

MAENOFFEREN SLATE MINE

Archaeological Assessment Report



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Maenofferen Slate Mine

Archaeological Assessment Report

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Report No. 1250

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SUMMARY

*This report sets out the results of an archaeological assessment undertaken by Gwynedd Archaeological Trust (GAT) on an area to the south of Maenofferen Slate Mine (centred on **SH 7153 4662**). The work was carried out on behalf of Steve Edwards as part of a Review of Old Mineral Permissions (ROMP) in April 2015.*

A desk-based assessment and walkover over survey of the site was carried out in April 2015. Two drainage channels (11) and a field boundary wall (13), which were recorded in the previous assessment, as well as a modern trackway (100), a quarried stone pile and trackway (101), and a post medieval sheepfold or store (102) with associated dry-stone wall (103), were recorded during the walkover survey. No evidence of the adit (10) recorded in the previous assessment was visible, and it is likely that this has been removed by the current mine workings directly to the north of the modern trackway. All the features within the assessment area have been recorded photographically and been surveyed in, and no further work is recommended on them.

1 INTRODUCTION

This report was commissioned by *Steve Edwards* and forms the report for the archaeological assessment carried out as part of a Review of Old Mineral Permissions (ROMP) on an area to the south of Maenofferen Slate Mine (centred on **SH 7153 4662**) (Figure 1).

The area for assessment is shown on client drawing Maenofferen Section Fig 1.3, reproduced in part as Figure 1. This figure also indicates the 'Permitted area of surface working' and the 'Permitted area of surface tipping' which are covered under the 'Review of Old Mineral Permissions' (ROMP). According to point 4.3.27 in Chapter C of the Gwynedd Unitary Development Plan 2001-2016, 'All applications for ROMP including stalled applications will be subject to the provisions of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999 (as amended 2000).'

The proposal is for slate extraction to be re-started at the Maenofferen Slate Mine by use of a process known as 'untopping'. The process of 'untopping' a slate mine involves the use of explosives to create fissures in the waste rock above the vein of slate, and then the use of extractive machinery to exploit these fissures and remove the waste rock and allow access to the slate vein. In the case of Maenofferen Slate Mine, previous untopping operations have been undertaken, the last in 2010, allowing access to some the upper levels of the underground working chambers. This phase of untopping would allow access to chambers further south than those which have been worked out following the previous untopping process.

A Project Design was prepared (Appendix I) which sets out the legislation framework and planning background in detail. The work was undertaken in accordance with guidelines set out in *Planning Policy Wales 2014* and *Welsh Office Circular 60/96 (Planning and the Historic Environment: Archaeology)* and was monitored by the Gwynedd Archaeological Planning Services (GAPS).

This report has been prepared in accordance with the *Standard and guidance for field evaluation*, and the *Standard and guidance for historic environment desk-based assessment* specified by the Chartered Institute for Archaeologists (CIfA 20014a & b).

2 SITE LOCATION

Maenofferen Slate Mine is located to the northeast of the town of Blaenau Ffestiniog. The site is located within the eastern portion of the slate mine (centred on **SH 7164 4651**) and comprises of rough upland pasture, measuring approximately 17km². The site is bounded to the north and south by previously quarried areas.

3 ARCHAEOLOGICAL BACKGROUND

The archaeology of the Maenofferen Slate Mine has been studied as part of the Atlanterra Project, financed by the European Regional Development Fund. The work, undertaken by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) in 2010, involved a detailed survey of each of the surviving buildings and structures relating to the extraction of slate from the underground workings. The underground workings themselves were not examined during this programme of works.

In addition to the survey of the Maenofferen Slate Mine complex, archaeological survey work has also examined the surrounding upland landscape as part of the RCAHMW 'Uplands Archaeology Initiative'. In 2000 Gwynedd Archaeological Trust (GAT) undertook an upland survey of Moel Bowydd, the area to the north of Maenofferen Slate Quarry (Hopewell 2000) and in 2014 Hayman and Horton undertook an upland survey of Manod Bach and Y Garnedd, the area to the south and south east of Maenofferen Slate Quarry (Hayman & Horton 2014).

The archaeological landscape created by the extraction of slate around Maenofferen and other associated mines and quarries has been subject to a process of assessment, survey and recording. This work was undertaken to feed into quarrying related development plans sensitive to the character of the region's historic landscape. In 1991 John Manley undertook an assessment and survey to the north of the Llechwedd and to the north west of the Fotty and Bowydd Quarries (Manley 1991) and in 1998 John G. Roberts undertook a survey of lands adjacent to the Diphwys Casson, Maenofferen and Llechwedd Slate Mines, and this included an area known as 'Archaeological Survey Area Two' (Roberts 1998). This area includes the northern half of the area which is to be covered in the present archaeological assessment and identified 31 features, of which 14 were considered to have key importance in contributing to the character of the historic landscape (Roberts 1998:11).

4 AIMS AND OBJECTIVES

As specified in the Project Design (Appendix I) the objective of the desk-based assessment was to address the:

- history of the site;
- potential impact of development on archaeological remains;
- requirements for further assessment in the form of intrusive field evaluation.

As specified in the Project Design (Appendix I) the objective of the walkover survey was to:

- verify the results of the desk based assessment;
- identify any further archaeological sites which may exist as above ground features;
- assess the potential for the preservation of below-ground archaeology;
- assess the impact upon the historic landscape;
- photograph and record the present condition of all sites noted;
- survey using survey grade (not handheld) GPS with <10cm accuracy (model: Trimble GNSS/R6/5800) any archaeological sites encountered within the assessment area.

5 METHODOLOGY

All works were carried out in accordance with the Project Design for the works (Appendix I).

- Features were surveyed in with the use of a Trimble TSC2 controlled GPS receiver (Trimble R6 Unit) where possible, with the results tied into the National Grid. When the use of a Trimble R6 Unit was not possible due to loss of signal, the features were located with handheld GPS and measured by hand from known locations, with the results tied into the National Grid.
- A written record of all identified features/ layers was completed via GAT pro-formas.
- A running photographic record was maintained, using a digital SLR camera set to maximum resolution in RAW format and archived in TIFF format.

6 ARCHAEOLOGICAL RESULTS

6.1 DESK-BASED ASSESSMENT

Maenofferen (also known by its variant spellings Maen-Offeren, Maen Y Fferem, and Maen Offeren) Slate Mine forms part of the extensive Blaenau Ffestiniog complex of mines that occupy the area between the Manod and Moelwyn Mountains. Maenofferen is one of the higher level mines, with the processing floor at over 400m above sea level.

It began operating on a piecemeal basis in the late 18th Century, principally as part of an open cast mining area, known as David Jones' pit. The first company to formally extract slate was the Maenofferen Slate Quarry Company Ltd formed in 1861, when the land and existing quarry was leased from the owner Lord Newborough. The quarry proved very successful, its output increased from 397 tons in 1861 to 8,600 tons in 1882, the fifth largest producer in the Ffestiniog area. In 1897 it employed 429 people, but by 1972 this had fallen to 60 men with an annual output of 1,200 tons. Quarrying still continues on the site today - with Maenofferen now owned by J. W. Greaves and Sons Ltd, Blaenau Ffestiniog - although underground operations ceased in 1999 and none of the above ground complex of buildings at Maenofferen remains in use today.

An archaeological assessment of the northern part of the current assessment area was undertaken by John G. Roberts in 1998 (Roberts 1998). This assessment showed seven features located either partially or fully within the current assessment area. These features consisted of three eroded/ silted up drainage ditches (**8** and **11**), a peat cutting (**9**), an adit (**10**), a dry-stone wall (**13**), and a drainage scoop (**15**) (Figure 2), and were described as follows:

8 and 11: Eroded/ silted drainage ditches which are up to 2m wide and 0.8m deep. Probably dug in the later part of the nineteenth century to divert the flow of surface water into the Maenofferen Quarry workings. The collected water is shed into the Afon Bowyff culvert at the northern boundary of Archaeological Survey Area Two.

9: Area of peat cutting. A prominent example is a 30m cut section-side which has a maximum (eroded) height of 0.6m.

10: Adit. The entrance is 2m high by 2.5m wide. The approach cut leading to the adit is 4m wide and 2.5m high at its greatest. The north end of the cut has been truncated by the modern access track (**7**). This feature is marked as a level on the 1886 6" O.S. map.

13: Extensive dry-stone wall. 2m maximum height, and 0.5m wide. The wall fabric has both irregularly coursed and uncoursed sections, and comprises a mixture of surface gathered and roughly quarried slate blocks and slabs. The wall is tumbled in places, but survives intact, including its topping of block

cope stones, for most of its length. Probably a nineteenth century wall associated with quarry related ownership boundaries.

15: Scoop which has been cut into hill-side to facilitate drainage of surface water away from the adit (**10**), by feeding the water collected into channels and ditches (**8**).

The only recommendation of the previous assessment in relation to the current assessment area was to *'ascertain whether the underground workings relating to the adit are documented in mapped form. If this is not the case, then a survey should be commissioned and a report prepared in advance of destruction by quarrying'* (Roberts 1998:12).

6.2 WALKOVER SURVEY

The walkover survey revealed seven features located within the assessment area (Figure 3), three of which (two drainage ditches (**11**) (Plate 1) and a dry-stone wall (**13**) (Plate 2)) had been noted in the desk-based assessment (Figure 2). The four features which had not been previously noted consisted of:

100: a modern rubble stone access trackway approximately 7m wide (Plate 3). The area between this trackway and the existing quarry face to the north and west has been heavily disturbed by surface working. Post-dates the 1998 assessment and is associated with the current quarry works;

101: a large area of quarried stone, measuring approximately 165m by 40m, and located between the dry-stone wall and the quarry face at the southern end of the assessment area. A rubble trackway, between 2m and 4m wide, was visible running along the top of the stone pile (Plate 4). Associated with the 19th century quarry works;

102: a square sheepfold or store (Plate 5) was located on top of the quarried stone pile, measuring 2m by 1.5m internally. Its walls were approximately 1.5m high and 0.6m wide, and were constructed from a mixture of surface gathered and roughly quarried slate blocks and slabs. The topping of block cope stones is mostly intact. An entranceway, 0.5m wide, was located at its southeastern corner. Associated with the 19th century quarry works.

103: A rough stone wall runs west from the northwestern corner of the sheepfold or store along the edge of the stone trackway (**101**) (Plate 6). It ran for approximately 9m and measured 1.7m wide adjacent to the sheepfold or store, and narrowed to 1.3m wide at its western end. It had an average height of 0.6m and was constructed from roughly quarried stone slabs. Associated with the 19th century quarry works.

7 DISCUSSION

The archaeological assessment has shown that a new stone access trackway (100) was constructed at some point after the completion of the 1998 survey of the area. The area to the north and east of this trackway, between the current quarry face and the trackway, and both inside and outside of the current assessment area, has been heavily disturbed. This disturbance, caused by surface working in the area, has removed any evidence of the features recorded by the previous assessment, including the drainage ditches (8), peat cutting (9), and adit (10).

As previously noted, the only recommendation of the previous assessment in relation to the current assessment area was to *'ascertain whether the underground workings relating to the adit are documented in mapped form. If this is not the case, then a survey should be commissioned and a report prepared in advance of destruction by quarrying'* (Roberts 1998:12). This had not been carried out, and the disturbance in this area by the current mine workings since the previous assessment has removed any evidence of the adit.

The eroded/ silted up drainage ditches (11) are still partially visible on site, however the drainage scoop (15) has fully silted up and is no longer visible. The 19th century dry-stone wall (13) is the same comparable condition as that recorded in the 1998 assessment of the area.

The southern section of the assessment area, which had not been previously assessed, revealed a large quarried stone pile, with a flattened trackway running along its top (101). A dry-stone sheepfold or store (102) with associated dry-stone wall (103) was located on top of this stone pile, adjacent to the quarry edge. All of these features are associated with the 19th century quarry workings.

8 CONCLUSIONS AND RECOMMENDATIONS

The only features recorded within the assessment area date to either the 19th century or current quarry workings. All the features have been recorded photographically and surveyed, and no further work is recommended on them.

The adit (10) which had previously been recorded within the assessment area and had been recommended for further work (Roberts 1998) has been removed by the current mine workings without this work being carried out. In addition to this, the modern access trackway (100) runs through the assessment area and within an area not signed off for working in. It is vital that in the future full assessment of any area is completed and the work approved by the Gwynedd Archaeological Planning Service (GAPS) prior to any work being carried out.

There are a number of buildings associated with the slate mine located both to the east and west of the assessment area. These buildings are located far enough away from the current assessment area so as not to be affected by the proposed work. However, an assessment of these buildings and the surrounding area would be required prior to any future work within this area.

9 ACKNOWLEDGEMENTS

The author would like to thank Steve Edwards for commissioning the work, and Andy Carson for his help on site. The work on site was carried out by Dave McNicol.

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Chartered Institute for Archaeologists (CIfA) 2014a, *Standard and Guidance for field evaluation*

Chartered Institute for Archaeologists (CIfA) 2014b, *Standard and Guidance for historic environment desk-based assessment*

APPENDIX I: PROJECT DESIGN

MAENOFFEREN SLATE MINE PROJECT DESIGN FOR ARCHAEOLOGICAL ASSESSMENT (G2417)

***Prepared for
Steve Edwards
April 2015***

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

MAENOFFEREN SLATE MINE**PROJECT DESIGN FOR ARCHAEOLOGICAL ASSESSMENT (G2417)**

Prepared for Steve Edwards, April 2015

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1. INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by *Steve Edwards* to provide a project design for undertaking an archaeological assessment to the south of the Maenofferen Slate Mine (centred on NGR **SH71534662**). The land to the south of the quarry is open upland terrain with another quarry, known as Diffwys-Casson Slate Quarry to the south. The area for assessment is shown on client drawing **Maenofferen Section Fig 1.3**, reproduced in this report as Figure 1. This figure also indicates the 'Permitted area of surface working' and the 'Permitted area of surface tipping' which are covered under the 'Review of Old Mineral Permissions' (ROMP). According to point **4.3.27** in Chapter **C** of the Gwynedd Unitary Development Plan 2001-2016, 'All applications for ROMP including stalled applications will be subject to the provisions of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999 (as amended 2000).'

The proposal is for slate extraction to be re-started at the Maenofferen Slate Mine by use of a process known as 'untopping'. The process of 'untopping' a slate mine involves the use of explosives to create fissures in the waste rock above the vein of slate, and then the use of extractive machinery to exploit these fissures and remove the waste rock and allow access to the slate vein. In the case of Maenofferen Slate Mine, previous untopping operations have been undertaken, the last in 2010, allowing access to some the upper levels of the underground working chambers. This phase of untopping would allow access to chambers further south than those which have been worked out following the previous untopping process.

The archaeological assessment will be undertaken in accordance with guidelines set out in *Planning Policy Wales 2014* and *Welsh Office Circular 60/96 (Planning and the Historic Environment: Archaeology)*.

The archaeological assessment will use existing information to establish the archaeological significance of the site; to assess the impact of the development proposals on surviving monuments or remains; and to help inform future decision making, design solutions and potential archaeological evaluation and mitigation strategies.

The scheme will be monitored by the Gwynedd Archaeological Planning Service (GAPS). A copy of this design must be approved by GAPS prior to the start of the assessment.

The assessment will conform to the guidelines specified in *Standard and Guidance for Historic Environment desk-based assessment* (Chartered Institute for Archaeologists, 2014).

2. ARCHAEOLOGICAL AIMS

A desk-based assessment is defined as “a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate” (ClfA 2014, 4).

The aims of the assessment are:

1. an assessment of the potential for heritage assets to survive within the area of study
2. an assessment of the significance of the known or predicted heritage assets considering, in England, their archaeological, historic, architectural and artistic interests.
3. strategies for further evaluation whether or not intrusive, where the nature, extent or significance of the resource is not sufficiently well defined
4. an assessment of the impact of proposed development or other land use changes on the significance of the heritage assets and their settings
5. strategies to conserve the significance of heritage assets, and their settings
6. design strategies to ensure new development makes a positive contribution to the character and local distinctiveness of the historic environment and local place-shaping
7. proposals for further archaeological investigation within a programme of research, whether undertaken in response to a threat or not.

3. ARCHAEOLOGICAL BACKGROUND

The archaeology of the Maenofferen Slate Mine has been studied as part of the Atlanterra Project, financed by the European Regional Development Fund. The work, undertaken by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) in 2010, involved a detailed survey of each of the surviving buildings and structures relating to the extraction of slate from the underground workings. The underground workings themselves were not examined during this programme of works.

In addition to the survey of the Maenofferen Slate Mine complex, archaeological survey work has also examined the surrounding upland landscape as part of the RCAHMW 'Uplands Archaeology Initiative'. In 2000 Gwynedd Archaeological Trust (GAT) undertook an upland survey of Moel Bowydd, the area to the north of Maenofferen Slate Quarry (Hopewell 2000) and in 2014 Hayman and Horton undertook an upland survey of Manod Bach and Y Garnedd, the area to the south and south east of Maenofferen Slate Quarry (Hayman and Horton 2014).

The archaeological landscape created by the extraction of slate around Maenofferen and other associated mines and quarries has been subject to a process of assessment, survey and recording. This work was undertaken to feed into quarrying related development plans sensitive to the character of the region's historic landscape. In 1991 John Manley undertook an assessment and survey to the north of the Llechwedd and to the north west of the Fotty and Bowydd Quarries (Manley 1991) and in 1998 John G. Roberts undertook a survey of lands adjacent to the Diphwys Casson, Maenofferen and Llechwedd Slate Mines, and this included an area known as 'Archaeological Survey Area Two' (Roberts 1998). This area includes some of the area which is to be covered in the present archaeological assessment and identified 31 features, of which 14 were considered to have key importance in contributing to the character of the historic landscape (Roberts 1998:11).

4. PROGRAMME OF WORK

4.1 INTRODUCTION

The assessment will address the following:

- The history of the site
- The potential impact of development on archaeological remains
- The requirements for further assessment in the form of intrusive field evaluation.

The project will be undertaken in four stages:

1. Desk-based assessment
2. Field visit
3. Report compilation
4. Project archive

Based on the results, the assessment will make recommendations for any further archaeological evaluation and mitigation stages, to help inform future decision making, design solutions and potential.

4.2 DESK-BASED ASSESSMENT

The desk-based assessment will involve a study of the following resources:

1. The regional Historic Environment Register (HER, GAT, Craig Beuno, Garth Road, Bangor, LL57 2RT) will be examined for information concerning the study area. This will include an examination of the core HER, and secondary information held within the record which includes unpublished reports, the 1:2500 County Series Ordnance Survey maps, and the National Archaeological Record index cards.
2. The National Monuments Record (NMR RCAHMW, National Monuments Record of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be checked for sites additional to the HER, and if required additional supporting information will be examined at the NMR.
3. Information about Listed Buildings and Scheduled Ancient Monuments from Cadw will be examined in the regional HER, with supporting information from Cadw if required. The Register of Outstanding and Special Historic Landscapes and the Register of Parks and Gardens will be checked.

4. Secondary sources will be examined, including the Inventories of the Royal Commission on Ancient and Historical Monuments for Wales, and works held within the regional libraries. Indices to relevant journals, including county history and archaeology society journals and national society journals such as *Archaeologia Cambrensis* will be checked. Also at this stage 19th century topographical dictionaries, antiquarian tours and trade directories will be examined where relevant.
5. Evidence from aerial photographs will be collated. Vertical and oblique collections held by the NMR, NRW and Welsh Assembly Government will be considered for examination. All photographs examined will be listed in the assessment report.
6. Archive data and maps, where relevant, will be consulted in the National Library of Wales at Aberystwyth, and at the regional archives at Gwynedd Archives, Caernarfon Record Office (Archon Code: 219) Victoria Dock, Caernarfon LL55 1SH and / or Gwynedd Archives, Meirionnydd Record Office (Archon Code: 220) Ffordd y Bala, Dolgellau LL40 2YF. This will include the relevant estate maps and tithe maps and information from Land Tax Assessments. Where relevant antiquarian prints and photographs from the national and regional archives will be examined.

4.3 FIELD SURVEY

This part of the assessment will involve a walkover of the study area and assessing the sites identified during the desk-based study. Any additional sites noted will also be assessed. The location of potentially well-preserved environmental deposits will be noted.

The aims of this stage of the work are to:

- verify the results of the desk based assessment
- identify any further archaeological sites which may exist as above ground features
- assess the potential for the preservation of below-ground archaeology
- assess the impact upon the historic landscape
- photograph and record the present condition of all sites noted.
- survey using survey grade (not handheld) GPS with <10cm accuracy (model: Trimble GNSS/R6/5800) any archaeological sites encountered within the assessment area.

Access onto land is to be arranged by the Client.

4.4 DATA PROCESSING AND REPORT COMPILATION

Following completion of the stages outlined above, a report will be produced incorporating the following:

1. Non-technical summary
2. Introduction
3. Aims and purpose
4. Specification
5. Methods and techniques, including details and location of project archive
6. Archaeological Background
7. Results of assessment in the form of a gazetteer
8. Assessment of impacts
9. Proposals for further field evaluation and/or mitigation
10. Summary and conclusions
11. List of sources consulted.

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included. A draft copy of the report will be sent to the regional curatorial archaeologist (GAPS) and to the client prior to production of the final report.

4.5 DEFINITION OF CATEGORY OF IMPORTANCE

To assess the importance of sites and to allow the appropriate mitigatory action to be proposed for each, a framework of categories will be used with each site allocated to a particular category according to its relative importance:

Category A - Sites of National Importance.

This category includes Scheduled Ancient Monuments and Listed Buildings (Grade I and II*) as well as those sites which would meet the requirements for scheduling (ancient monuments) or listing (grade I and II* and certain grade II) or both. Sites that are scheduled or listed have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of Regional Importance

These sites are those which would not fulfil the criteria for scheduling, but may include Listed Buildings at grade II. They are sites of particular importance within the region.

Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an

acceptable alternative. Sites that are Listed have legal protection, and it is recommended that all listed buildings are preserved *in situ*.

Category C - Sites of District or Local Importance

These sites are not of sufficient importance to justify a recommendation for preservation if threatened, but nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and Damaged Sites

These are sites which are of minor importance or are so badly damaged that too little remains to justify their inclusion in a higher category. For these sites the most appropriate mitigation is often rapid recording either in advance or during destruction.

Category E - Sites needing further investigation

Sites, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A-D, are temporarily placed in this category, with specific recommendations for further recommendation. This category can also apply to areas as well as individual sites.

5. DISSEMINATION AND ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled and cross-referenced, and lodged in an appropriate place (to be decided in consultation with the regional Historic Environment Record) within an agreed submission period.

- Two copies of the paper report plus a digital report and archive on optical disc will be provided to GAPS;
- Two copies of the paper report plus a digital report and archive on optical disc will be provided to Historic Environment Record, Gwynedd Archaeological Trust; this will be submitted within six months of report completion
- A digital report and archive (including photographic and drawn) data will be provided to Royal Commission on Ancient and Historic Monuments, Wales.
- A paper report(s) plus digital report(s) will be provided to the client.

10.1 5.1 HISTORIC ENVIRONMENT RECORD

In line with the regional Historic Environment Record (HER) requirements, the HER must be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER. At the onset, the HER Enquiry Form provided by the HER, will be completed and submitted.

The assessment will be undertaken in April 2015 weather permitting.

6. PERSONNEL

The work will be managed by John Roberts, Principal Archaeologist GAT Contracts Section. The work will be undertaken by one of the Trust's Archaeologists experienced in the relevant skills/periods required.

7. HEALTH AND SAFETY

The Trust subscribes to the SCAUM (Standing Conference of Archaeological Unit Managers) Health and Safety Policy as defined in **Health and Safety in Field Archaeology** (2006).

The GAT Project Archaeologist will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and landowner prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat.

8. INSURANCE

Public Liability

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Aviva Insurance Ltd

POLICY TYPE Public Liability

POLICY NUMBER 24 7651 01 CHC/000405

EXPIRY DATE 21/06/2015

Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.

INSURER Aviva Insurance Ltd

POLICY TYPE Employers Liability

POLICY NUMBER 24 765101 CHC/000405

EXPIRY DATE 21/06/2015

Professional Indemnity

Limit of Indemnity- £2,000,000 in respect of each and every claim

INSURER Royal & Sun Alliance Insurance PLC

POLICY TYPE Professional Indemnity

POLICY NUMBER RKK865819/1208

EXPIRY DATE 22/07/2015

9. REFERENCES

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Client Drawing ***Maenofferen Section Fig 1.3***

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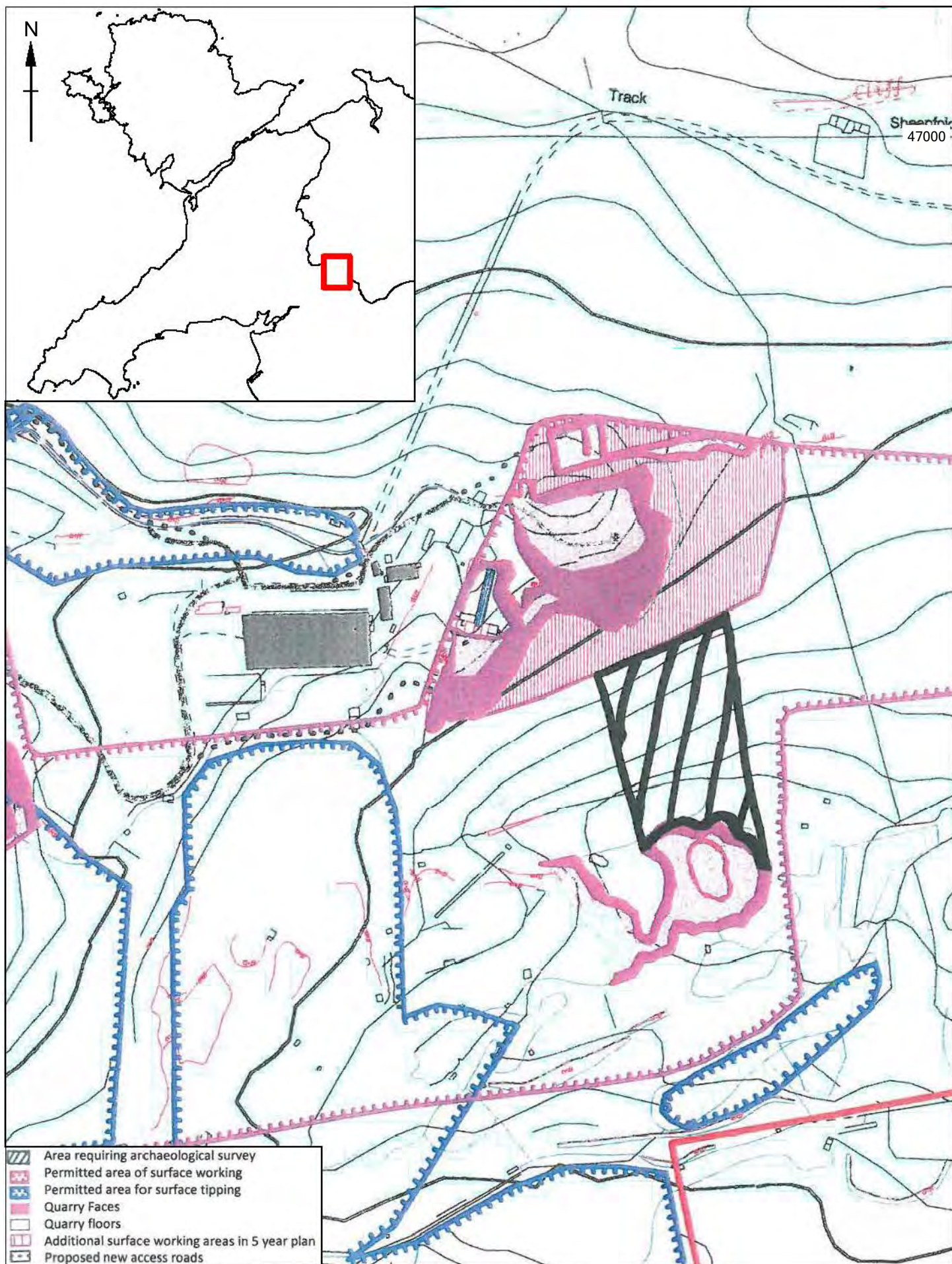


Fig. 1: Site Location. Reproduced from Clint Drawing Figure 1.3



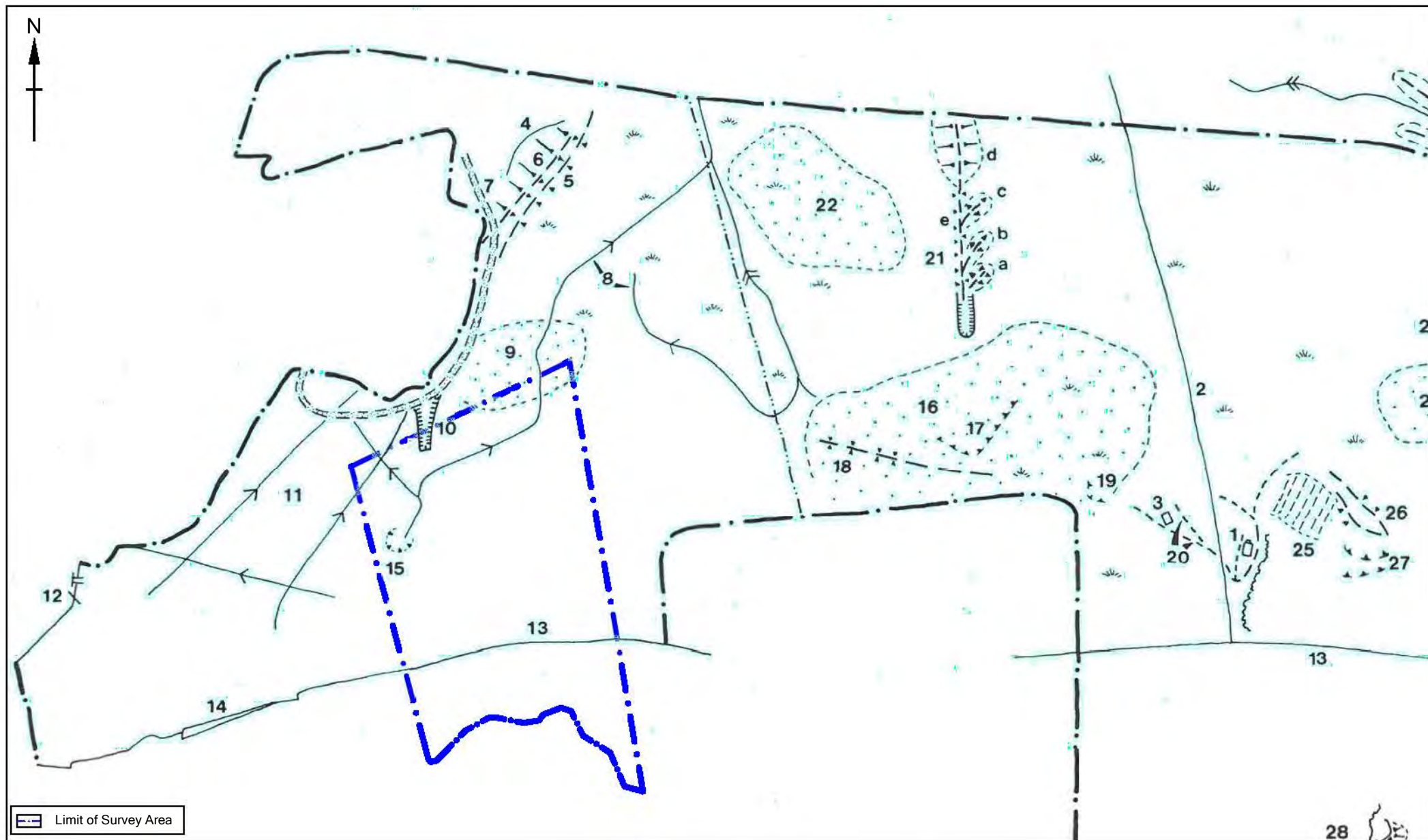


Fig. 2: Assessment Area Overlain on Previous Survey Area 2.
Reproduced from Drawing LLECH.97.ARC03

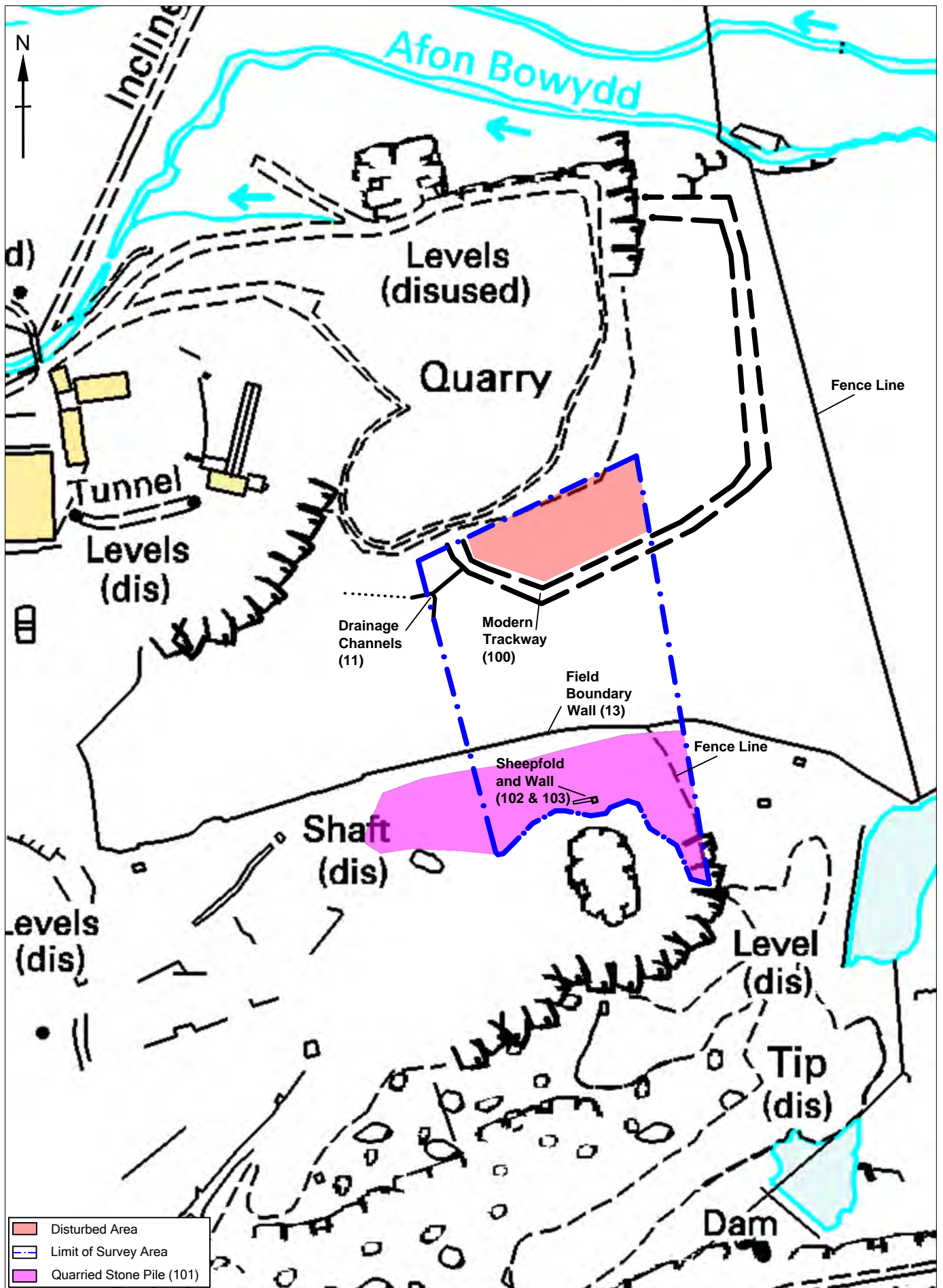


Fig. 3: Assessment Area Showing Location of Features





Plate 1: Drainage Ditch (11). View from the Northeast.



Plate 2: Dry-Stone Wall (13). View from the ENE.



Plate 3: Modern Access Trackway (100). View from the Northeast.



Plate 4: Quarried Stone Pile and Trackway (101). View from the WSW.



Plate 5: Sheepfold or Store (102). View from the Southeast.



Plate 6: Stone Wall (103). View from the Northwest.



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