10350 91760, ST 12540 92230 and ST 13760 89960

DESCRIPTION

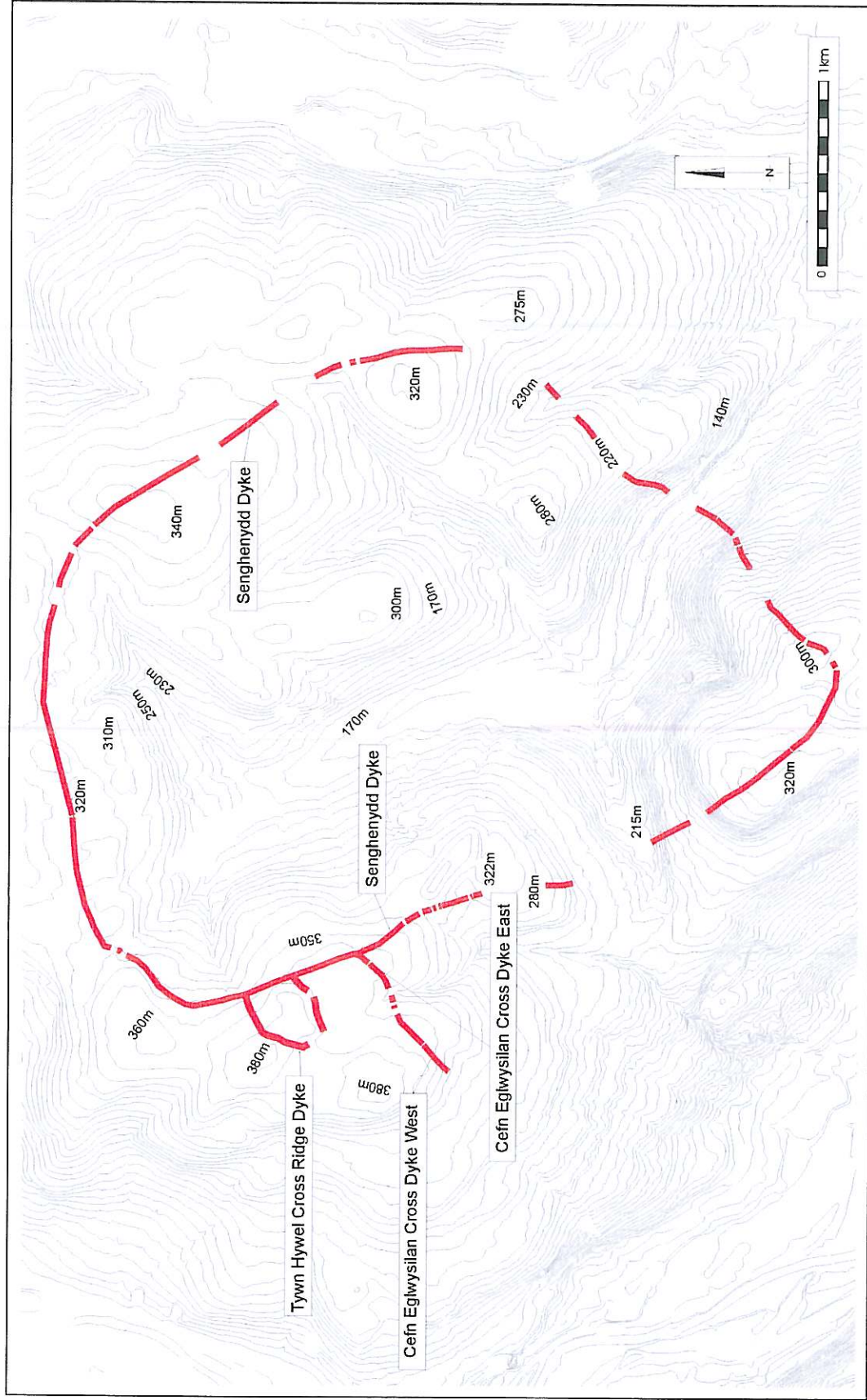
A long linear earthwork bank and internal ditch known as the Senghenydd Dyke is a significant landscape feature seen on Mynydd Eglwysilan and Mynydd Meio (Figure 17; Plates 31 and 32). The dyke is over 12 kilometres in length and follows the ridge tops of Cefn Eglwysilan, Mynydd Eglwysilan and Mynydd Meio, enclosing 10 square kilometres around the settlements of Senghenydd and Abertridwr. The earthwork has a bank that averages 3m in width and between 0.5m to 1.5m in height with an internal ditch that follows bank for almost its entire length. However, the ditch was found to be intermittent in places, especially where modern field boundaries and tracks appear to have removed all evidence of its existence.

Senghenydd Dyke is known to be a Norman deer park boundary but is thought to have originated as the boundary for the Llys (royal court) of the early-medieval Cantref of Senghenydd (RCAHMW 1982, 381-2). Both the Cefn Eglwysilan (PRN 02268.0m) and Twyn Hywel (PRN 02415.0m) dykes' eastern ends terminate at the Senghenydd Dyke and the former were probably built to control stock grazing on the Cefn Eglwysilan moorland.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The Senghenydd Dyke is a considerable engineering feat and survives in fairly good condition. However, the dyke is suffering from severe erosion by vehicles tracks and to a lesser extent fly-tipping. This particular monument, more than any other surveyed, is in desperate need of a complete and detailed survey to assess its actual state of preservation, rate of erosion and its form. Also, the dyke would benefit from a series of trial excavations designed to obtain the monuments structure, construction sequence and if possible its date.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 17: Senghenydd Dyke 04736m

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 31: View to northwest of Senghenydd Dyke on Cefn Eglwysilan (04736m). 2m scale in shot

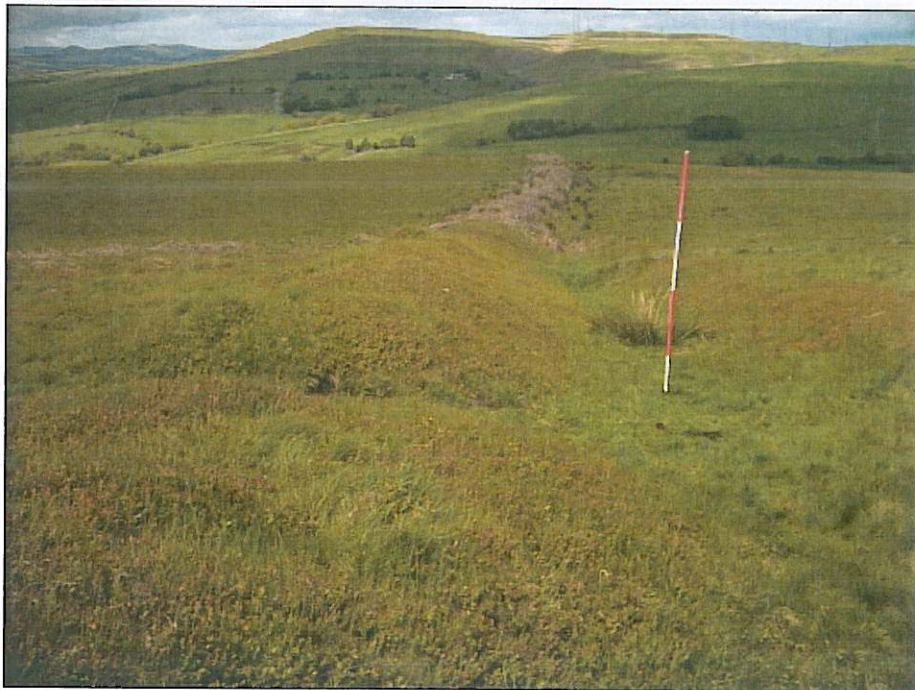


Plate 32: View to northwest of Senghenydd Dyke on Mynydd Meio (04736m). 2m scale in shot

PRN 05039g **Mynydd Llwyd – Twyn Calch**

NGR: ST 25900 98895 to ST 26144 98694

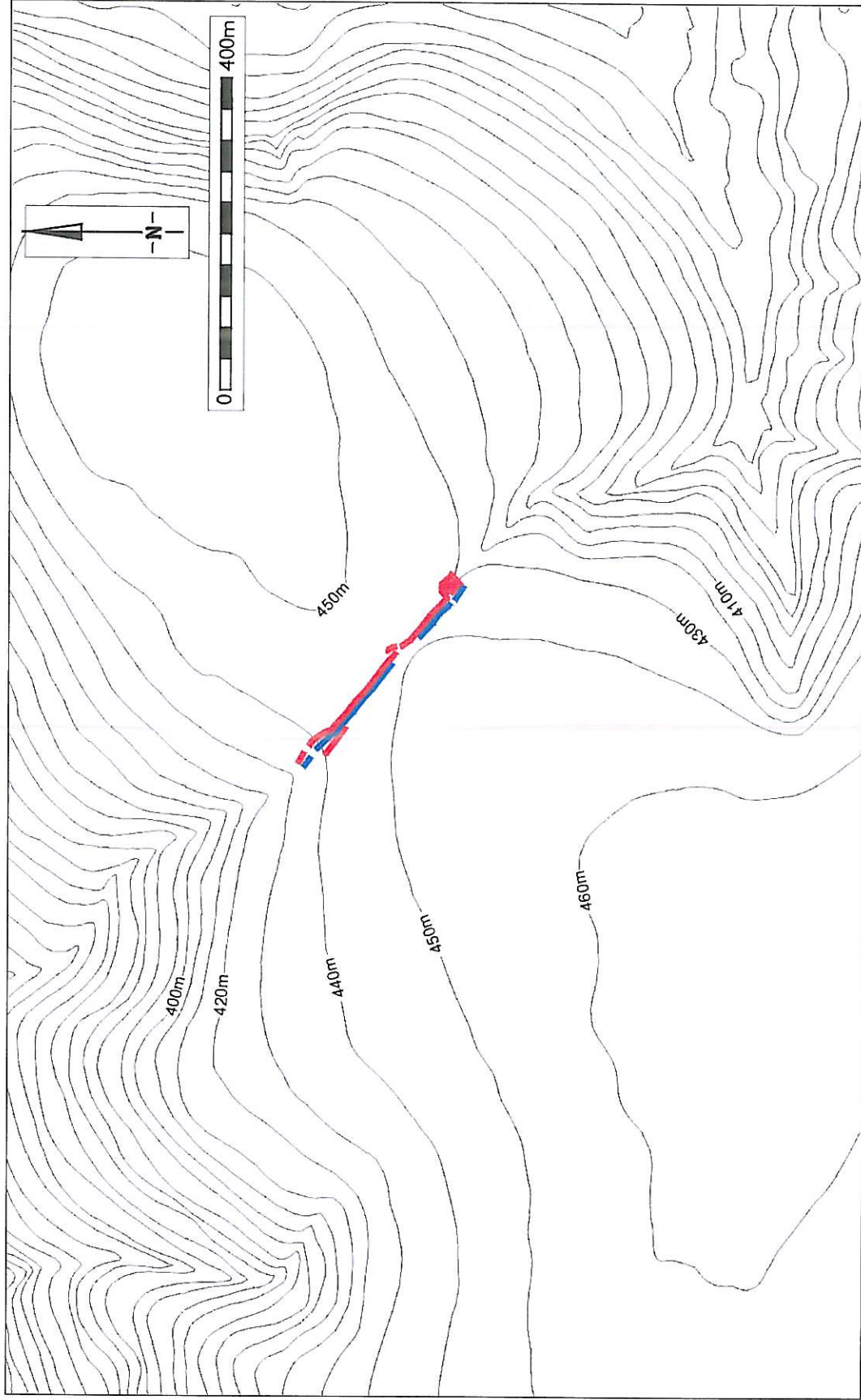
DESCRIPTION

A long (330m) discontinuous earthwork dyke following a natural scarp between the summits of Twyn Calch and Mynydd Llwyd (Figure 18; Plates 33 and 34). The dyke is positioned on a narrow saddle pinched by Buarth Maen to the northwest and Cwm Lleucu to the southeast, located between the 440m OD contours. The earthwork bank stands to 1m to 1.5m in height on its western side, whilst the eastern side gradually slopes down into the hillside. There is the suggestion of a ditch on the western side of the earthwork bank on both the northern and southern flanks of the ridge. The centre of the ridge has a peculiar arrangement of interdigitised banks and the presence of several modern vehicle tracks confound the clear understanding of how these banks are related. Where the tracks and footpaths dissect the earthworks some erosion has occurred revealing a sandstone rubble construction to the bank. A footpath passes through the dyke to the south near the source of the Nant Lleucu through a curious dog-legged bank that may indeed be original.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

The earthwork is relatively stable except for three places where severe erosion has occurred. At the dykes northern end a vehicle track has been made through the surviving earthwork, which has successfully eroded away a significant portion of bank material. In the centre of the dyke a modern vehicle track is positioned through the bank causing some erosion, however, this part of the dyke may have been the location of an original gap, therefore judging the extent of erosion is difficult.

GGAT 83 Cross Ridge Dyke survey and excavation



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Figure 18: Mynydd Llwyd – Twyn Calch Dyke 05039g

GGAT 83 Cross Ridge Dyke survey and excavation



Plate 33: View to southeast of Mynydd Llwyd – Twyn Calch Dyke (05039g). 2m scale in shot



Plate 34: View to northeast of Mynydd Llwyd – Twyn Calch Dyke (05039g). 2m scale in shot

4. Discussion and conclusions

Problems were encountered during the auguring of the seven sites; stone at varying levels of depth obstructed almost all sample locations. This then, would suggest that many of the cross-ridge dykes in Southeast Wales are composed of stone or have a significant stone content. Indeed, the excavation of Bedd Eiddil identified large sandstone slabs used as cladding over an earthwork bank, and in places prevented even the most determined auguring. Therefore, the auguring of this monument type was found to be an inefficient method of evaluation. Small-targeted excavations of this monument type would be a more efficient method of assessment.

Each of the seven sites augured produced results establishing that these monuments are situated on ferric stagnopodzols, (mainly upland soils with a peaty topsoil and periodically wet, faintly mottled bleached subsurface horizon overlying an iron-rich layer), some areas with a thin iron pan, over Palaeozoic sandstone bedrock. Crampton (1966) has shown these dykes to have been built not long after the *Ericaceae* pollen had reached its maximum, the soil structure being a *sol brun acide*, forming since the early-medieval period, on a podzol that started forming in the Bronze Age. This would correspond well with the recovery of the prehistoric burnt flint flake and burnt clay ball from the existing palaeosol at Bedd Eiddil. The presence of *Ericaceae* pollen in the palaeosol implies a heathland existed before the dyke was constructed.

Conversely, Garreg Las Cross Dyke (PRN 04513.0g) would appear to be the only monument augured that might belong to the Neolithic. An absence of any palaeosols or secondary podzols at the site indicated the dyke was raised before the development of the peat, which we know began forming in the Bronze Age (Crampton 1966). This would correspond well with Olding's (2000) hypothesis of a Neolithic provenance for the dyke and its association with the Garreg Las Monument Complex (PRN 08452g).

Recommendations for adding to or amending the schedule are the subject of a separate report. Mynydd Llwyd-Twyn Calch Dyke (PRN 05039g) survives as it probably once stood. Bwlch Y Lladron (PRN 02262.0m), Cefn Eglwysilan Cross Dyke East (PRN 02269.0m) and Tor Clawdd (PRN 02789.0w) have, for one reason or another, not survived well. These monuments must be monitored on a regular bases to prevent any further degradation of the earthworks. Senghenydd Dyke (PRN 04736m) would benefit from a complete and detailed survey to assess its actual state of preservation, rate of erosion and its form. Also, the dyke would benefit from a series of trial excavations designed to obtain the monuments structure, construction sequence and if possible its date.

A recurring observation at all the dykes surveyed is the damage caused by motorised vehicles, especially motorcycles. Bedd Eiddil is a particularly bad example, here the eastern section of the dyke has suffered severe erosion from motorcycles, deep wheel ruts have cut through the monument and as a result the bank and ditch has become almost flattened. This particular dyke was recently (2005) de-scheduled. The excavation established that a substantial bank and ditch survives and it is therefore suggested that at least an 80m length of the dyke must be well-preserved west of the damaged area. Fly-tipping is a problem identified on several of the scheduled monuments, especially those in more secluded locations such as those on Gelligaer Common and at the head of the Rhondda Valleys. Horses and walkers have had slightly less impact than motor vehicles, although even these activities have damaged the dykes, cutting artificial paths through the earthworks. Animal burrowing has also been identified on most sites but given the cross-ridge dyke's predominately stone content they remain stable; this then only presents problems during any future environmental analysis of these monuments.

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Ordnance Survey	Second Edition 6" Maps	1900/1
Ordnance Survey	Third Edition 6" Maps	1921
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Appendix I

Inventory of contexts

02261.0m SAM Gm 118 FFOS TONCENGLAU

Borehole 01 NGR SN 92022 02659

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.29m	Plastic, black-brown fibrous (peaty) sandy loam	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SN 92030 02436

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.4m	Friable black-brown peaty silt-loam	Unknown
201	Deposit	0.4m – 1.2m	Plastic light-brown clayey-silt	Unknown

Borehole terminates on sandstone.

Borehole 03 NGR SN 92017 02308

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.46m	Black-brown peaty silt-loam	Unknown

Borehole terminates on sandstone.

02262.0m BWLCH Y LLADRON

Borehole 01 NGR SN 94661 03328

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.28m	Black-brown silty-clay loam topsoil.	Unknown
101	Deposit	0.28m – 0.33m	Fine and friable grey-brown silty clay (eluvial horizon?).	Unknown
102	Deposit	0.33m – 0.55	Light brown silty-clay with orange banding.	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SN 94663 03328

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.2m	Black peaty fibrous rich silt-loam topsoil.	Unknown
201	Deposit	0.2m – 0.22m	Friable grey- brown silty-clay (eluvial horizon?)	Unknown
202	Deposit	0.22m – 0.62m	Light brown silty-clay with orange banding and sub-rounded fragments of sandstone (<0.01m)	Unknown

Borehole terminates on sandstone.

Borehole 03 NGR SN 94658 03337

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.2	Black peaty fibrous rich silt-loam topsoil.	Unknown
301	Deposit	0.2m – 0.3m	Friable grey- brown silty-clay (eluvial horizon?)	Unknown
302	Deposit	0.3m – 0.39m	Light brown silty-clay with orange banding and sub-rounded fragments of sandstone (<0.01m)	Unknown
303	Deposit	0.39m – 0.94m	Greyish-brown silty-clay with frequent small angular fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

02263.0m SAM Gm 260 DYKE 315M E OF TYLA-GLASBorehole 01 NGR SO 11168 01315

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.2	Dark-brown friable silty-loam topsoil with moderate root contamination.	Unknown
101	Deposit	0.2m – 0.48m	Mid-brown sandy-silt with sub-rounded fragments of sandstone (<0.01m).	Unknown
102	Deposit	0.48m – 1.11m	Very friable orange-brown silt with isolated sub-rounded fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SO 11165 01318

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.19m	Dark brown, very clean, clayey silt.	Unknown
201	Deposit	0.19m – 0.26m	Fine greyish-brown, very clean, silt.	Unknown

Borehole terminates on sandstone.

Borehole 03 NGR SO 11165 01314

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.15m	Dark greyish-brown clayey-silt loam with some root contamination.	Unknown
301	Deposit	0.15m – 0.51m	Mid-orange-brown clayey-silt.	Unknown
302	Deposit	0.51m – 0.68m	Mid-brown sandy-silt with infrequent sub-angular fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

Borehole 04 NGR SO 11115 01294

Context	Type	Depth	Description	Period
400	Deposit	0m – 0.06m	Dark brown silty-loam with heavy root contamination.	Unknown
401	Deposit	0.06m – 0.26m	Friable dark-brown silty-loam with isolated sub-angular fragments of sandstone (<0.01m).	Unknown
402	Deposit	0.26m – 0.3m	Light-brown clayey-silt with isolated sub-angular fragments of sandstone (<0.01m).	Unknown
403	Deposit	0.3m – 0.32m	Friable orange-brown silt with isolated sub-angular fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

Borehole 05 NGR SO

Context	Type	Depth	Description	Period
500	Deposit	0m – 0.14m	Dark greyish-brown fine clay-silt.	Unknown

Borehole terminates on sandstone.

Borehole 06 NGR SO

Context	Type	Depth	Description	Period
600	Deposit	0m – 0.10m	Dark brown friable silty-loam with moderate root contamination.	Unknown
601	Deposit	0.10m – 0.21m	Clean orange-brown clayey-silt.	Unknown
602	Deposit	0.21m – 0.34m	Greyish-brown silt with isolated angular fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

02264.0m SAM Gm 261 CEFN GELLIGAER**Borehole 01** NGR SO 11774 00289

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.11m	Black silty-loam topsoil heavy root contamination.	Unknown
101	Deposit	0.11m – 0.2m	Brown friable sandy-clay with isolated angular fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SO 11775 00290

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.19m	Dark brown, very clean, clayey silt.	Unknown

Borehole terminates on sandstone.

Borehole 03 NGR SO 11753 00274

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.09m	Friable dark brown clay-silt with isolated root contamination.	Unknown
301	Deposit	0.09m – 0.14m	Dark brown sandy clayey-silt with isolated fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

Borehole 04 NGR SO 11753 00277

Context	Type	Depth	Description	Period
400	Deposit	0m – 0.03m	Mid-brown clay-silt with isolated root contamination.	Unknown
401	Deposit	0.03m – 0.06m	Black friable silty-loam with moderate root contamination.	Unknown
402	Deposit	0.06m – 0.075m	Greyish-brown clean friable clayey-silt.	Unknown
403	Deposit	0.075m – 0.11m	Mid orange-brown clean clayey-silt.	Unknown
404	Deposit	0.11m – 0.16m	Clean, friable light grey-brown silt.	Unknown

Borehole terminates on sandstone.

Borehole 05 NGR SO 11757 00269

Context	Type	Depth	Description	Period
500	Deposit	0m – 0.06m	Blackish-brown silty-loam topsoil moderate root contamination.	Unknown
501	Deposit	0.06m – 0.1m	Clean black silty-loam.	Unknown
502	Deposit	0.1m – 0.2m	Mid-brown clayey-silt with small angular isolated fragments of sandstone (<0.01m).	Unknown

Borehole terminates on sandstone.

Borehole 06 NGR SO 11729 002626

Context	Type	Depth	Description	Period
600	Deposit	0m – 0.03m	Mid-brown friable silt-loam.	Unknown
601	Deposit	0.03m – 0.21m	Light orange-brown clayey-silt. Very friable with moderate angular fragments of sandstone.	Unknown

Borehole terminates on sandstone.

GGAT 83 Cross Ridge Dyke survey and excavation

Borehole 07 NGR SO 11725 00265

Context	Type	Depth	Description	Period
700	Deposit	0m – 0.07m	Brown clay-silt with moderate root contamination.	Unknown
701	Deposit	0.07m – 0.12m	Clean brown sandy-clay.	Unknown
702	Deposit	0.12m – 0.19m	Void, possible animal burrow.	Unknown
703	Deposit	0.19m – 0.32m	Dark-brown clay-silt with moderate angular fragments of sandstone (<0.01m).	Unknown
704	Deposit	0.32m – 0.56m	Light brown clayey-silt with small sub-angular isolated fragments of sandstone (<0.03m).	Unknown

Borehole terminates on sandstone.

02266.0m SAM Gm 285 (now descheduled) Bedd EiddilBorehole 01 NGR SS 97173 99687

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.15m	Dark-brown silty-loam with moderate root contamination.	Unknown
101	Deposit	0.15m – 0.29m	Mid-brown silty-loam with orange sandy flecks..	Unknown
102	Deposit	0.29m – 0.46m	Intermixed layer of mid-brown silty-loam with orange sandy flecks and dark-brown silty-loam with organic matter.	Unknown
103	Deposit	0.46m – 0.54m	Mid-brown silty clay-loam with orange sand mottling.	Unknown
104	Deposit	0.54m – 0.74m	Light brownish-yellow clean silty-clay.	Unknown
105	Deposit	0.74m – 0.89m	Light grey-brown silty clay with small sub-angular moderate fragments of sandstone (<0.01m).	Unknown
106	Deposit	0.89m – 0.95m	Compacted light yellow-brown clean silt-clay with small angular isolated fragments of sandstone (<0.01m).	Unknown
107	Deposit	0.95m – 1.02m	Clean grey-brown silt-clay.	Unknown
108	Deposit	1.02m – 1.08m	Clean yellow sandy silt-clay.	Unknown
109	Deposit	1.08m – 1.24m	Light brownish-yellow compacted silt-clay with frequent small fragments of sandstone (<0.02m).	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SS 97156 99686

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.55m	Slightly plastic blackish-brown sandy silt-clay.	Unknown
201	Deposit	0.55m – 0.68m	Sandy silt-clay mottled with bands of yellow sand.	Unknown
202	Deposit	0.68m – 1.42m	Compacted sandy silt-clay with frequent sub-angular fragments of sandstone (<0.01); grading with depth to larger fragments of sandstone (<0.03).	Unknown

Borehole terminates on sandstone.

Borehole 03 NGR SS 97156 99688

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.87m	Dark-brown fine clay-silt.	Unknown
301	Deposit	0.87m – 1.44m	Light-brown silty-clay with small sub-angular moderate fragments of sandstone (<0.02m).	Unknown

Borehole terminates on sandstone.

GGAT 83 Cross Ridge Dyke survey and excavation

Excavation NGR SS 97153 99686

Context	Type	Description	Period
1000	Deposit	Root matt - black-brown peaty (organic) silt-loam, very friable (quite desiccated), with heavy root contamination, particularly where grass tumps grow.	Modern
1001	Deposit	Black-brown peaty (organic) silt-loam with frequent root contamination.	Prehistoric
1002	Structure	Linear earthwork bank (cross dyke) with stone cladding. Bank contains contexts 1008, 1009, 1010, 1011, 1013, 1014 and cladding 1015.	Early-medieval?
1003	Cut	Linear ditch cut parallel to linear earthwork bank (cross dyke) (1002). Ditch cut contains contexts 1006, 1007, 1008, 1015 and 1016. Colluvial processes have moved contexts 1008, 1009 and stone cladding 1015 and 1016 into the ditch cut.	Early-medieval?
1004	Deposit (n.b)	Light yellow-brown silty-sand, weathered sandstone, with low plasticity indicating the presence of a small quantity of clay.	Natural
1005	Deposit	Illuvial horizon. Uniform bright brown-grey clayey-silt band with moderate fragments of angular sandstone. Matrix is a little plastic but mainly silt with weathered sandstone adding a slight sandy consistency.	Natural
1006	Deposit	Dark black-brown silty clay-loam with moderate root contamination. Secondary fill of ditch cut 1003, the result of natural silting.	Natural
1007	Deposit	Basal fill of ditch cut 1003 is a dark-brown silty clay-loam with grey silt and orange sand mottling, and moderate root contamination. Deposit very compacted and may indicate deliberate back filling.	Early-medieval?
1008	Deposit	Dark-brown silty clay-loam with grey-white and orange sandy mottling. The deposit has migrated down the southern edge of ditch cut (1003); the deposit appears to be an amalgamation of several layers, now indistinct, belonging to the linear earthwork bank 1002. The deposit has become interdigitised with 1009.	Early-medieval?
1009	Deposit	Basal layer of linear earthwork bank 1002. Light yellow-brown clayey-silt, friable with pockets of orange sand. The deposit has migrated down the southern edge of ditch cut (1003), and in the process has become interdigitised with 2008. Deposit affected by both small and large animal burrows.	Early-medieval?
1010	Deposit	Secondary layer of linear earthwork bank 1002. Dark-brown silt-loam with orange sand mottling. Possibly a single tip event. Deposit affected by both small and large animal burrows.	Early-medieval?
1011	Deposit	Thin light-brown sandy-loam lens with an orange tinge, contained by 1010. Deposit affected by both small and large animal burrows.	Early-medieval?
1012	Deposit	Light-brown sandy silt-loam with yellow and orange sand mottling. Deposit part of linear earthwork bank 1002 and extends as a thin gently sloping layer that pinches to a tip at its southern extremity. Deposit affected by both small and large animal burrows.	Early-medieval?
1013	Deposit	Dark-brown sandy silt-loam with orange sand mottling. Deposit part of linear earthwork bank 1002, layer is directly overlaid by stone cladding 1015. Colluvial movement has pinched the northern end of the deposit.	Early-medieval?
1014	Deposit	Light-brown loamy-sand with grey and orange sand mottling forming the upper deposit of linear earthwork bank 1002. The deposit has occasional fragments of sub-angular sandstone and root contamination.	Early-medieval?
1015	Structure	Stone cladding over linear earthwork bank 1002. Three large (c0.3m x 0.4m to 0.85m x 0.45m) sandstone flagstones sit on the top of the upper bank deposits. The weight of these stones may have aided the colluvial movement of underlying deposits into ditch cut 1003.	Early-medieval?
1016	Structure	Large sandstone flagstone (c0.45m long) residing in the base of ditch cut 1003. Possibly the remains of stone cladding slumped into the ditch.	Early-medieval?

n.b = not bottomed.

02790.0w SAM Gm 264A Cefn Morfydd Dyke*Borehole 01* NGR SS 78686 98167

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.26m	Dark-brown silty-loam, very fibrous, heavy root contamination.	Unknown
101	Deposit	0.26m – 0.42m	Void - animal burrow.	Unknown
102	Deposit	0.42m – 0.56m	Light-brown silty-loam with isolated sub-angular fragments of sandstone (<0.01).	Unknown
103	Deposit	0.56m – 0.7m	Light yellow-brown silty-loam with isolated sub-angular fragments of sandstone (<0.02).	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SS 78718 98106

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.26m	Dark-brown silty clay-loam with moderate root contamination.	Unknown
201	Deposit	0.26m – 0.49m	Mid-brown very clean clayey silt-loam.	Unknown

Borehole terminates on sandstone.

Borehole 03 NGR SS 78944 98034

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.03m	Black-brown silty-loam with moderate root contamination.	Unknown
301	Deposit	0.03m – 0.19m	Dark-brown friable sandy-loam.	Unknown
302	Deposit	0.19m – 0.28m	Mid-brown friable sandy-silt.	Unknown
303	Deposit	0.28m – 0.36m	Sandy silt-clay, friable with moderate sub-angular fragments of sandstone (<0.02).	Unknown

Borehole terminates on sandstone.

04513g SAM Mm 260 Garreg Las Cross Dyke*Borehole 01* NGR SO 30357 25103

Context	Type	Depth	Description	Period
100	Deposit	0m – 0.01m	Dark-brown fibrous, peaty silt-loam, root mat.	Unknown
101	Deposit	0.01m – 0.1m	Mid-brown clayey-silt with heavy root contamination and isolated fragments of sandstone (<0.02m).	Unknown
102	Deposit	0.1m – 0.3m	Clean mid-brown silt.	Unknown
103	Deposit	0.3m – 0.37m	Light-brown compacted friable silt with isolated fragments of sandstone (<0.02m).	Unknown

Borehole terminates on sandstone.

Borehole 02 NGR SO 30352 25101

Context	Type	Depth	Description	Period
200	Deposit	0m – 0.01m	Dark-brown fibrous, peaty silt-loam, root mat.	Unknown
201	Deposit	0.01m – 0.12m	Void – possible animal burrow	Unknown
202	Deposit	0.12m – 0.22m	Black-brown peaty silt-loam	Unknown

Borehole terminates on sandstone.

GGAT 83 Cross Ridge Dyke survey and excavation

Borehole 03 NGR SO 30347 25093

Context	Type	Depth	Description	Period
300	Deposit	0m – 0.15m	Dark-brown fibrous, peaty silt-loam, root mat.	Unknown
301	Deposit	0.15m – 0.3m	Mid-brown friable clayey-silt with some root contamination.	Unknown
302	Deposit	0.3m – 0.42m	Light mid-brown friable silt.	Unknown
303	Deposit	0.42m – 0.9m	Light brown friable silt.	Unknown
304	Deposit	0.9m – 1.05m	Light grey weathered sandstone with light-brown silt mottling. Frequent sub-angular fragments of sandstone.	Natural

Borehole terminates on sandstone.

Borehole 04 NGR SO 30359 25081

Context	Type	Depth	Description	Period
400	Deposit	0m – 0.12m	Mid-brown, slightly plastic, clayey silt-loam.	Unknown
401	Deposit	0.12m – 0.36m	Mid-brown silt, very clean.	Unknown
402	Deposit	0.36m – 0.67m	Light-brown silt with isolated fragments of sandstone (<0.01).	Unknown
403	Deposit	0.67m – 1.03m	Pinkish-brown sandy-silt, very compacted weathered sandstone, with isolated fragments of sandstone (<0.01).	Unknown

Borehole terminates on sandstone.

Borehole 05 NGR SO 30366 25087

Context	Type	Depth	Description	Period
500	Deposit	0m – 0.06m	Dark-brown fibrous peaty silt-loam, root mat.	Unknown
501	Deposit	0.06m – 0.09m	Black fibrous peaty loam.	Unknown
502	Deposit	0.09m – 0.13m	Pinkish-brown silt.	Unknown

Borehole terminates on sandstone.

Borehole 06 NGR SO 30367 25085

Context	Type	Depth	Description	Period
600	Deposit	0m – 0.16m	Dark-brown fibrous peaty silt-loam, root mat.	Unknown
601	Deposit	0.16m – 0.25m	Mid-brown friable silt with isolated root contamination.	Unknown
602	Deposit	0.25m – 0.67m	Light mid-brown silt with isolated fragments of sandstone (<0.02).	Unknown

Borehole terminates on sandstone.

Borehole 07 NGR SO 30357 25109

Context	Type	Depth	Description	Period
700	Deposit	0m – 0.16m	Dark-brown fibrous peaty silt root mat, very compacted.	Unknown
701	Deposit	0.16m – 0.26m	Pinkish-brown sandy-silt with orange banding. Isolated sub-angular fragments of sandstone (<0.02).	Unknown

Borehole terminates on sandstone.

Borehole 08 NGR SO 30346 25104

Context	Type	Depth	Description	Period
800	Deposit	0m – 0.15m	Dark-brown fibrous peaty silt root mat, very compacted.	Unknown
801	Deposit	0.15m – 0.18m	Mid-brown sandy-silt, occasional small fragments of sandstone (<0.005).	Unknown
802	Deposit	0.18m – 0.23m	Light-brown sand, weathered sandstone.	Unknown

Borehole terminates on sandstone.

GGAT 83 Cross Ridge Dyke survey and excavation

Borehole 09 NGR SO 30337 25099

Context	Type	Depth	Description	Period
900	Deposit	0m – 0.12m	Dark-brown fibrous peaty silt root mat.	Unknown
901	Deposit	0.12m – 0.41m	Mid-brown silt, friable with decaying organic matter.	Unknown
902	Deposit	0.41m – 0.5m	Pinkish-brown sandy-silt, weathered sandstone, with moderate sub-angular fragments of sandstone.	Unknown

Borehole terminates on sandstone.

Borehole 10 NGR SO 30339 25133

Context	Type	Depth	Description	Period
1017	Deposit	0m – 0.08m	Dark-brown fibrous peaty silt root mat.	Unknown
1018	Deposit	0.08m – 0.19m	Brown silt, friable with sub-angular fragments of sandstone.	Unknown

Borehole terminates on sandstone.

Borehole 11 NGR SO 30331 25121

Context	Type	Depth	Description	Period
1100	Deposit	0m – 0.08m	Brown fibrous peaty-silt root mat	Unknown

Borehole terminates on sandstone.

Borehole 12 NGR SO 30327 25116

Context	Type	Depth	Description	Period
1200	Deposit	0m – 0.15m	Brown fibrous peaty-silt root mat	Unknown
1201	Deposit	0.15m – 0.23m	Pinkish-brown sandy-silt, weathered sandstone, with moderate sub-angular fragments of sandstone (<0.02).	Unknown

Borehole terminates on sandstone.