

# **BRYNBERIAN WATER MAIN REHABILITATION SCHEME PEMBROKESHIRE ARCHAEOLOGICAL ASSESSMENT**



Report prepared  
by  
Dyfed Archaeological Trust  
for  
Dŵr Cymru



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PEMBROKESHIRE  
ARCHAEOLOGICAL ASSESSMENT**

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**SUMMARY**

*Dŵr Cymru is currently proposing a programme of rehabilitation works on a water main between Cilgwyn and Brynberian, Pembrokeshire (between NGR SN7693698 – SN09623530). The water main passes through an archaeologically sensitive landscape that contains important prehistoric and early medieval monuments. These include a pair of Bronze Age standing stones, which are a Scheduled Ancient Monument, an Iron Age hillfort and the site of an Early Medieval carved stone – which is also a Scheduled Ancient Monument. Therefore, the Historic Environment Advisors to Dŵr Cymru recommended that an archaeological desk-based assessment be carried out to identify any potential impacts of the scheme. Dŵr Cymru commissioned Dyfed Archaeological Trust Field Services to carry out the assessment in June 2008.*

*This assessment has shown that the route of the water main and the expected methodology of pipe splitting, with some areas of new cut, will avoid all the known archaeological sites. A watching brief on areas of new cut and any works within 50m of the known archaeological sites has been recommended.*

## **1. INTRODUCTION**

### **1.1 Project Proposals and Commission**

Dŵr Cymru is proposing rehabilitation works on a water main at Brynberian, Pembrokeshire (between NGR SN7693698 – SN09623530). The existing water main passes through an archaeologically sensitive landscape that contains important prehistoric and early medieval monuments. These include a pair of Bronze Age standing stones, which are a Scheduled Ancient Monument, an Iron Age hillfort and the site of an Early Medieval carved stone – which is also a Scheduled Ancient Monument. Therefore, the Historic Environment Advisors to Dŵr Cymru recommended that an archaeological desk-based assessment be carried out to identify any potential impacts of the scheme.

Dŵr Cymru commissioned Dyfed Archaeological Trust Field Services to carry out the assessment in June 2008.

### **1.2 Methodology**

Available existing written, cartographic, pictorial and technical information, held in the Historic Environment Record<sup>1</sup> (HER), was examined to assess the character, extent and significance of the archaeological resource within the assessment area. A site visit was also made to assess the current condition of the known sites and to identify new archaeological features or deposits, or locations within the survey area that may contain them. From this information, a map and a table of archaeological sites and features within the survey area has been produced. The archaeological resource is placed in its local, regional and national contexts. The potential effect of the scheme upon the archaeological resource is assessed and possible mitigation measures are suggested for consideration.

### **1.3 Abbreviations used in this report**

All sites recorded on the county HER are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). New sites identified during this assessment are located by their NGR. References to cartographic and documentary evidence and published sources are given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

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<sup>1</sup> Held and managed by Dyfed Archaeological Trust, The Shire Hall, Llandeilo.

## 2. THE STUDY AREA

### 2.1 Location and Description

The Brynberian water main runs from Cilgwyn (NGR SN7693698) southeast to a point just northwest of Brynberian (NGR SN09623530), a total distance of c.2.25km. The route rises from its west, Cilgwyn, end at c.120m above Ordnance Datum (OD) to a high point of c.240m OD just beyond the mid-way point (NGR SN08903584), before dropping down to c.170m OD at its east, Brynberian, end. For this assessment a 100m wide corridor, based on the centre line of the route, has been used to assess the likely impacts of the scheme.

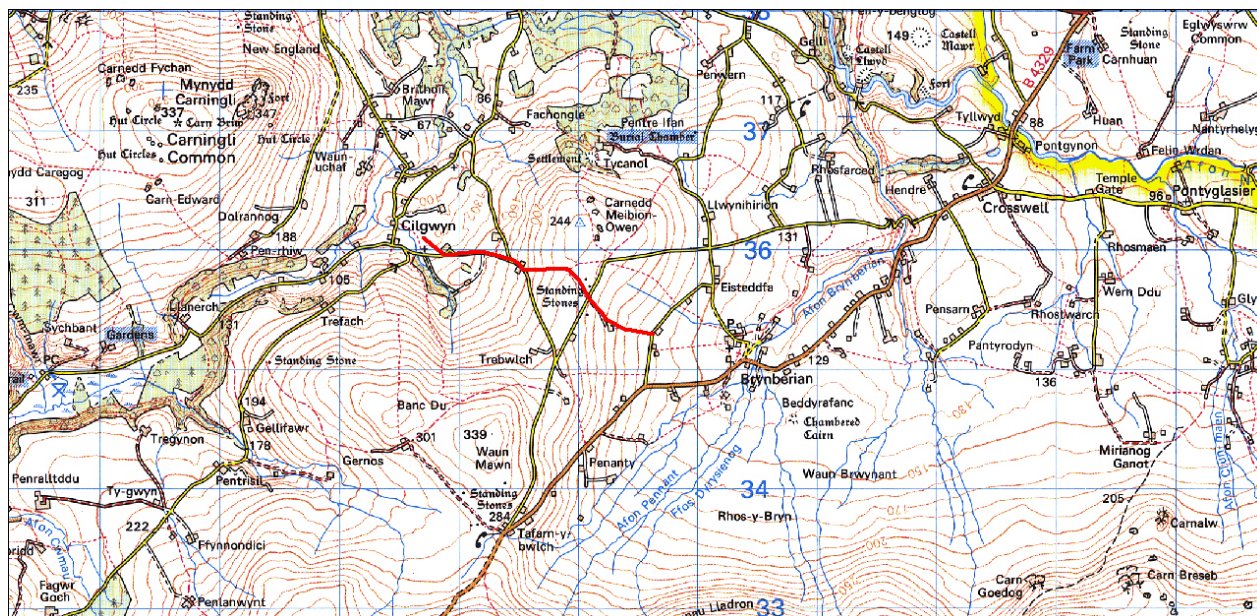


Figure 1: Location plan showing assessment area in red.

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### 2.2 The historic landscape

The route lies entirely within the Preseli registered Historic Landscape in Wales (ref: HLW (D) 7) as identified in the Register of Landscapes of Outstanding Historic Interest in Wales (published by CCW, Cadw and ICOMOS UK in 1998). A landscape characterisation study carried out by Cambria Archaeology (Murphy and Ludlow 2001) on behalf of Cadw has further divided the Preseli HLW into 27 Historic Landscape Character Areas (HLCA). The route crosses the Cilgwyn HLCA (Ref: HLCA 275) and Trehaidd HLCA (ref: HLCA 277). The main historic landscape characteristics of these areas are given below.

#### 2.2.1 The Cilgwyn HLCA

The Cilgwyn HLCA lies on the northern flank of Mynydd Preseli and is characterised by dispersed settlements and small irregular fields. The present landscape had been established by the time the parish tithe map was produced in 1843. It is thought that the dispersed settlements and small irregular fields reflect the late medieval and early post-medieval enclosure of woodland and the Welsh tenurial system of land holding (Murphy and Ludlow 2001, HLCA 275). The field boundaries in the area are varied and include stone-faced banks, dry-stone



walls and stone and earth banks topped with hedges. The area is well wooded and the deciduous woodland is a major character element.

### 2.2.2 The Trehaidd HLCA

The Trehaidd HLCA is a relatively small area on the northern edge of Mynydd Preseli. It is characterised by dispersed settlements and roughly rectangular fields with a 'distinct east-west trend' (Murphy and Ludlow 2001, HLCA 277), which are probably the result of post-medieval or early modern enclosure. Field boundaries are generally earth banks topped with hedges. This is in contrast to the adjacent Cilgwyn HLCA where the field boundaries generally included a high proportion of stone. The main landscape use is pasture.

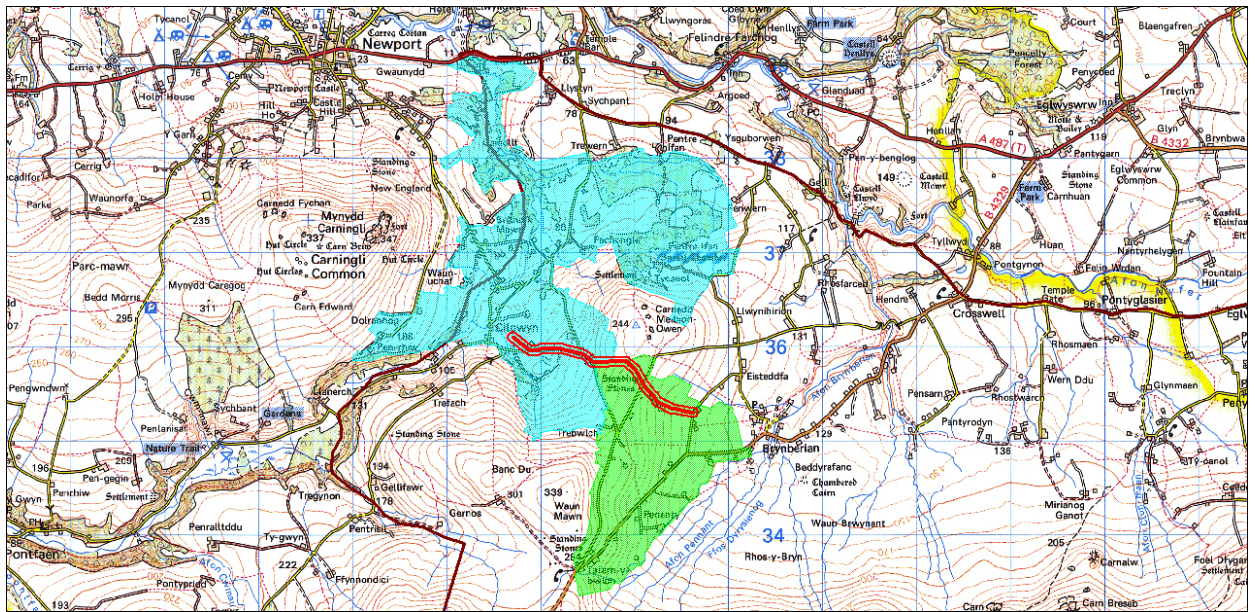


Figure 2: Plan showing the assessment area (red line) and the Cilgwyn (blue shaded area) and Trehaidd (green shaded area) HLCA.

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### **3. THE CULTURAL HERITAGE RESOURCE**

#### **3.1 Scheduled Ancient Monuments and Listed Buildings**

##### **3.1.1 Scheduled Ancient Monuments**

There are two Scheduled Ancient Monuments (PRN 1516; NGR SN09023573 and PRN 14424; NGR SN09283535) within the assessment area.

There is also one site that is considered to be of schedulable quality within the assessment area (PRN 1478; NGR SN08513589).

See previously recorded sites (section 4.2) below for descriptions and discussion of these sites.

##### **3.1.2 Listed Buildings**

There are no listed buildings within the assessment area.

There are no buildings with the potential to be listed within the assessment area.

#### **3.2 Previously recorded sites within the assessment area**

There are five sites recorded on the HER within the assessment area.

##### **3.2.1 PRN 1478 Cil-Gwyn-Mawr Iron Age Hillfort (NGR SN08513589)**

This site was visited and described in 2006 as part of a pan-Wales project to identify and record all possible prehistoric defended enclosures. The project was intended to promote the long-term management of these sites and was grant-aided by Cadw. The description from that study is included here:

*'Cilgwyn Mawr is a sub-circular earthwork defended enclosure occupying a gentle west-facing slope at 190m above sea level. It measures c.55m diameter internally. The site is bisected by a substantial boundary bank, dividing the enclosure in two. The site is best preserved to the west of the boundary. Here the surrounding bank is c.5m wide, 0.5m high internally and 0.8m high externally. There is a clear entrance on the northeast side. Two slight hollows on the southwest external side of the bank are disturbances. The bank is turf-covered with many stones/boulders projecting through it. To the east of the boundary the enclosure is very poorly preserved. The defensive bank survives for just a few metres on the north side and is only just visible. Part of the interior is occupied by an old, grass-covered quarry c.1m deep, and a cottage with its garden encroaches on the southeast side of the site. The enclosure is under improved pasture. It has been ploughed occasionally in the recent past.'* (Murphy et al 2007).

There has been no significant change in the site since the 2006 visit.

##### **3.2.2 PRN 1505 Cilgwyn Neolithic hand axe (NGR SN07783605)**

The centre section of a flaked and ground Group VIII stone axe was recovered from somewhere in this vicinity in the 1950s. The surviving section measured 7.5cm x 5cm x 3cm thick and the broken ends of the axe had been reworked (information from HER).



There is no information on the circumstances of the find and it appears to be a chance discovery.

### **3.2.3 PRN 1516 Penlan Stones/Parc lan stones (NGR SN09023573)**

A pair of Bronze Age standing stones, protected as a Scheduled Ancient Monument (ref: PE371). The stones stand c.4m apart and are aligned roughly north-south (Cook 2006, PRN 1516). The southern stone is c.1.5m high and triangular in plan, c.0.45m thick, and taper to a point at the top. The north stone is shorter at c.1.3m high and it is roughly rectangular in plan, c.0.9m x 0.25m, and it also tapers to a point at the top.

The stones are being used by animals as rubbing stones, which is creating an erosion ring around their base (Cook 2004, PRN 1516; Cadw Scheduled Monument Site Visit notes – copies held in the HER).

### **3.2.4 PRN 2882 Croesffordd Dwr-Bach Field System (NGR SN08613589) – includes PRN 1476 (NGR SN08613590) and PRN 1477 (NGR SN08603590)**

This is a small area of ridge and furrow in the two small fields adjacent to Troed-y-rhiw. The ridge and furrow is clearly visible on aerial photographs of the area running on three separate alignments, which include the interior of the former Cil-Gwyn Hillfort (PRN 1478). The ridge and furrow within the hillfort shows that the defences of the hillfort were still clearly defined when the ploughing was taking place, which was probably during the post-medieval period.

The field system also includes a row of twenty-four stones (PRN 1476: NGR SN08613590) that were erected on end and formed an unbroken line of approximately 40 feet (c.12m) aligned east west (RCAHM 1925, 258 no.767). A circular setting of twelve stones (PRN 1477: NGR SN08603590) was also recorded close to the west end of PRN 1476 and the two were considered '*doubtless part of the same work*' (RCAHM 1925, 258 no.767). The function of the stones is uncertain and when the Royal Commission on the Ancient and Historic Monuments (RCAHM) visited the site in June 1914 they concluded that the '*site calls for excavation*' (RCAHM 1925, 258 no.767). As far as is known this site has never been excavated or investigated further.

### **3.2.5 PRN 4473 Parc y Castell (NGR SN08153600)**

Two field names Parc y Castell Ucha and Parc Y Castell Issa noted on the Nevern parish tithe schedule as field numbers 1283 and 1284. However, the site has been wrongly located within the HER as it is shown in a field numbered 1765 on the tithe schedule.

This site will no longer be considered in this assessment.

### **3.2.6 PRN 14424 Penparke Inscribed Stone (NGR SN09283535)**

An inscribed stone of probable 8<sup>th</sup> - 90<sup>th</sup> century date, which is protected as a Scheduled Ancient Monument (ref: PE448). The stone was found in 1961 built into the farmyard wall at Penparke Farm. The stone is a rough cross-carved stone and is one of a large number of inscribed stones recorded on neighbouring farms. A possible 'holy well' site (PRN 1490; NGR SN09173569) is located 140m to the north of the route.

The large number of early medieval inscribed stones and the possible holy well in such a small area indicate the probable presence of an early medieval religious chapel and cemetery in the area, although the location of such a site is unknown (Edwards 2007, 402-403).

### **3.3 New sites identified within the assessment area**

#### **3.3.1 *Parc yr Odin* (NGR SN08353598)**

A field name recorded on the Nevern parish tithe schedule (1843). The Odin element is probably an alternative spelling of *Odyn*, meaning a kiln. Therefore, the field name translates as Kiln Park, suggesting that a kiln was present at some point in the past.

The likely location for the kiln is unknown.

### **3.4 Archaeological potential within the assessment area**

Any area has the potential to contain previously unknown buried archaeological remains and with a linear scheme such as this that crosses a large swathe of the landscape that potential is obviously increased.

The number of prehistoric sites and findspots within, and close to, the assessment area shows that the region has been fairly intensively utilised for several thousand years.

Similarly, the large number of early medieval sites and features suggest an actively used landscape and possibly an early religious settlement in the area.

The present landscape was established during the medieval and post-medieval periods.

Therefore, with the time-depth of activity across the Cilgwyn – Brynberian area there is potential for previously unknown, buried archaeological features and deposits to be present along the water main route.

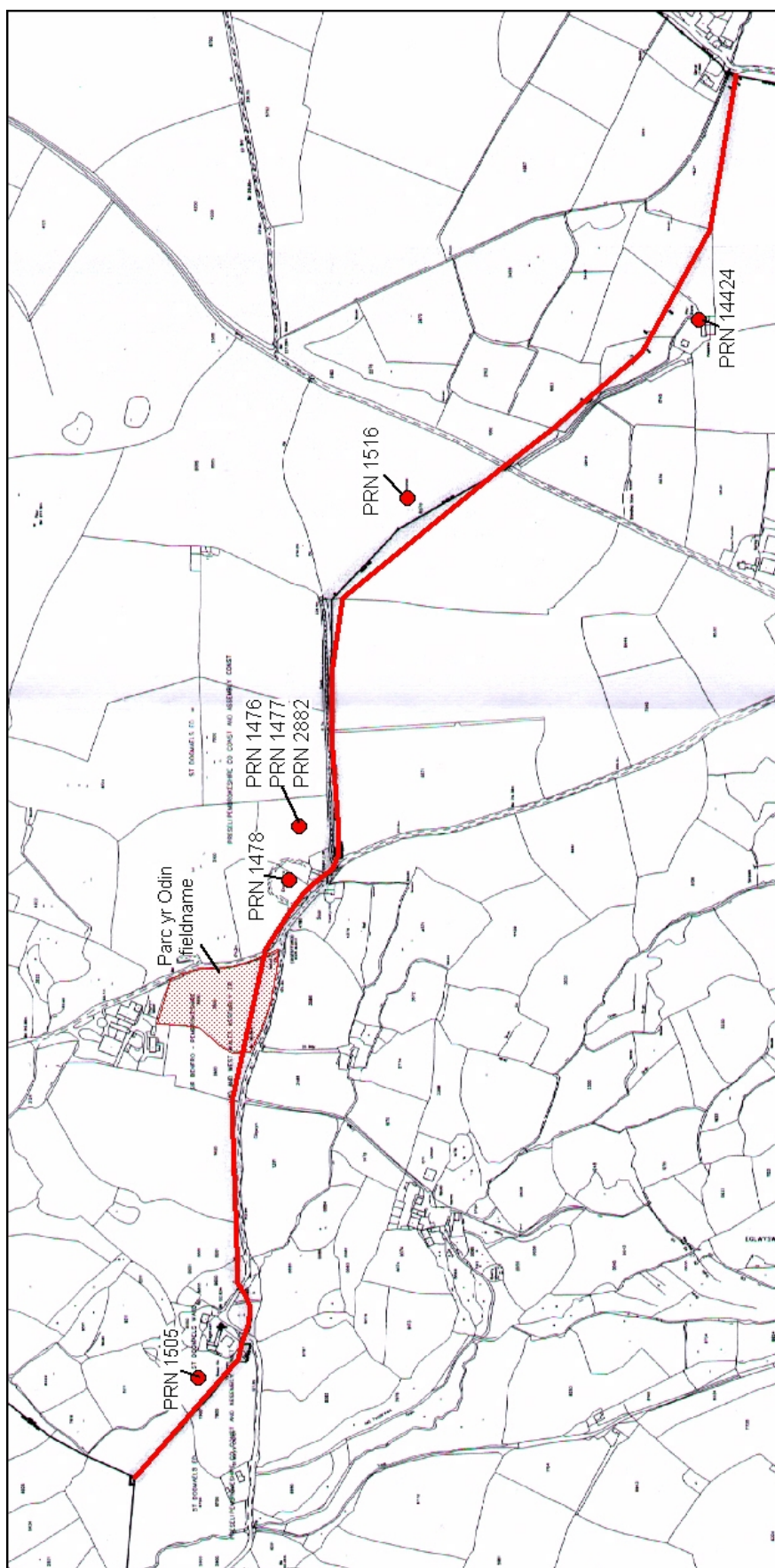


Figure 3: Known archaeological sites along the water main route.  
(Base map supplied by Dŵr Cymru)

#### 4. ASSESSMENT OF ARCHAEOLOGICAL IMPORTANCE

The importance of all previously recorded and newly identified sites is categorised according to the following criteria, based on those given in the Department of Environment, Transport and Regions' *Design Manual for Roads and Bridges* Volume 11 Section 3 Part 2 (1993):

- A** - sites of national importance - usually Scheduled Ancient Monuments or Grade I and II\* Listed Buildings
- B** - sites of regional or county importance and Grade II Listed Buildings
- C** - sites of district or local importance
- D** - minor sites or sites so badly damaged that too little now remains to justify their inclusion in a higher grade
- E** - sites about which insufficient is known to assign them to a higher grade

PRN / Site	NGR	Site type	Period	Form	Category
1476	SN08613590	Field Boundary?	Medieval Post-medieval	Structure Earthwork	C
1477	SN08603590	Unknown stone setting	Medieval Post-medieval	Structure Earthwork	C
1478	SN08513589	Hillfort	Iron Age	Earthwork	A
1505	SN07783605	Findspot	Neolithic	Finds	D
1516	SN09023573	Standing stone pair	Bronze Age	Structure	A
2882	SN08613589	Field system	Medieval Post-medieval	Earthwork	C
14424	SN09283535	Inscribed stone	Early medieval	Structure	A
Parc yr Odin	SN08353598	Place name	Post-medieval	Documents	E

Table 3: Assessment of the archaeological importance of all identified sites.

## 5. ASSESSMENT OF LIKELY SEVERITY OF PHYSICAL EFFECTS

### 5.1 Previously recorded sites

An assessment of the likely severity of effect of a proposed development on identified archaeological features can be made according to the following criteria:

- 1 - Total** - complete destruction of the site
- 2 - Very severe** - loss of most of the major components of a site
- 3 - Severe** - loss of some of the major components of a site
- 4 - Medium** - loss of some components of a site
- 5 - Slight** - some loss of some minor components of a site
- 6 - None**
- 7 - Beneficial**
- 8 - Unknown**

PRN / Site	NGR	Site type	Form	Archaeological Importance	Likely Severity of Effect
1476	SN08613590	Field Boundary?	Structure Earthwork	C	None
1477	SN08603590	Unknown stone setting	Structure Earthwork	C	None
1478	SN08513589	Hillfort	Earthwork	A	Slight / None
1505	SN07783605	Findspot	Finds	D	None
1516	SN09023573	Standing stone pair	Structure	A	None
2882	SN08613589	Field system	Earthwork	C	None
14424	SN09283535	Inscribed stone	Structure	A	None
Parc yr Odin	SN08353598	Place name	Documents	E	Slight / None

Table 4: Summary of possible severity of effects of proposed coal extraction.



## 6. SIGNIFICANCE OF PHYSICAL EFFECTS

Having evaluated the archaeological significance of the features (Table 3) and the likely severity of the effects of the proposed scheme (Table 4), the likely significance of effect can be assessed according to the following table.

SITE IMPORTANCE					
SEVERITY OF EFFECT	A	B	C	D	E
<b>1 Total</b>	Major	Major	Moderate	Minor	Unknown
<b>2 V Severe</b>	Major	Major	Moderate	Minor	Unknown
<b>3 Severe</b>	Major	Moderate	Minor	Minor	Unknown
<b>4 Medium</b>	Moderate	Moderate	Minor	Minor	Unknown
<b>5 Slight</b>	Moderate	Minor	Minor	Minor	Unknown
<b>6 None</b>	No Effect	No Effect	No Effect	No Effect	No Effect
<b>7 Beneficial</b>	Beneficial	Beneficial	Beneficial	Beneficial	Unknown

PRN Site /	NGR	Site type	Archaeological Importance	Severity of Effect	Significance of Effect
1476	SN08613590	Field Boundary?	C	None	No effect
1477	SN08603590	Unknown stone setting	C	None	No effect
1478	SN08513589	Hillfort	A	Slight / None	Moderate / No effect
1505	SN07783605	Findspot	D	None	No effect
1516	SN09023573	Standing stone pair	A	None	No effect
2882	SN08613589	Field system	C	None	No effect
14424	SN09283535	Inscribed stone	A	None	No effect
Parc yr Odin	SN08353598	Place name	E	Slight / None	Minor / No effect

Table 5: Assessment of significance of effects.

## **7. CONCLUSIONS**

The proposed methodology of the scheme – pipe splitting with a small amount of open cut – means that the overall impacts of the scheme are minor. The route misses most known archaeological sites and runs outside of the two Scheduled areas that are close to the line. It is assumed that new open cut areas will be away from the known archaeological sites.

There should be no damage to the existing boundaries along the route, but the potential impact on any possible buried archaeological remains is unknown.

The route lies wholly within the Preseli registered Historic Landscape, but given the nature of the scheme and the very limited potential impacts an ASIDOHL study is not required.

## **8. MITIGATION**

Even though the water main route runs through a landscape of significant archaeological potential it is considered that it will have little archaeological impact and therefore, the only mitigation recommended is a watching brief on any significant groundworks such as areas of new cut, any topsoil stripping that is required and in areas close to known archaeological sites.

### **8.1 Watching brief**

A watching brief should be maintained on all areas where a new cut is required and on any works within 50m of the known archaeological sites.

## SOURCES

### Cartographic sources

NeVERN parish tithe map (1843) and apportionment (1840)

Ordnance Survey 1<sup>st</sup> edition 1:2500 map (1891) sheet XXXXII.1

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Ordnance Survey 1<sup>st</sup> edition 1:2500 map (1891) sheet XXXXII.6

Ordnance Survey 2<sup>nd</sup> edition 1:2500 map (1906) sheet XXXXII.1

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June 2008

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Position: Head of Field Services

Signature ..... Date

This report has been checked and approved by Ken Murphy  
on behalf of, Dyfed Archaeological Trust Ltd.

Position: Director

Signature ..... Date

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comments you may have on the content or presentation of this report