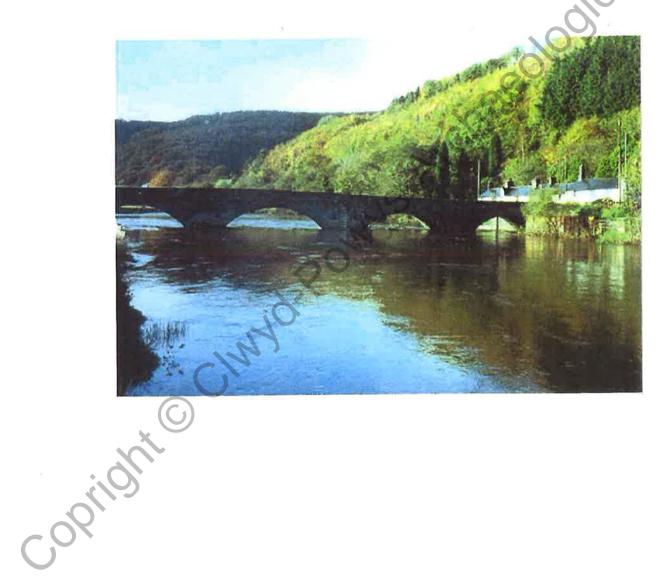
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THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

A487 Fishguard to Bangor Trunk Road Pont ar Ddyfi Improvement

CULTURAL HERITAGE ASSESSMENT Volume 1: Text



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CULTURAL HERITAGE ASSESSMENT Volume 1: Text

> **NW** Jones November 2001

Report for Powys County Council

The Clwyd-Powys Archaeological Trust

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CPAT Report Record

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CONTENTS

VOLUME 1: TEXT

- 1 INTRODUCTION
- Archaeoloojical Frusi 2 LOCATION, TOPOGRAPHY AND GEOLOGY
- 3 **CULTURAL HERITAGE ASSESSMENT**
- **BASELINE CONDITIONS**
- 5 POTENTIAL IMPACTS
- 6 **MITIGATION**
- 7 CONCLUSIONS
- 8 **ACKNOWLEDGEMENTS**
- 9 **REFERENCES**

VOLUME 2: ILLUSTRATIONS

- Fig. 1 Route options and archaeological sites
- Fig. 2 Tithe survey of Machynlleth parish, 1844
- Fig. 3 Tithe survey of Pennal parish, 1842
- Fig. 4 Ordnance Survey 2nd ed. 25", revised 1900

VOLUME 3: APPENDICES

- 1: GAZETTEER OF SITES
- 2: SPECIFICATION

1 INTRODUCTION

- 1.1 The proposed development involves improvements to the A487 at Pont ar Ddyfi, Machynlleth in western Powys. A Brief for the Cultural Heritage section of the Environmental Assessment was prepared by Mid Wales Trunk Road Agency (dated September 2001), which detailed the works required.
- 1.2 The Contracting Section of CPAT was invited to submit a tender for the assessment, which was duly accepted in October 2001, with the assessment being undertaken during the following month.

2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The proposed improvements affect a 1.4km section of the A487 north of Machynlleth (SH 74420131 to SH 75050217), either side of the Powys-Gwynedd boundary, which at this point follows the Dyfi. All but the southern edge of the study area lies within the Snowdonia National Park (fig. 1).
- 2.2 Three route options have been proposed (fig. 1), of which Option 1 involves improvements to the existing road, while Options 2 and 3 would involve the construction of a new road and river crossing further to the east.
- 2.3 The present road heads due north from Machynlleth Station railway bridge to cross the Dyfi by the existing Pont ar Ddyfi road bridge. The road then follows the north bank of the river eastwards for 0.5km before heading north-east towards Corris in the Afon Dulas valley.
- 2.4 To the south of the Dyfi, extending as far as the railway, the land is generally flat, lying on the floodplain of the river. The river runs along the north side of the floodplain with the present road situated on a terrace above the floodplain. Soils in this area consist predominantly of alluvial soils of the Conway Association (Rudeforth et al. 1984).

3 CULTURAL HERITAGE ASSESSMENT

- 3.1 Stage one of the assessment involved the examination of all the readily available primary and secondary documentary, cartographic, pictorial, photographic and oral sources. Repositories and organisations consulted included the following: the County Sites and Monuments Records (SMRs), CPAT, Welshpool and GAT, Bangor; the National Library of Wales, Aberystwyth; the National Monuments Record (NMR), RCAHMW, Aberystwyth; Powys County Archives, Llandrindod Wells; the National Trust; Cadw: Welsh Historic Monuments; and records held by Powys County Council.
- 3.2 Stage two consisted of a field survey of the whole of the proposed construction area, which took the form of a walked transect survey of the proposed routes, undertaken on 8 November 2001. All archaeological sites were recorded on standard CPAT site visit forms, the data including: an accurate location using a hand-held Geographical Positioning System (GPS); a written description of character, function, condition, vulnerability, dating etc; a unique primary record number (PRN); and sketch surveys as appropriate. Each extant site was also photographed in 35mm format black and white and colour print and colour slide.
- 3.3 A search of the County SMRs yielded only three recorded sites within the study area. However, this sparse number is almost certainly a reflection of the lack of fieldwork in the area rather than an indication of the potential archaeological resource.

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- There is no clear evidence for the early history of the area. There is a tradition of a 34 Roman settlement at Machynlleth known as Maglona, although no physical or artefactual evidence has ever come to light to support this (RCAHM 1911, 145-6). There is, however, a Roman fort downstream on the north side of the river at Pennal. The town itself with founded as a planned settlement in the late 13th century although some form of settlement may already have been in existence (Silvester 1992, 124).
- The land to the south of the Dyfi, as far as the railway, extends across the floodplain 3.5 and is therefore unlikely to have been settled. There is, however, evidence that this area was cultivated during the medieval or early post-medieval period. A map of the Wynnstay Estate in 1763 depicts five mere stones which would have been erected to demarcate different plots of land, probably meadow from which hay crops were taken.
- The Dyfi valley has long been an important routeway and a river crossing may well have existed here long before the construction of the first timber bridge in 1533. This bridge was replaced in stone around 1681. The present bridge (PRN 4090; plates 1-2) dates from 1805, and records suggest that it was constructed on dry land and the river then diverted to run underneath it (Davies 1991, 68). From the available evidence it would seem that the late 17th-century bridge occupied approximately the same position as its successor, although possibly slightly upstream, which may have allowed the later bridge to be constructed alongside. There is no evidence, however, to suggest that the course of the river has been substantially altered at this point.
- There are records of a minor Civil War engagement (PRN 4323) in November 1644, 3.7 which has in some sources been attributed to the area around Pont ar Ddyfi, although the exact location is not recorded. What may have been little more than a local skirmish involved Parliamentary troops marching from Pembroke who beat off a Royalist ambush near Machynlleth and went on to burn Mathafam, the home of the Royalist leader, Rowland Pugh, some miles to the east (Gaunt 1991, 50).
- The present line of the A487 is likely to have been established following the 3.8 construction of the first bridge. A new road between Machynlleth and Tywyn was constructed in 1775 by the Tumpike Trust although the existing road, also a tumpike, dates from 1827 (Davies 1996, 71). A tollgate (PRN 36892) was erected in the second half of the 18th century opposite the north end of the bridge (Davies 1991, 71), although it is unclear whether this is the same building that survives in that position today (PRN 36885). The section of road on the north side of the Dyfi is, for part of its length, flanked by the original dry-stone walls which in places still stand to around 1.0m in height. One section (SH 74860203) has a substantial revetment wall on the south side, close to a bend in the river. Another feature relating to the turnpike is a milestone (PRN 36889) plate 4) which survives on the north side of the road to the east of Pont ar Ddyfi, and bears the inscription Mach 1M, with a benchmark beneath. A small quarry (PRN 36896) recorded by the Ordnance Survey in 1886 (fig. 4) close to Pont ar Ddyfi may have been used to provide stone for the construction and maintenance of the road and possibly also for the bridge.
- The tollgate is depicted on an estate map of 1828 while the Tithe Surveys (figs 2-3) for the parishes of Pennal (1842) and Machynlleth (1844) provide details of land ownership and field names, although unfortunately not landuse. A number of houses are depicted at the northern end of the bridge, including a row of six cottages (PRN 36885; plate 3) and a detached building to the east of the bridge (PRN 36891; plate 6).
- 3.10 During the 19th century the area around Corris developed as a major producer of slate and by the 1850s improved transport was needed to the river port at Derwenlas, downstream from Machynlleth. The Comis, Machynlleth and River Dovey Tramroad Act was passed in 1858 allowing the construction of a 2ft 3in narrow gauge line from Corris to Machynlleth, and then to Derwenlas, which was opened in 1859. The line was worked by horses and gravity and crossed the Dyfi on a timber viaduct (PRN 36894). The main line railway opened in 1863 after which slate was exchanged at Machynlleth and the track to Derwenlas was abandoned with the railway now being known as the

Corris Railway. In 1878 the Imperial Tramways Company of Bristol acquired the line, relaying it with steel rails, easing some curves and introducing steam locomotives from 1879. Passengers were carried briefly by horse bus in 1879 and from 1883 by steam following improvements to some curves. In 1906 the timber viaduct was replaced with a steel girder construction resting on three stone piers. The line was purchased by GWR in 1930 with the passenger service ending the following year. Following floods in 1948 the line was closed, and it was dismantled by 1950 (Baughan 1991 175-7).

- 3.11 The line now survives to the south of the Dyfi as an embankment (PRN 36886; plate 7) up to 5m wide and 0.6m high, the top being 3m wide. The best preserved section is flanked by concrete fence posts. Elsewhere, the line can be identified by following field boundaries. Immediately south of the Dyfi an exposed section shows the embankment to be constructed of slate waste with edge-set slate edging and slate coping. A well-constructed stone-built culvert (PRN 36888; plate 8) survives beneath the embankment. The section to the north of the Dyfi (PRN 36887; plate 9) has been partly reused by a recently constructed cycleway, beyond which the line survives alongside the road. There is no surviving trace of the viaduct, the site now being occupied by a recently constructed bridge for the new cycleway (plate 10).
- 3.12 The Corris Railway is depicted by the Ordnance Survey on the 1st edition 25" map surveyed in 1886, as well as the 2nd edition map revised in 1900 (fig. 4). The latter also shows a small building (PRN 36893; plate 12), now surviving only as an earthwork, in a field close to the road to the south of the bridge. Also shown is a Sunday School (PRN 36890; plate 5) close to the bridge, in the entrance to a small quarry (PRN 36896).
- 3.13 In addition to those sites noted above, the field survey also identified a substantial flood defence embankment (PRN 36895; plate 11) along the south side of the river. This would appear to post-date the Corris Railway and may therefore have been constructed after 1950.
- 3.14 Although examination of available borehole and test pit data for the proposed route revealed no obvious potential for palaeoenvironmental deposits the floodplain contains a number of palaeochannels which could contain significant deposits.

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4 BASELINE CONDITIONS

- 4.1 A gazetteer of sites is provided in Appendix 1. Each site has been classified according to its perceived significance. The categories are those given in the Cadw: Welsh Historic Monuments draft Archaeology and the Trunk Road Programme in Wales: a Manual of Best Practice.
 - Category A sites of national importance. It is presumed that sites in this category will be preserved and protected in situ.
 - Category B sites of regional or county importance which are of particular importance within the region. Preservation in situ is the preferred option for these sites, but if loss or damage is unavoidable, appropriate detailed recording should be undertaken.
 - Category C sites of district or local importance which are not of sufficient importance to justify preservation if threatened, but which merit adequate recording in advance of loss or damage.
 - Category D minor and damaged sites which do not merit inclusion in a higher category, and for which rapid recording should be sufficient.
 - Category E sites whose importance could not be fully determined as a result of the assessment and may warrant further evaluation.

Category A sites

4.2 There are two category A sites within the assessment area.

PRN	Name	Type	Period	Condition
4090	Pont ar Ddyfi	Bridge	Post Medieval	Intact
36885	Pen-y-bont nos 1-6	Building	Post Medieval	Intact

- 4.3 Pont ar Ddyfi (PRN 4090) was constructed around 1681, replacing a timber bridge built in 1533. The present stone bridge is composed of five arches spanning a total of 64m. The southern arch has recently been strengthened by the addition of steel reinforcements on either side. This historic bridge has been identified as a site of national importance and afforded statutory protection as a Scheduled Ancient Monument (SAM Mg002).
- 4.4 The row of six cottages opposite the north end of Pont ar Ddyfi (PRN 36885) has been listed Grade II. The two-storey cottages probably date from the early 19th century and may incorporate the tollgate (PRN 36892).

Category B sites

4.5 There are six Category B sites within the area of the assessment.

PRN	Name	Туре	Period	Condition
36886	Corris Railway (Powys)	Railway	19th Century	Damaged
36887	Corris Railway (Gwynedd)	Railway	19th Century	Damaged
36888	Corris Railway Culvert	Culvert	19th Century	Near intact
36889	Pont ar Ddyfi milestone	Milestone	19th Century	Intact
36890	Pont ar Ddyfi Sunday School	Sunday school	19th Century	Intact
36891	Pont ar Ddyfi house 'Minafon'	House	19th Century ?	Intact

4.6 The Corris Railway was established in 1858 as a narrow gauge horse-drawn tramway and, following conversion to steam, operated until 1948. To the south of the Dyfi the line survives as an embankment (PRN 36886) with a culvert (PRN 36888) beneath, while to the north the line (PRN 36887) can be traced alongside the A483.

4.7 A late 18th or early 19th-century house (PRN 36891) lies adjacent to the road to the east of the bridge, opposite the former Sunday School (PRN 36890), which was built at the end of the 19th century. To the east of the bridge a milestone (PRN 36889) survives on the north side of the A483.

Category C sites

4.8 Only one site has been assigned to Category C.

PRN	Name	Type	Period	Condition
36893	Pont ar Ddyfi platform	Platform	20th Century	Damaged

4.9 The earthwork platform (PRN 36893) survives for a building depicted on the Ordnance Survey 1st edition 25" map, surveyed in 1886. The form and function of the structure is unknown, although its size and position would suggest agricultural use, possibly a small barn.

Category D sites

4.10 There are four Category D sites within the area of the assessment

PRN	Name	Type	Period	Condition
36894	Corris Railway Dyfi Bridge	Bridge	19th Century	Destroyed
36895	Pont ar Ddyfi embankment	Flood defence	20th Century ?	Damaged
36896	Pont ar Ddyfi Quarry	Quarry	19th Century ?	Damaged
36898	Machynlleth mere stones	Boundary stone	Medieval ?	Destroyed

- 4.11 The site of the timber viaduct for the Corris Railway (PRN 36894) is now occupied by a recent bridge constructed for a new cycleway. It is assumed that any remains of the viaduct will have been destroyed. The flood defence embankment (PRN 36895) along the south side of the Dyfi appears to post-date the Corris Railway and may therefore have been constructed after 1950.
- 4.12 A small quarry (PRN 36896) immediately north of Pont ar Ddyfi may have been used to provide stone for the construction and maintenance of the road and possibly also for the construction of the bridge. The five mere stones (PRN 36898) depicted on a map of 1763 are assumed to have been destroyed by later agriculture.

Category E sites

 (C_1)

4.13 There are four sites whose importance could not be fully determined as a result of the assessment and may warrant further evaluation, although one of the sites is likely to be unaffected by the proposals.

PRN	Name	Туре	Period	Condition
4323	Pont ar Ddyfi Battle	Battle site	Post Medieval	Unknown
36897	Machynlleth Ridge and Furrow	Ridge and furrow	Medleval ?	Unknown
36899	Pont ar Ddyfi bridge (site of)	Bridge	Post Medieval	Unknown
36892	Pont ar Ddyfi Toligate	Tollgate	Post Medieval	Unknown

4.14 The minor Civil War engagement (PRN 4323) close to Pont ar Ddyfi is not well recorded and the location is unknown but may lie within the assessment area. The first stone bridge across the Dyfi at this point was built around 1681 and replaced by the existing bridge in 1805. The new bridge, however, was constructed in a different location to its predecessor, the exact position of which is unknown but may lie immediately to the east. The site of the late 18th-century tollgate (PRN 36892) at the northern end of Pont ar Ddyfi is now occupied by a row of six cottages, which may include the tollgate. An area of possible ridge and furrow (PRN 36897) was identified from aerial photography but could not be identified on the ground.

5 POTENTIAL IMPACTS

- 5.1 Under the existing baseline conditions there appears to be no obvious impact on any of the sites identified during the assessment. The potential impact on the cultural heritage of each of the three proposed options is considered below. At this stage, however, the precise nature of the works involved remains unknown, particularly with regard to any ancillary works such as constructors compounds, services etc.
- 5.2 Four of the sites identified will not be affected by any of the proposed options.

PRN	Name	Type	Period	Condition	Impact	Category
36894	Corris Railway Dyfi Bridge	Bridge	19th Century	Destroyed	Unaffected	D
36896	Pont ar Ddyfi Quarry	Quarry	19th Century ?	Damaged	Unaffected	D
36897	Machynlleth Ridge and Furrow	Ridge and furrow	Medieval ?	Unknown	Unaffected	OF
36898	Pont ar Ddyfi mere stones	Boundary stone	Medieval ?	Destroyed	Unaffected	D

Option 1

5.3 Option 1 may potentially impact upon eight sites identified during the assessment.

PRN	Name	Туре	Period	Condition	Impact	Category
4090	Pont ar Ddyfi	Bridge	Post Medieval	Intact	Structural	A
4323	Pont ar Ddyfi Battle	Battle site	Post Medieval	Unknown	Unknown	E
36885	Pen-y-bont nos 1-6	Building	Post Medieval	Intact	Setting	Α
36890	Pont ar Ddyfi Sunday School	Sunday school	19th Century	Intact	Setting	В
36891	Pont ar Ddyfi house 'Minafon'	House	19th Century ?	Intact	Setting	В
36892	Pont ar Ddyfi Tollgate	Tollgate	Post Medieval	Unknown	Setting	E
36893	Pont ar Ddyfi platform	Platform	20th Century	Damaged	Loss ?	С
36899	Pont ar Ddyfi bridge (site of)	Bridge	Post Medieval	Unknown	Unknown	E

- 5.4 The main impact is likely to be on the Pont ar Ddyfi bridge (PRN 4090) with works to strengthen the bridge and improve its load-bearing capabilities. The bridge has been identified as a site of national importance and has been afforded statutory protection as a Scheduled Ancient Monument. The proposals would inevitably have a negative impact on the integrity of the historic structure as well as a visual impact, although the extent of the impact cannot be determined at present.
- 5.5 The existing houses (PRNs 36885 and 36890-1) around the northern end of the bridge are unlikely to be directly affected, although the proposals may have a minor visual impact on their setting. The building platform (PRN 36893) may be affected by ancillary works, while the potential impact on the Civil War battle site and the former river bridge cannot be determined since the precise location of both sites remains unknown.

Option 2
Option 2 may potentially impact upon four sites identified during the assessment.

PRN	Name	Туре	Period	Condition	Impact	Category
4323	Pont ar Ddyfi Battle	Battle site	Post Medieval	Unknown	Unknown	E
36889	Pont ar Ddyfi milestone	Milestone	19th Century	Intact	Loss	В
36893	Pont ar Ddyfi platform	Platform	20th Century	Damaged	Loss ?	С
36895	Pont ar Ddyfi embankment	Flood defence	20th Century ?	Damaged	Damage	D

5.7 The main impact is likely to be on the existing A483 north of the Dyfi. Sections of the road retain the original walling, as well as a milestone (PRN 36889), dating from the creation of the turnpike road in the late 18th century. The survival and integrity of these features is likely to be severely affected by the proposals.

5.8 Part of the flood defence embankment (PRN 36895) would be lost, although the feature is considered to be relatively modern and of only minor significance. The building platform (PRN 36893) may be affected by ancillary works, while the potential impact on the Civil War battle site cannot be determined since the precise location of the site remains unknown. In addition, Option 2 is likely to have an impact on the area of palaeoenvironmental potential (fig. 1).

Option 3

Option 3 may potentially impact upon seven sites identified during the assessment.

PRN	Name	Туре	Period	Condition	Impact	Category
4323	Pont ar Ddyfi Battle	Battle site	Post Medieval	Unknown	Unknown	E
36886	Corris Railway (Powys)	Rallway	19th Century	Damaged	Unknown	В
36887	Corris Railway (Gwynedd)	Railway	19th Century	Damaged	Part loss/ damage	В
36888	Corris Railway Culvert	Culvert	19th Century	Near intact	Unknown	В
36889	Pont ar Ddyfi milestone	Milestone	19th Century	Intact	Loss	В
36893	Pont ar Ddyfi platform	Platform	20th Century	Damaged	Loss?	С
36895	Pont ar Ddyfi embankment	Flood defence	20th Century ?	Damaged	Damage	D

- 5.10 The main impact is likely to affect to areas of significance. Sections of the existing A483 north of the Dyfi retain the original walling, as well as a milestone (PRN 36889), dating from the creation of the tumpike road in the late 18th century. The survival and integrity of these features is likely to be severely affected by the proposals. At the north-east end of the proposed improvement there is likely to be a direct impact on the remains of the Corris Railway (PRN 36887), which at this point runs along the eastern side of the A483.
- 5.11 Part of the flood defence embankment (PRN 36895) would be lost, although the feature is considered to be relatively modern and of only minor significance. In addition, Option 3 is likely to have an impact on the area of palaeoenvironmental potential (fig. 1).
- 5.11 The line of the Corris Railway to the south of the Dyfi (PRN 36886), together with its associated culvert (PRN 36888), as well as the building platform (PRN 36893) at the southern end of the improvement, may be affected by ancillary works. The potential impact on the Civil War battle site cannot be determined since the precise location of the site remains unknown.

6 MITIGATION

- 6.1 Under the existing baseline conditions there appears to be no obvious impact on any of the sites identified during the assessment and no mitigation is proposed.
- 6.2 The potential impact on the cultural heritage of each of the three proposed options has considered above and appropriate mitigation measures are outlined below, followed by a site-by-site description of proposed mitigation. Four of the sites identified (PRNs 36894, 36896-8) will not be affected by any of the proposed options and therefore have no mitigation proposed. A watching brief should be maintained during all groundworks to allow identification and recording of any significant features which may be revealed.

Option 1

PRN	Name	Type	Period	Category	Impact	Mitigation
4090	Pont ar Ddyfi	Bridge	Post Medieval	Α	Structural	Preserve
4323	Pont ar Ddyfi Battle	Battle site	Post Medieval	E	Unknown	Watching brief
36885	Pen-y-bont nos 1-6	Building	Post Medieval	Α	Setting	Nothing
36890	Pont ar Ddyfi Sunday School	Sunday school	19th Century	В	Setting	Nothing
36891	Pont ar Ddyfi house 'Minafon'	House	19th Century ?	В	Setting	Nothing
36892	Pont ar Ddyfi Tollgate	Tollgate	Post Medieval	CE	Unknown	Nothing
36893	Pont ar Ddyfi platform	Platform	20th Century	C	Loss ?	Excavate
36899	Pont ar Ddyfi bridge (site of)	Bridge	Post Medieval) E	Unknown	Watching brief

Option 2

PRN	Name	Type	Period	Category	Impact	Mitigation
4323	Pont ar Ddyfi Battle	Battle site	Post Medieval	É	Unknown	Watching brief
36889	Pont ar Ddyfi milestone	Milestone	19th Century	В	Loss	Preserve/ record
36893	Pont ar Ddyfi platform	Platform	20th Century	С	Loss ?	Preserve/ excavate
36895	Pont ar Ddyfi embankment	Flood defence	20th Century ?	D	Damage	Watching brief

Option3

PRN	Name	Type	Period	Category	Impact	Mitigation
4323	Pont ar Odyfi Battle	Battle site	Post Medieval	E	Unknown	Watching brief
36886	Corris Railway (Powys)	Railway	19th Century	В	Unknown	Preserve/ record
36887	Corris Railway (Gwynedd)	Railway	19th Century	В	Part loss/ damage	Preserve/ evaluate
36888	Corris Railway Culvert	Culvert	19th Century	В	Unknown	Preserve/ record
36889	Pont ar Ddyfi milestone	Milestone	19th Century	В	Loss	Preserve/ record
36893	Pont ar Ddyfi platform	Platform	20th Century	С	Loss ?	Preserve/ excavate
36894	Corris Railway Dyfi Bridge	Bridge	19th Century	D	Already destroyed	Nothing
36895	Pont ar Ddyfi embankment	Flood defence	20th Century ?	D	Damage	Watching brief

PRN 4090 Pont ar Ddyfi

The existing bridge has been designated as a Scheduled Ancient Monument (SAM Mg002) and it is assumed that such sites would be preserved and protected in situ. Any works affecting the structure would require Scheduled Monument Consent, with Cadw: Welsh Historic Monuments, as advisors to the National Assembly, being responsible for determining any mitigation.

PRN 4323 Pont ar Ddyfi Battle site

The exact location of the Civil War engagement is unknown, but may lie within the area of the proposed improvements. The engagement is unlikely to have left any physical evidence although artefactual remains could be expected. A watching brief during topsoil stripping is considered sufficient mitigation.

PRN 36885 Pen-y-bont nos 1-6

The row of cottages has been identified as a building of national importance and listed Grade II. It is assumed that such sites would be preserved and protected in situ. Any works affecting the structure would require Listed Building Consent, with Cadw: Welsh Historic Monuments, as advisors to the National Assembly, being responsible for determining any mitigation.

PRN 36886 Corris Railway (Powys)

6.6 The site is unlikely to be directly affected by the proposals and preservation in situ is recommended. Should the site be affected appropriate detailed recording should be undertaken in advance of any works.

PRN 36887 Comis Railway (Gwynedd)

6.7 Preservation in situ is recommended. Should the site be affected by Option 3 trial excavation should be undertaken in advance of any works to evaluate the archaeological potential and determine any further mitigation.

PRN 36888 Corris Railway Culvert

6.8 The site is unlikely to be directly affected by the proposals and preservation in situ is recommended. Should the site be affected appropriate detailed recording should be undertaken in advance of any works.

PRN 36889 Pont ar Ddyfi milestone

6.9 Preservation in situ is recommended. Should the site be affected by Options 2 or 3 preservation by record should be ensured and the milestone temporarily removed and replaced on completion of the works.

PRN 36890 Pont ar Ddyff Sunday School

6.10 It is assumed that the building will be unaffected and no mitigation is therefore proposed.

PRN 36891 Pont ar Ddyfi house 'Minafon'

6.11 It is assumed that the building will be unaffected and no mitigation is therefore proposed.

PRN 36892 Pont ar Ddyfi Tollgate

6.12 It is uncertain whether the tollgate was incorporated into the row of six cottages (PRN 36885) which have been identified as buildings of national importance and listed Grade II. It is assumed that such sites would be preserved and protected in situ. Any works affecting the structure would require Listed Building Consent, with Cadw: Welsh Historic Monuments, as advisors to the National Assembly, being responsible for determining any mitigation.

PRN 36893 Pont ar Ddyfi platform

6.13 The preferred option would be for preservation in situ, although should the site be affected by the proposals preservation by record should be ensured through a programme of excavation.

PRN 36894 Corris Railway Dyfi Bridge

6.14 The site has already been destroyed and no mitigation is therefore proposed.

PRN 36895 Pont ar Ddyfi embankment

6.15 Both Options 2 and 3 would involve cutting through the embankment and a watching brief, including adequate opportunity for recording, should ensure preservation by record of affected sections.

PRN 36896 Pont ar Ddyfi Quarry

6.16 It is assumed that the site will be unaffected and no mitigation is therefore proposed.

PRN 36897 Machynlleth Ridge and Furrow

6.17 It is assumed that the site will be unaffected and no mitigation is therefore proposed.

PRN 36898 Pont ar Ddyfi mere stones

6.18 The site has already been destroyed and no mitigation is therefore proposed.

PRN 36899 Pont ar Ddyfi bridge (site of)

- 6.19 The exact location of the bridge is unknown, but may lie immediately to the east of the present bridge. A watching brief should be maintained during any groundworks in this area.
- 6.20 In addition to the above mitigation an assessment should be considered of the palaeoenvironmental potential of palaeochannels to the south of the Dyfi, which may be affected by Options 2 and 3.

7 CONCLUSIONS

- 7.1 The assessment has identified a number of sites of archaeological and historical significance. Each site has been assessed with regard to the potential impact of the proposed road improvements and appropriate mitigation measures have been recommended.
- 7.2 With regard to the cultural heritage there are two main areas where the proposals could have a significant impact. Firstly, the existing bridge is a Scheduled Ancient Monument and any works to the structure would have a detrimental impact upon it. The row of cottages at the northern end of the bridge are listed buildings and together with the former Sunday School and another house can be seen as having significant group value along with the bridge. Secondly, the various remains relating to the Corris Railway are considered to be of regional importance and may be affected by Option 3. Other sites may also be affected, including a milestone, a flood embankment and a building platform.

8 ACKNOWLEDGEMENTS

8.1 Thanks are due to the following for their assistance and co-operation: Bob Silvester, CPAT, for assisting with the desktop study; Kate Geary, GAT; the staff at the National Library of Wales, Aberystwyth; the staff of the National Monuments Record, Aberystwyth; John Latham, National Trust; John Hough and Tony Caine, Powys Highways.

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Tithe Survey for Pennal parish 1842, apportionment 1844

Aerial photographic sources

Oblique aerial photographs held by CPAT

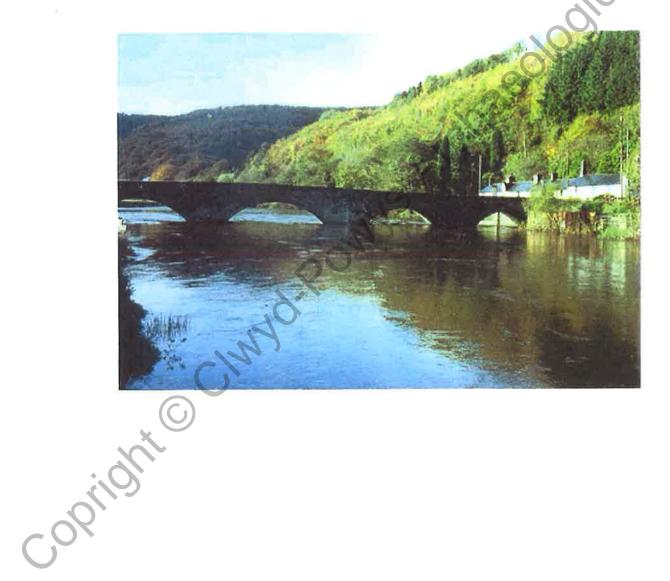
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Vertical aerial photographs held by RCAHMW

106G/UK/1468/2031-2, 1946 106G/UK/1468/4029-4031, 1946 106G/UK/1450/4045-6, 1946 58/2122/404-5, 1957 58/5607/164, 1963

A487 Fishguard to Bangor Trunk Road Pont ar Ddyfi Improvement

CULTURAL HERITAGE ASSESSMENT Volume 2: Illustrations



A487 Fishguard to Bangor Trunk Road Pont ar Ddyfi Improvement

CULTURAL HERITAGE ASSESSMENT Volume 2: Illustrations

> **NW** Jones November 2001

Report for Powys County Council

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VOLUME 2: ILLUSTRATIONS

- Fig. 1 Route options and archaeological sites
- Fig. 2 Tithe survey of Machynlleth parish, 1844
- Fig. 3 Tithe survey of Pennal parish, 1842
- Tichaeological liusi Ordnance Survey 2nd ed. 25" surveyed 1886, revised 1900 Fig. 4
- Plate 1 Pont ar Ddyfi (PRN 4090)
- Plate 2 Pont ar Ddyfi (PRN 4090)
- Plate 3 Pen-y-bont nos 1-6 (PRN 36885)
- Plate 4 Pont ar Ddyfi Milestone (PRN 36889)
- Plate 5 Pont ar Ddyfi Sunday School (PRN 36890)
- Plate 6 Pont ar Ddyfi house 'Minafon' (PRN 36891)
- Plate 7 Corris Railway embankment (PRN 36886)
- Plate 8 Corris Railway culvert (PRN 36888)
- Plate 9 Corris Railway (PRN 36887)
- Plate 10 Site of Corris Railway Dyfi Bridge (PRN 36894)
- Plate 11 Pont ar Ddyfi flood defence (PRN 36895)
- Copilonic Plate 12 Pont ar Ddyfi platform (PRN 36893)

CPAT Report No 442.2

Fig. 1 Route options and Archaeological Sites, scale 1:5,000

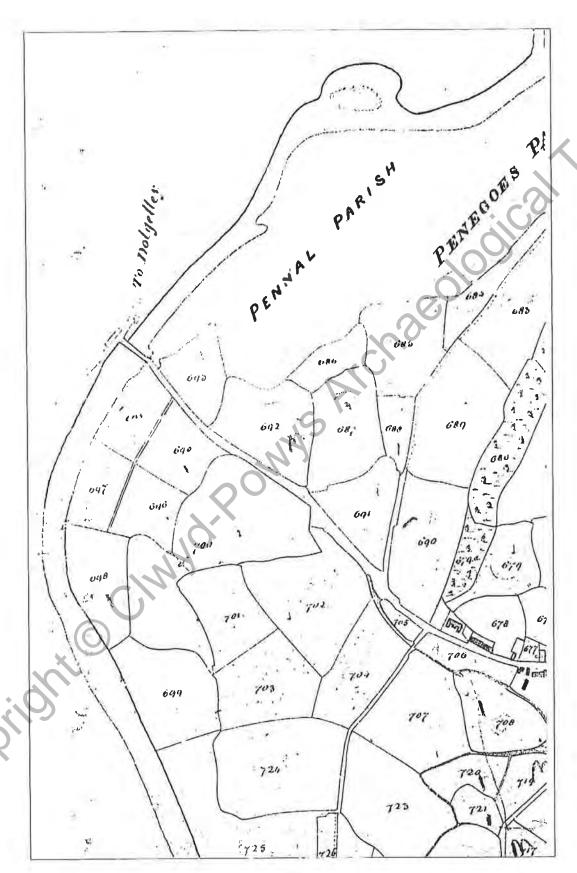


Fig. 2 Extract from Tithe Survey of Machynlleth Parish 1844

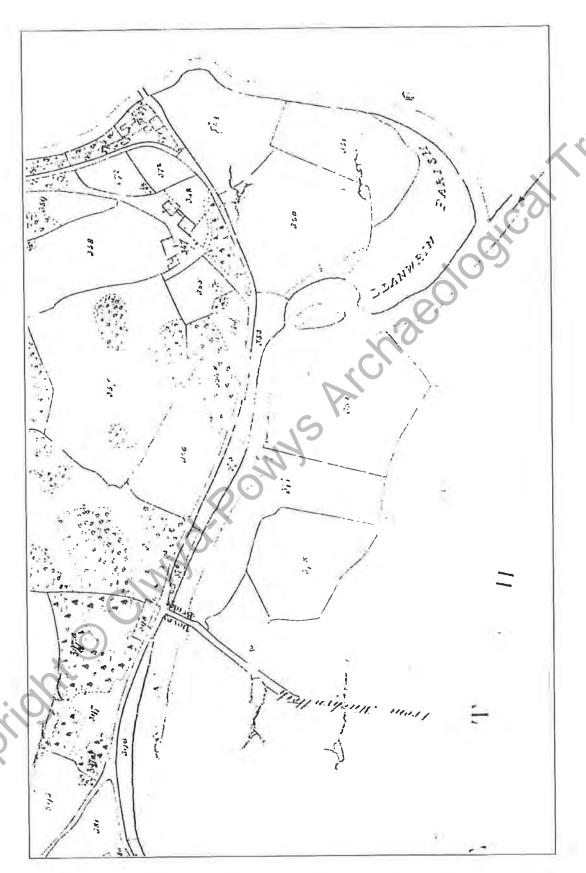


Fig. 3 Extract from Tithe Survey of Pennal Parish 1842

Cultural Heritage Assessment

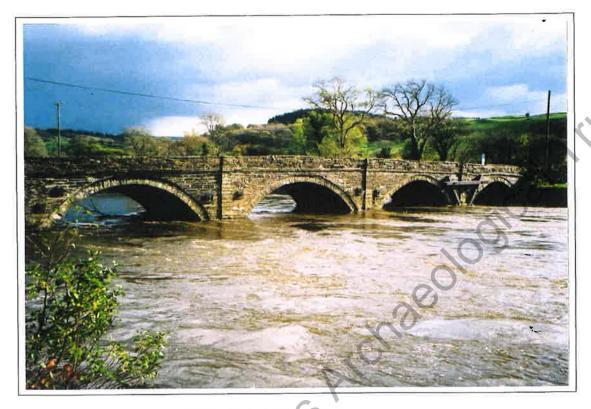


Plate 1 Pont ar Ddyfi (PRN 4090). Photo CPAT 1113.19

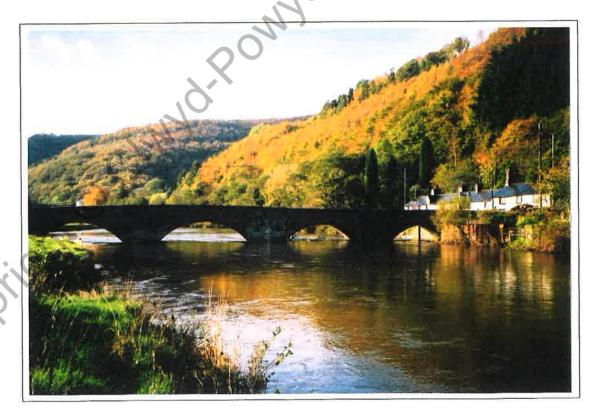


Plate 2 Pont ar Ddyfi (PRN 4090). Photo CPAT 1113.24



Plate 3 Pen-y-bont nos 1-6 (PRN 36885). Photo CPAT 1113.20



Plate 4 Pont ar Ddyfi Milestone (PRN 36889). Photo CPAT 1113.16



Plate 5 Pont ar Ddyfi Sunday School (PRN 36890). Photo CPAT 1113.17



Plate 6 Pont ar Ddyfi house 'Minafon' (PRN 36891). Photo CPAT 1113.18



Plate 7 Corris Railway embankment (PRN 36886). Photo CPAT 1113.9

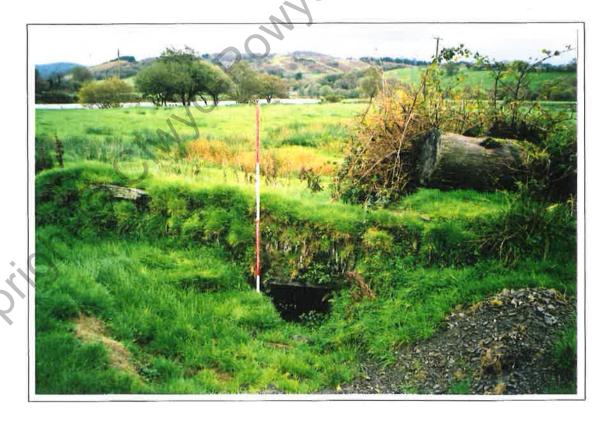


Plate 8 Corris Railway culvert (PRN 36888). Photo CPAT 1113.10



Plate 9 Corris Railway (PRN 36887) north of the Dyfi. Photo CPAT 1113.14



Plate 10 Site of Corris Railway Dyfi Bridge (PRN 36894). Photo CPAT 1113.11



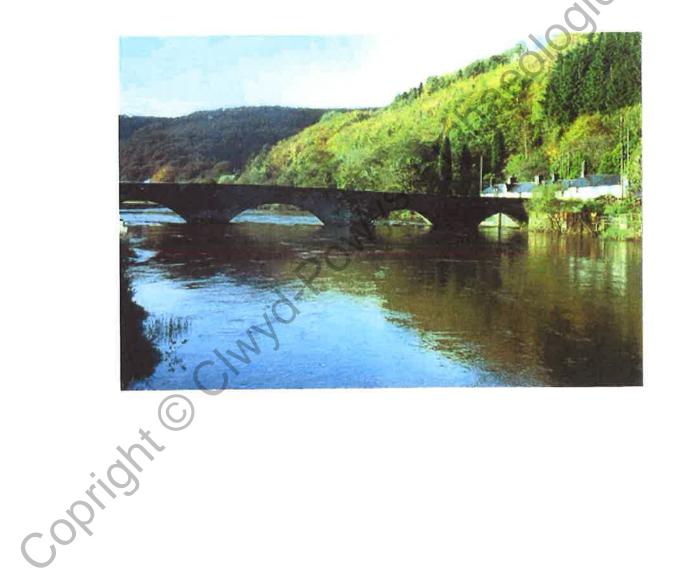
Plate 11 Pont ar Ddyfi flood defence (PRN 36895). Photo CPAT 1113.12



Plate 12 Pont ar Ddyfi platform (PRN 36893). Photo CPAT 1113.8

A487 Fishguard to Bangor Trunk Road Pont ar Ddyfi Improvement

CULTURAL HERITAGE ASSESSMENT Volume 3: Appendices



A487 Fishguard to Bangor Trunk Road Pont ar Ddyfi Improvement

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APPENDIX 1 GAZETTEER OF SITES

Pont ar Ddyfi

NGR SH7441801916 Category A

Bridge Type

Period

19th Century

Form Structure

Intact Condition

One of the finest bridges in Montgomeryshire. Joins Pennal to Machynlleth UD. Stone bridge 5.5m wide with 5 arches spanning a total of 64m. Stringcourse, low, stepped cutwaters and flat pilasters, without capitals, between arches. Low parapet with roadway approx 20 feet wide. (late C18 according to Jervoise). (Former Cadw listing description)

The original timber bridge was constructed in 1533 when Geoffrey Hughes, a citizen and merchant of London, left £6 13s 4d towards the making of a bridge. This was replaced in stone around 1681.

Present bridge has had steel reinforcement bars added to either side of the southern arch.

GATPRN 29495 PRN

4323

Pont ar Ddyfi Battle

NGR SH7442001873 Category

Type Battle site Form Document

Period

Post Medieval

Condition Unknown

There are records of a minor Civil War engagement in November 1644, which has in some sources been attributed to the area around Pont ar Ddyfi, although the exact location is not recorded. What may have been little more than a local skirmish involved Parliamentary troops marching from Pembroke who beat off a Royalist ambush near Machynlleth and went on to burn Mathafam, the home of the Royalist leader, Rowland Pugh (Gaunt 1991, 50).

PRN

36885

Pen-y-bont nos 1-6

NGR SH74400196

Category A

Type Building Period

Post Medieval

Intact

Building Form

RA PROCE

Condition

Grade II listed building comprising nos 1-6 Pont ar Ddyfi. Probably early 19th century with later 19th century and modern alterations. Two storey painted roughcast fronts, slate roof and original rubble chimney stacks to nos 1 and 3, otherwise brick stacks.

PRN

36886

Corris Railway (Powys)

NGR SH74770174

Category B

Railway Type Structure Form

FRA

Period Condition 19th Century Damaged

The Corris Machynlleth and River Dovey Tramroad Act was passed in 1858 allowing the construction of a 2ft 3in narrow gauge line from Corris to Machynlleth, and then to Derwenlas, which was opened in 1859. The line was worked by horses and gravity and crossed the Dyfi on a timber viaduct. The main line railway opened in 1863 after which slate was exchanged at Machynlleth and the track to Derwenlas was abandoned with the railway now being known as the Corris Railway. In 1878 Imperial Tramways Company of Bristol acquired the line, relaying with steel rails, easing some curves and introducing steam locomotives from 1879. Passengers were carried briefly by horse bus in 1879 and from 1883 by steam following improvements to some curves. The line was purchased by GWR in 1930 with the passenger service ending the following year. Following floods in 1948 the line was closed and dismantled by 1950 (Baughan 1991

The line now survives to the south of the Dyfi as an embankment up to 5m wide and 0.6m high, the top being 3m wide. The best preserved section is flanked by concrete fence posts. Elsewhere, the line can be identified by following field boundaries. Immediately south of the Dyfi an exposed section shows the embankment to be constructed of slate waste with edge-set slate edging and slate coping.

2

NGR SH75050215 Corris Railway (Gwynedd) Category B 36887 19th Century

Period Type Railway Damaged Condition Form Structure

The Corris Machynlleth and River Dovey Tramroad Act was passed in 1858 allowing the construction of a 2ft 3in narrow gauge line from Corris to Machynlleth, and then to Derwenlas, which was opened in 1859. The line was worked by horses and gravity and crossed the Dyfi on a timber viaduct. The main line railway opened in 1863 after which slate was exchanged at Machynlleth and the track to Derwenlas was abandoned with the railway now being known as the Corris Railway. In 1878 Imperial Tramways Company of Bristol acquired the line, relaying with steel rails, easing some curves and introducing steam locomotives from 1879. Passengers were carried briefly by horse bus in 1879 and from 1883 by steam following improvements to some curves. The line was purchased by GWR in 1930 with the passenger service ending the following year. Following floods in 1948 the line was closed and dismantled by 1950 (Baughan 1991 175-7).

The section to the north of the Dyfi has been partly reused by a recently constructed cycleway, beyond which the line survives alongside the road with the remains of a slate slab fence on the east side (CPAT 01).

NGR SH74880191 Corris Railway Culvert Category PRN 36888

19th Century Period Culvert Type Condition Near intact Structure Form

Well-constructed stone-built culvert beneath the Corris Railway embankment to the south of the Dyfi. The culvert is 0.65m wide and 0.5m high, crossing beneath the line at an angle. Large stone lintel with edge-set stones above and slate coping on top forming edge of railway embankment. Only west side clearly visible, east side partly obscured by vegetation.

NGR SH7481702015 Category B Pont ar Ddyfi milestone PRN

19th Century Period Milestone Type Condition Intact Structure Form

Milestone, roughly shaped, measuring 46cm wide and 80cm high, lying on N side of A487. Inscribed MAch 1M with benchmark beneath

Dole ! Cost ? Pont ar Ddyfi Sunday School NGR SH7443501970 Category B PRN

Period 19th Century **Sunday School** Type Condition Intact Structure Form

Brick-built chapel and Sunday School on north side of A487 to east of Pont ar Ddyfi. Now pebbledashed and converted to a dwelling.

9635B Pont ar Ddyfi house 'Minafon' NGR SH74450196 Category B PRN 36891

House Period 19th Century? Type Condition Intact

Structure Form

Stone-built house immediately to east of Pont ar Ddyfi.

100

Category B Pont ar Ddyfi Tollgate NGR SH74410196 PŘN 36892

Post Medieval **Tollgate** Period Type Condition Unknown Structure Form

Tollgate erected in the second half of the 18th century and depicted in 1828 opposite the north end of the bridge. Uncertain whether this is the same building which survives at the east end of the row of cottages.

3

Pont ar Ddyfi platform NGR SH7446501545 Category C PRN 36893

Type **Platform** Period 19th Century Earthwork Condition Damaged Form

Building depicted on OS 2nd edition 25" of 1900. Survives as a level area in pasture field. Slight scarp 0.3m high defines north-east and south-east sides, with overall dimensions c. 9m NW-SE by 5m NE-SW. Probing suggests a solid surface beneath the turf, possibly a floor or rubble.

Category D Corris Railway Dyfi Bridge NGR SH74920196 PRN 19th Century Type Bridge Period Destroved Form Document Condition

Originally a timber viaduct with at least seven piers carrying the Corris narrow gauge railway over the Dyfi. Replaced in 1906 by a steel girder bridge supported on three stone piers with stone abutments at either end. The line was opened in 1859 and closed in 1948 (Baughan 1991, 175). The site of the bridge is now occupied by the Dyfi Millennium Bridge, opened in 2001 to carry the new cycleway. No visible trace of railway bridge survives. Large stones forming remains of revetting on south bank may not be associated with the bridge.

Pont ar Ddyfi embankment 36895 NGR SH74660191 **PRN** Period 20th Century Flood defence Type Condition Damaged Earthwork Form

Flood defence bank along south side of the Dyfi to the east of Pont ar Ddyfi. Survives as a turf covered bank up to 17m wide overall and 1.2m high. The embankment appears to post-date the Corris Railway, suggesting that it was constructed after 1950 when the line was dismantled. Footpath follows the top of the embankment.

PRN 36896 Pont ar Ddyfi Quarry NGR SH74420198 Category D

Period 19th Century? Type Quarry Earthwork Condition Damaged Form

Quarry depicted on OS 2nd edition 25" 1900. Now disused.

PRN Machynlleth Ridge & Furrow NGR SH74740162 Category E 36897

Ridge and furrow Period Medieval? Type Condition Unknown **Document** Form

Possible ridge and furrow identified from RAF vertical APs. No visible trace remains on the ground.

PRN Pont ar Ddyfi mere stones NGR SH74440168 Category D 36898

Boundary stone Period Medieval? Type Form Document Condition Destroyed

Five mere stones depicted and named on an estate map of 1763. No longer surviving in pasture field.

PRN 36899 Pont ar Ddyfi bridge (site of) NGR SH74420118 Category E

Period Post Medieval Type Bridge Document Condition Unknown Form

The original timber bridge was constructed in 1533 when Geoffrey Hughes, a citizen and merchant of London, left £6 13s 4d towards the making of a bridge. This was replaced in stone around 1681. The present bridge dates from 1805 and contemporary records suggest that it was constructed on dry land and the river then diverted to run underneath it (Davies 1991, 68). It is not clear whether any remains of the 1681 bridge might survive. The bridge may have been located immediately upstream of the present structure.

APPENDIX 2 SPECIFICATION

A487 FISHGUARD TO BANGOR TRUNK ROAD, PONT AR DDYFI IMPROVEMENT: SPECIFICATION FOR AN ASSESSMENT OF THE CULTURAL HERITAGE BY THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

1.1 The proposed development involves improvements to the A487 Fishguard to Bangor Trunk Road at Pont ar Ddyfi, Machynlleth, Powys. Three separate options have been proposed, two of which would involve the construction of new crossings over the Dyfi. A Brief has been prepared by The Director of Highways Transport and Property, Powys County Council, which details the works required to produce an Cultural Heritage Assessment, which will be included within an Environmental Assessment.

2 Objectives

- 2.1 The objectives of the assessment are:
- 2.1.1 to reveal be means of a combination of desk based study and field survey, the nature, condition, significance and, where possible, the chronology of the cultural heritage within the area of the proposed development in so far as these aims are possible;
- 2.1.2 to record any archaeological sites identified during the field evaluation;
- 2.1.3 to prepare a report outlining the results of the assessment.

3 Methods

- 3.1 Stage one of the assessment will involve the examination of all the readily available primary and secondary documentary, cartographic, pictorial, photographic and oral sources. Repositories consulted will include the following: County SMR, CPAT, Welshpool; County SMR, GAT. Bangor; the National Monuments Record, RCAHMW, Aberystwyth; the National Library of Wales, Aberystwyth; Powys County Archives, Llandrindod Wells; Cadw: Welsh Historic Monuments; National Trust; CCW.
- 3.2 Stage two will take the form of a field survey of the area affected by the proposals. All archaeological sites will be recorded together with any potential environmental deposits. Each site will be recorded on standard CPAT site visit forms including: an accurate location using GPS; photography in 35mm format black and white and colour print and colour slide; sketch surveys as appropriate; written description of character, function, condition, vulnerability, dating etc.
- 3. 3 Following the on-site work an illustrated and bound report will be prepared according to the principles laid out in the Brief, incorporating the results from stages 1 and 2. This will be in A4 format, divided into three volumes: 1 Report Text; 2 Drawings and Maps (A3); 3 Appendices. The report will contain sections on: Summary; Methodology; Site location; Topography and Geology; Desk Top Study; Field Survey; Conclusions and Recommendations and References; together with a gazetteer of archaeological sites. A map will be included within the report showing the location of all sites recorded during the assessment, and where possible, their extent. Six copies of the final report will be provided to the client, as well as required digital information on CD.
- 3.4 The site archive will be prepared to specifications laid out in Appendix 3 in the <u>Management of Archaeological Projects</u> (English Heritage, 1991).

4 **Resources and Programming**

- The assessment will be undertaken by a small team of skilled archaeologists under the direct 4.1 supervision of Mr RJ Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists.
- All report preparation will be completed by or with the assistance of the same field archaeologist who 4.2 conducted the evaluation.
- It is anticipated that stage one of the assessment will be completed within 5 days, the field survey will 4.3 be completed in 1 day, and the report will be completed within 5 days.
- Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff. 4.4
- Copidht Charder Charles Archaeoloc CPAT is covered by appropriate Public and Employer's Liability insurance, as well as Professional