BRUNANT HIGHWAY SUPPORT SCHEME, PUMPSAINT, CARMARTHENSHIRE ARCHAEOLOGICAL WATCHING BRIEF (NGR SN 6682 4084)





Prepared by DAT Archaeological Services For: Carmarthenshire County Council





DYFED ARCHAEOLOGICAL TRUST

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Gan / By

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BRUNANT HIGHWAY SUPPORT SCHEME, PUMPSAINT, CARMARTHENSHIRE ARCHAEOLOGICAL WATCHING BRIEF

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SUMMARY

The Brunant Highway Support Scheme was necessitated following a tree fall on the northwestern side of a small road leading northeast from Pumpsaint, Carmarthenshire. The road is located on the side of a relatively steep hillslope leading down to the Afon Cothi. The tree fall destabilised the ground on the hillslope and thus compromised the integrity of the road line. A scheme was put forward by Carmarthenshire County Council to support the northwestern edge of the road for a length of 15m using a series of stone filled gabionade baskets dug into the hillslope. The scheme area lies within part of the Dolaucothi estate owned by the National Trust. Due to the site lying in proximity to the nationally significant Roman gold mines at Dolaucothi and the earthwork remains of an associated Roman aqueduct, the National Trust required an archaeologist to be present during groundworks associated with the scheme as part of the land access agreement. Carmarthenshire County Council commissioned DAT Archaeological Services to undertake the watching brief in March 2015.

The watching brief indicated that the modern road line in the area of the scheme was located in a distinct terrace cut into the steep hillslope. The existing tarmac road surface was built upon two layers of make-up levelling material, the first a dark crushed stone and tarmac layer which sat upon a light grey stone layer which appeared to be re-deposited crushed bedrock. This material probably originated from when the modern road was terraced into the hillslope, the bedrock removed crushed and laid down as a levelling layer for the road. Below this layer was the undisturbed natural bedrock.

Further investigation on the steep hillslope edge indicated that it comprised thin and loose topsoil overlying bedrock. It is likely that this topsoil has been subject to significant erosion and slippage.

There was no indication that any archaeological deposits survived within the area of the Brunant Highway Support Scheme. If any archaeological deposits had been present they would have been removed during the construction of the modern road when it was terraced into the hillslope. The steepness of the hillslope is such that it is perhaps unlikely that any significant archaeological remains would have ever been present here.

Although no significant archaeological remains or deposits were recorded within the area of the Brunant Highway Support Scheme, the potential for the survival of archaeology to be present elsewhere in the vicinity still remains.

1. INTRODUCTION

Project Proposals and Commission

- 1.1.1 DAT Archaeological Services were commissioned by Carmarthenshire County Council to undertake an archaeological watching brief during the implementation of the Brunant Highway Support Scheme near Pumpsaint, Carmarthenshire (centred on NGR SN 6682 4084; Figures 1 and 2).
- 1.1.2 The highway support scheme lies within National Trust owned land. As part of the land access agreement with Carmarthenshire County Council to carry out the repairs, the National Trust archaeologist, Claudine Gerrard, placed a requirement for an archaeological watching brief during groundworks to address the potential archaeological impacts of the scheme.
- 1.1.3 The requirement for the watching brief was placed on the highway scheme as the proposed road repair works lie within close proximity to the Dolaucothi Gold Mines, and most specifically the site lies to the southwest of the Scheduled Area of the Dolaucothi Roman Aqueduct (SAM CM200). The potential for remains associated with the Roman gold mines and aqueduct was therefore possible within the road area.
- 1.1.4 The works repaired the northwestern side of the road which was compromised following a tree fall. The works involved the excavation of the northwestern edge of the road in order that gabionade walling could be inserted to support the road. The walling was proposed to be around 3m in height, 2m in width and around 15m in length.

1.2 Scope of the Project

- 1.2.1 A written scheme of investigation (WSI) for a watching brief was prepared by DAT Archaeological Services prior to the commencement of the works, which was approved by the National Trust and Carmarthenshire county Council prior to the commencement of the works. The project objectives were:
 - Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the watching brief.
 - To identify the presence/absence of any archaeological deposits.
 - To establish the character, extent and date range for any archaeological deposits to be affected by the proposed groundworks.
 - To appropriately investigate and record any archaeological deposits to be affected by the groundworks.
 - To produce an archive and report of any results.
- 1.2.2 The overall work was summarised as: "Archaeological attendance during ground works associated with the proposed Brunant highway support scheme near Pumpsaint, Carmarthenshire, which are likely to expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared."

1.3 Report Outline

1.3.1 This report describes the location of the development works along with its archaeological background, and provides a summary and discussion of the archaeological watching brief and its results.

1.4 Abbreviations

1.4.1 Sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Ancient Monument (SAM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.5 Illustrations

1.5.1 Photographic images are to be found within the report. Printed map extracts are not necessarily reproduced to their original scale.

1.6 Timeline

1.6.1 The following timeline is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	c.450,000 - 10,000 BC	
Mesolithic –	c. 10,000 – 4400 BC	Pre
Neolithic –	c.4400 – 2300 BC	hist
Bronze Age –	c.2300 - 700 BC	Prehistoric
Iron Age –	c.700 BC - AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	
Post-Roman / Early Medieval Period –	c. AD 410 - AD 1086	
medieval Period –	1086 - 1536	Hist
post-medieval Period ¹ –	1536 - 1750	Historic
Industrial Period –	1750 - 1899	n
modern –	20 th century onwards	

Table 1: Archaeological and historical timeline for Wales

3

¹ The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

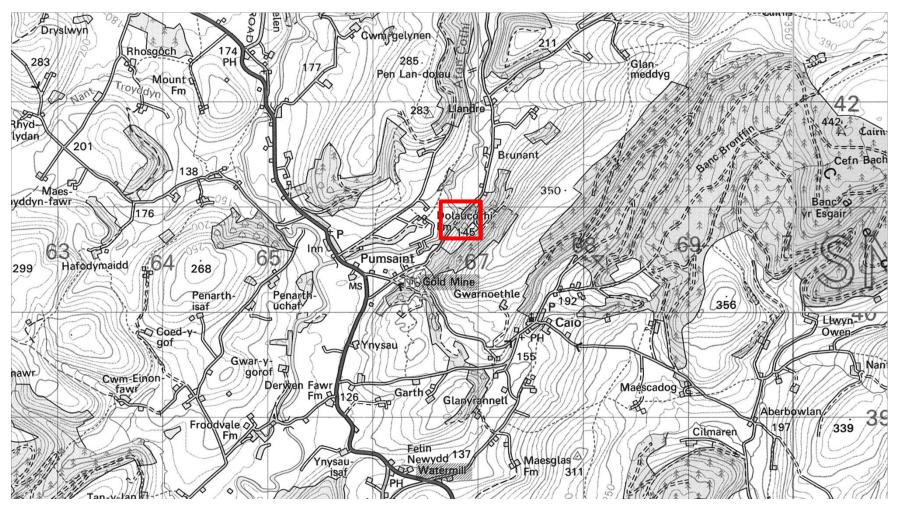
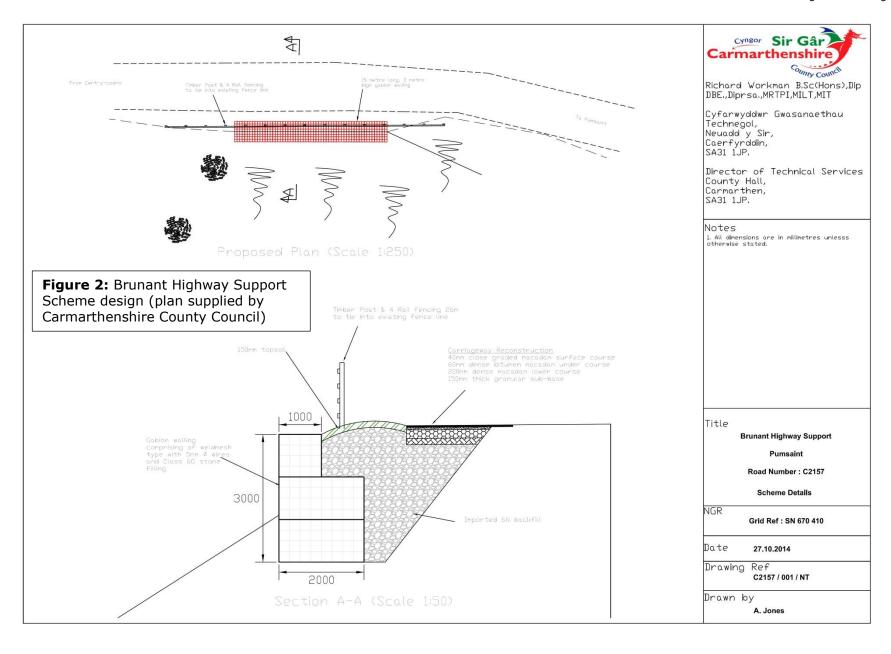


Figure 1: Location map showing the area of the Brunant Highway Support Scheme within the red square

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2. SITE LOCATION AND TOPOGRAPHY

- 2.1 The site is located on the road line from Pumpsaint towards Brunant Farm to the northeast (centred on NGR SN 6682 4084; Figures 1 and 2) within Carmarthenshire.
- 2.2 The site area lies on a steep northwest facing slope leading down to the Afon Cothi.
- 2.3 The hillslope to the northwest is sparsely wooded with a number of trees close to the repair area. One of these trees had fallen recently and caused damage to the road line, and thus the reason why the support scheme was necessary.
- 2.4 The site area lies between the 140 and 150m aOD contours, with the river below 140m aOD.
- 2.5 The bedrock of this region comprises mudstone, siltstones and sandstones of the Llandovery Rock formation.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 The Historic Landscape

- 3.1.1 The Brunant Highway support scheme lies within the Dolaucothi Historic Landscape Character (HLC) Area (Ref: HLW (D) 8) recorded on the Register of Landscapes of Outstanding Historic Interest in Wales (Cadw 1998).
- 3.1.2 The site lies specifically in the Dolaucothi Pumpsaint (No. 243) part of the HLC and is decribed as follows:

Dolaucothi – Pumpsaint; Grid Reference: SN 663409 Area in Hectares: 126.90

Historic Background

A small character area centred on the village of Pumsaint which is a linear settlement either side of the A482, at the confluence of the Afon Cothi with its tributary, the Afon Twrch. It once lay within Cwmwd Caeo of Cantref Mawr which remained an independent Welsh lordship until 1284, and largely retained native systems of tenure throughout the medieval period. The A482 follows the line of the Roman road between the forts at Llandovery (Alabum) and Llanio (Bremia), past the Roman gold mines of Area 243 that were operational by the 1st century AD and necessitated the construction of a fort on the level ground beneath the present village. The fort site, Louentium, has been partially excavated (Jones and Little, 1974), and featured a detached bath-house building. Roman activity may have influenced subsequent settlement patterns. It has been claimed (Jones 1994, 88) that some gold exploitation persisted into the post-Roman period affecting the status of the surrounding area, which came to be regarded as important enough to be mentioned in the marginalia of the Book of St Chad (Jones 1994, 88), while a Medieval chapel, 'Llanpumsaint', erected within the fort ramparts probably has pre-Conquest origins (Sambrook and Page 1994, 4). It was a chapel-of-ease to Caeo parish mentioned in the will of Rhys Fychan in 1271 (ibid.), and was marked on Saxton's map of Carmarthenshire of 1578. However, there is no evidence that it was accompanied by any nucleation. The development of the present village was probably encouraged by the Post-Medieval development of the Roman road into an important droving road and, from the late 18th-century, a mail road, and by the Post-Medieval Dolaucothi estate within which the village partly lay. The present pattern of large, regular fields also suggests estate remodelling of the landscape. By the later 19th century Pumsaint village contained a post office, public house, hall and stores. Dolaucothi House occupies the valley floor to the east of the village and was established by the Johnes family, a branch of the Jones family of Abermarlais, by 1679 when the house was already a building of some size, containing six hearths; in 1704 it was described as 'the capital messuage called 'Tyddyn Dole Cothi' (Jones 1987, 56). It was practically rebuilt in 1792-6 and by 1873 the estate comprised 3172 acres (ibid.). The house was requisitioned during the Second World War, the lead was stripped from the roofs and it was demolished in 1951 (Whittle 1999). The grounds were taken over by the National Trust in 1956. At the north end of the area is Brunant, a surviving gentry house with late 16th or 17th century origins (Jones 1987, 15).

Description and essential historic landscape components

This is a relatively small but complex character area. It lies across the valley floor and lower valley sides of the Afon Cothi upstream of Pumpsaint

village at between 120 m and 200 m. In essence it is a late 18th- and 19th-century estate landscape which is superimposed over earlier landscape elements. There are two focii: Dolaucothi House and Pumpsaint village. The late 18th and early 19th century house at Dolaucothi has been demolished, except for a northern wing which now serves as a farmhouse. A coach house also survives. Many elements of the park and gardens associated with the house also survive, including a walled garden, a ha-ha, drives and possible landscaping for walks along the river. The most distinctive element of the park, however, is the planting, with many fine specimen trees remaining. The whole of the floodplain of the Cothi retains a parkland appearance. At the northeastern end of the area the early 19th century gentry house of Brunant and its setting continue the parkland aspect to the Cothi floodplain upstream of the former house of Dolaucothi. A Roman fort lies beneath Pumpsaint village, but little surface evidence for it survives. Houses and other buildings in the village date mainly to the mid-19th century, and were constructed by the Dolaucothi estate with a distinctive signature - a 'pattern-book' style of coursed rubble walls, steeply pitched slate roofs, barge- and facia-boards (red painted) and casement windows with diamond panes. A chapel in the village dates to 1875, and close to it is a terrace of late 19th century two-storey 'villa' houses not in the estate style. 20th century development is limited to a corrugated iron - tin - village hall and a few houses. Outside the village and parkland the area is divided into small irregular fields of improved pasture by earth banks topped by hedges. Hedges are not in good condition apart from those alongside roads and tracks. Many have long gaps and others are derelict. There are many distinctive hedgerow trees. Dispersed farms and other dwellings are generally in the Dolaucothi 1850s 'pattern book' style. Outbuildings to the farms are in the same style. Apart from the A482 road which runs through Pumpsaint village, transport links are local - minor roads, lanes and tracks.

Recorded archaeology provides great time-depth, with nearly all periods being represented. It comprises a Neolithic findspot, a Bronze Age standing stone, the Roman road, fort, baths and coin hoard, the medieval chapel site, an unknown cropmark, parkland features associated with the Dolaucothi estate, and buildings.

There are many distinctive buildings, most of them constructed on behalf of the Dolaucothi estate. The house at Dolaucothi has gone but the site represents an early 19th century parkland with remnants of possible lime avenue, two enclosed gardens extant c. 1770, totally remodelled c. 1790, and altered and improved in the early 19th-century. The walled garden is partially intact and the whole is entered as ref. number PGW (Dy) 1 (CAM) in the Cadw/ICOMOS Register of Parks and Gardens of Special Historic Interest in Wales (Whittle 1999). The stable block, carthouse, lodge and home farm are Grade II listed. Brunant, which contains 16th- or 17th-century elements, is also Grade II listed. There are 14 other Grade II listed buildings within the character area including Salem chapel from 1875, the public house, village hall, post office, stores, war memorial, forge and K6 telephone kiosk.

Although this area has very distinct historic components, its boundaries are not well defined; it merges with neighbouring areas to the northeast, east and southwest, but is better defined to the south against Dolaucothi Gold Mines.

3.1.3 A single registered Historic Parks or Garden lies within a 500m radius of the Brunant Highway support scheme. It is the 19th century parkland around the former Dolaucothi mansion, including its 18th century walled

garden and other elements (Ref. PGW (Dy) 7(CAM)). The registered gardens lie to the west of the road scheme.

3.2 Scheduled Ancient Monuments

3.2.1 There is one scheduled ancient monument within 500m of the road support scheme; the Dolaucothi Roman Aqueduct (SAM CM200). The aqueduct survives as an earthwork to the north and south of the scheme, and would pass on the higher ground to the northeast, but no visible evidence for it remains in this stretch. The aqueduct connects the Afon Cothi at Pwll Uffern-Cothi and runs for a *c.*11km length along the Cothi Valley to feed the Roman gold mines at Dolaucothi (SAM CM208), which lie over 500m from the support scheme site.

3.3 Known Archaeological Remains

- 3.3.1 A search of the Dyfed HER within a 500m radius area around the Brunant Highway Support Scheme indicates that there are currently twenty-five known sites of archaeological and historical importance (including the Roman Aqueduct Scheduled Ancient Monument PRN 1948) (Table 2; Figure 3).
- 3.3.2 The earliest known site within the study area is that of the findspot of a Neolithic axe recovered near Dolaucothi House (PRN 1944). A rectangular cropmark of unknown significance is also recorded to the north of the scheme area (PRN 10400).
- 3.3.3 All of the remaining sites recorded on the HER are specifically associated with the former Dolaucothi mansion (PRN 20428) and its associated estate, gardens and parkland. The support scheme area lies to the east of these sites but lies within the wider area of the Dolaucothi estate which is now owned by the National Trust.
- 3.3.4 The HER also records two listed buildings within 500m of the site, which are the Dolaucothi Home Farm and its associated stable block (both grade II listed).

PRN	Name	Description	Period	NGR
1944	Dolaucothi Findspot	A stone axe recovered from the vicinity of Dolaucothi House and exhibited in 1878. The axe has since been lost and there are no details of the exact findspot, nor the circumstances of its recovery.	Neolithic	SN665408
1948	Allt Cwmhenog Aqueduct	Damaged earthwork. Part of the Roman aqueduct system that supplied water to the nearby gold mines at Dolaucothi. Scheduled Ancient Monument CM200	Roman	SN668404
10400	Allt Y Brunant Cropmark	Rectangular cropmark of unknown significance.	Unknown	SN66754119
18901	Hafod-Las	Recorded as a "hafod" placename of possible mediaeval origin.	Post- Medieval	SN66454097
20428	Dolau Cothi Mansion	The site of Dolaucothi House. A family dispute left the house empty after 1945. Beyond repair it was demolished by the National Trust in 1955. T. Lloyd 1986. Part of a rear wing and a barn are still standing.	Post- Medieval	SN66484083
44462	Dolaucothi Stable	The southern end of this range of buildings is used by the National Trust as volunteer accommodation. The interior of this part and the upper floor of the entire	Post- Medieval	SN66474088

		range were not visited. This range is not on the map of	1	
		circa 1770.		
44463	Dolaucothi Threshing Barn	The threshing barn is directly south of the cart shed and possible tack room (PRN 44464). These buildings have enclosing walls to the east and west to make a small yard with an entrance to the north. Rubble built with slate roof.	Post- Medieval	SN66424087
44464	Dolaucothi Cart Shed	The cart shed and possible tack room are immediately north of the threshing barn. These buildings are not on the map of circa 1770 but is recorded on the Cynwyl Gaeo tithe map of circa 1841. These buildings have enclosing walls to the east and west.	Post- Medieval	SN66434087
44465	Dolaucothi Potato Clamp	This building is north of the stable block and appears as a stone platform. It is a rubble built vaulted structure with an entrance in the west wall and a small opening in the north end. The structure appears to be sound. It is currently used for storage.	Post- Medieval	SN66494089
44466	Dolaucothi Stock Enclosure	Rubble built structure with newly slated roof and metal latticed windows, currently with metal sliding door. The stock house is not on the Ordnance Survey map of 1891 but is recorded on the Ordnance Survey map of 1907.	Post- Medieval	SN66484090
44467	Dolaucothi Shed	A shed with timber supports and corrugated tin roof is located between the stock house and the potato clamp. This shed is not on the Ordnance Survey map of 1891 but is recorded on the Ordnance Survey map of 1907.	Post- Medieval	SN66484089
44468	Dolaucothi Poultry House & Run	A poultry house with attached run is built onto the back of the stock houses. Rubble and breeze block structure with tin roof. This building does not appear on the Ordnance Survey map of 1964 and is probably a very recent feature.	Post- Medieval	SN66464091
44469	Dolaucothi Milking Parlour	Rubble built with new slate roof this well maintained building is in use as a milking parlour. The interior walls are rendered and floor concreted. This range of buildings is not on the map of circa 1770 but is recorded on the Cynwyl Gaeo tithe map.	Post- Medieval	SN66464091
44470	Dolaucothi Mill?	According to the map of circa 1770 the mill was situated to the west of the house. Nothing is visible of this site which is in the garden of the current farmhouse.	Post- Medieval	SN66434083
44471	Dolaucothi Mill Leat	According to the map of circa 1770 this leat ran to the mill that was situated to the west of the house. Nothing of this site was noted during the visit.	Post- Medieval	SN664408
44475	Dolaucothi Toilet	A rubble built ty bach with four, individually accessed, cubicles with stone floor. Two cubicles are accessed from the walled garden and two from the trackway. A wall separates the entrances of the two pairs of cubicles.	Post- Medieval	SN66564081
44477	Dolaucothi Ha Ha	The ha ha is located in front of the mansion separating the park from the garden. The ha ha allows an uninterrupted view from the mansion into the park while keeping livestock at a distance from the house.	Post- Medieval	SN66454076
44478	Dolaucothi Walled Garden	The following description is taken from the National Trust report on Dolaucothi. â€~All that remains of the walled garden at Dolaucothi are walls up to 3m high forming a roughly rectangular enclosure to the south of the remaining house. A dressed stone g	Post- Medieval	SN66524079
44479	Dolaucothi Garden	The following description is taken from the National Trust report on Dolaucothi. This garden is an â€~enclosure containing unkempt vegetation including garden plants such as Wellingtonias, as well as at least two rockeries and several selected large boul	Post- Medieval	SN66484090
44480	Dolaucothi Bridge	The following description is taken from the National Trust report on Dolaucothi. A simple wooden bridge between stone piers across the Cothi on the trackway	Post- Medieval	SN66544090

		linking Dolaucothi House with the Ogafau Lodge. The central portion has a concrete base.		
44481	Dolaucothi Pheasantry	This site was identified from Ordnance Survey 1906 Carmarthenshire XVII.I. The site was not visited.	Post- Medieval	SN66484090
44482	Dolaucothi Mill Stone	This mill stone, measuring approximately 1.5 metres with a central, square hole, is set upright in a stone wall. The stone is said to have come from the mill in Pumpsaint village.	Post- Medieval	SN66544090
44483	Dolaucothi Fence	Iron railings, typical of this type of parkland and a very ornate iron gate with decorative motifs. The gate in particular is suffering from rust and is deteriorating.	Post- Medieval	SN66554069
60983	Dolaucothi Home Farm, Pumpsaint	Grade II listed house	Post- Medieval	SN6647840837
60984	Stable Range At Dolaucothi Home Farm, Pumpsaint	Grade II listed stable range	Post- Medieval	SN6647040886

Table 2: Sites recorded on the Dyfed HER within 500m of the development site

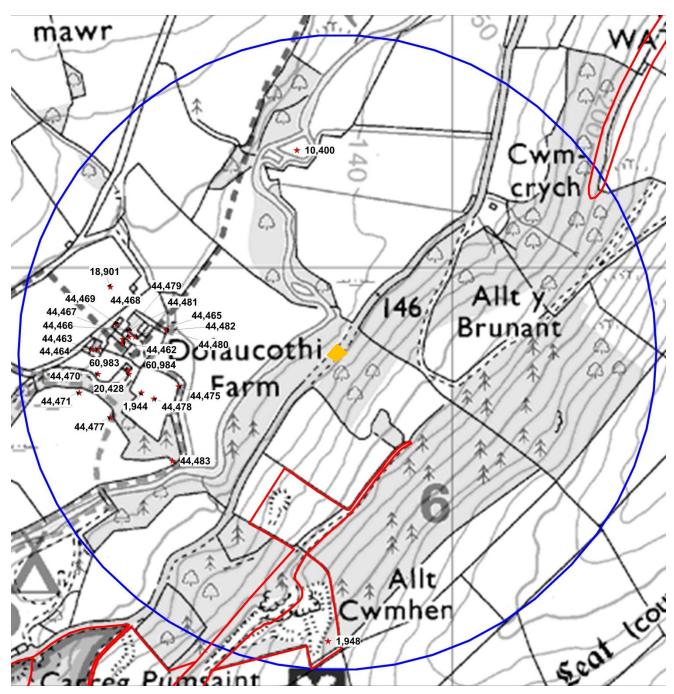


Figure 3: Map of HER records (red stars and PRN numbers) and Scheduled Areas (red boundaries) within 500m of the Brunant Highway Support Scheme area (gold)

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4. WATCHING BRIEF METHODOLOGY

4.1 Fieldwork

- 4.1.2 A watching brief was undertaken during initial groundworks at the site which had the potential to expose, damage or destroy underlying archaeological remains.
- 4.1.2 Excavation work was undertaken by a 360° tracked excavator fitted with a toothed bucket. All archaeological deposits revealed during the groundworks were examined and recorded to an appropriate level.
- 4.1.3 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual² used by DAT Archaeological Services.

4.2 Timetabling of Fieldwork

4.2.1 The watching brief took place on the 9th and 10th March 2015.

4.3 Post-Fieldwork Reporting and Archiving

- 4.3.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2007), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 4.3.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.
- 4.3.3 A report fully representative of the results of the fieldwork has been prepared.

² DAT Archaeological Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

5. RESULTS AND DISCUSSION

- 5.1 The initial visit on 9th March 2015 involved a meeting with the site contractors to discuss the work schedule. The only works carried out during this time were site-set up works, cutting down of trees and tarmac cutting along the road edge. No archaeological deposits were threatened by these works.
- 5.2 The second visit on 10th March 2015 observed groundworks along the length of the 15m stretch of the road repair area and an area to the southwest where shallow groundworks were being carried out (Photo 1). These additional groundworks included the partial removal of a slight (modern) bund along the western edge of the road and the cutting back and cleaning up of silts and other material accumulated on the road edge (Photo 2).
- 5.3 Through discussion with the site contractors the archaeologist was given the opportunity to investigate the road make-up in this area to the south of the main 15m stretch support scheme. A small section was excavated through the stripped area to the road edge (Photo 3). The section indicated a depth of tarmac road surface of around 0.10m sitting on top of a dark stone and mixed tarmac layer of 0.30m depth. Below this was a light grey stone and sand level of a minimum depth of 0.20m, which was also levelling material for the road, containing larger stones than seen within the layer above. This layer was also present along the base of the stripped area.



Photo 1: View northeast along road line showing area entire area of groundworks



Photo 2: Cleaning the road edge to the southwest of the road repair area



Photo 3: Small section cleaned up against existing road edge showing make-up layers

- 5.4 Within the 15m length of the main Brunant Highway Support Scheme it was necessary for the site contractors to form a platform along its entire length on the northwestern side of the road. This platform would enable the machine to be able to excavate the 3m depth required for the gabionade foundations. The platform would also enable a level platform on the side of the hillslope on which the machine could work.
- 5.5 The platform was created by partially digging into the soils of the hillslope and creating a terrace to the northwest. It was evident at the outset of these works that the topsoil on the hillslope was very loose and quite shallow.
- 5.6 Three areas of the 15m stretch were subject to deeper excavation under archaeological supervision to provide sections excavated through the road make-up and into the hillslope to determine if archaeological remains were present. The first test slot was excavated at the southwestern end of the scheme, identifying a similar sequence of road make-up deposits as was recorded to the southwest, although the lower layers were slightly shallower (tarmac 0.10m; tarmac and dark stone 0.10m 0.20m; light grey larger stone and sand 0.10m 0.20m) (Photo 4).
- 5.7 In this area it was possible to dig beneath the lower light grey stone and sand layer which demonstrated it lay on natural sandstone bedrock of a light grey colour very similar to the lower layer of road make-up.



Photo 4: Representative northwest facing section through road make-up deposits within the 15m length of the Brunant Highway Support Scheme area (0.5m scale bar placed in front of bedrock)

5.8 A deeper test slot was excavated in the central part of the scheme running at an angle to the edge of the road line through to the steep hillslope leading down to the Afon Cothi. The slot indicated a range of different bedrock levels below the road make-up layers, ranging from light grey sandstone, with a more yellow sandstone layer beneath overlying thin bands of both yellow and grey stones beneath (Photos 5 & 6). The bedrock was observed to the edge of the hillslope.



Photo 5: West facing section through natural bedrock below road make-up layers (material above the 1m horizontal scale bar is re-deposited)



Photo 6: Detail of west facing section through natural bedrock below road makeup layers (material above the 1m horizontal scale bar is re-deposited)

- 5.9 A second test-slot was excavated at the northeastern end of the scheme, running from the cut edge of the road through to and slightly down the hillslope (Photo 7). This area was excavated deeper into the bedrock and revealed more variation in its colour, including light grey, orange/yellow and dark grey banding (Photos 7 & 8).
- 5.10 At the northwestern end of the test slot a small amount of excavation was carried out removing part of the thin topsoil of the hillslope. This could be seen to range in depth of between 0.10 to 0.15m depth lying directly on the bedrock which had a steep slope of around 70° running down to the river below (Photo 8).



Photo 7: Test slot at northeastern end of scheme showing cut edge of tarmac, road make-up and bedrock beneath viewing southeast (1m and 0.5m scales)

5.11 No significant archaeological deposits were recorded on the site and no significant archaeological artefacts were recovered. Due to the presence of undisturbed bedrock directly beneath the road make-up layers there was no need for any further visits to the site to archaeologically monitor the groundworks.



Photo 8: Detail of base of test slot trench showing variations in colours of the natural bedrock and topsoil on top of steep bedrock slope at bottom of photograph viewing northeast (1m scale)

6. **CONCLUSIONS**

- 6.1 A watching brief was carried out during groundworks associated with the Brunant Highway Support Scheme in March 2015, undertaken by Carmarthenshire County Council. The scheme area lies within part of the Dolaucothi estate owned by the National Trust. Due to the site lying in proximity to the nationally significant Dolaucothi Roman gold mines and the Roman aqueduct, the National Trust required an archaeologist to be present during groundworks associated with the scheme as part of the land access agreement.
- 6.2 The main groundworks for the project involved excavation of the northwestern edge of the road line to enable the insertion of stone filled gabionades to create a supported base for the road on the northwest facing hillslope leading down to the Afon Cothi. This was necessitated following a tree fall which compromised the integrity of the road.
- 6.3 It was clear from the archaeological watching brief that the existing tarmac road surface was built upon two layers of make-up levelling material. The road surface comprised crushed stone and tarmac of between 0.10 and 0.30m depth. The upper, darker layer is likely to be imported material laid down directly before the road was surfaced. The lower make-up layer was formed of crushed stone and sand and would appear to be re-deposited crushed bedrock. Presumably this material had been dug up when the road was first constructed and terraced into the hillside, the excavated bedrock being laid down as a levelling layer (cut and fill exercise to create a level surface for the road).
- 6.4 Directly below this layer of crushed and re-deposited stone was the undisturbed natural bedrock. This was formed of mudstone, siltstone and predominantly sandstone in this area.
- 6.5 The watching brief would suggest that the ground surface below the road and along its northwestern edge had been significantly disturbed when the modern road was built. No surviving archaeological deposits or former ground surface layers were visible within the excavation area.
- 6.6 The northwestern hillslope comprised thin and loose topsoil overlying bedrock. It is likely that this topsoil has been subject to significant erosion and slippage. Much of its composition may have also comprised material that had washed off the road surface and accumulated on the bank.
- 6.7 There was no indication that any archaeological deposits survived within the area of the Brunant Highway Support Scheme. If any archaeological deposits had been present they would have been removed with the construction of the existing road which had evidently been significantly terraced into the former hillslope (Photo 9). No evidence survived of any earlier road surfaces.
- Although no significant archaeological remains or deposits were recorded within the area of the Brunant Highway Support Scheme, it is possible that significant remains could still lie within the vicinity of the development. The specific works were located in an area where there was a steep northwest facing hillslope down to the Afon Cothi such that the roadline had been significantly terraced into the hillslope. The terracing of the modern road would have removed any archaeological deposits which may have been present within the road line. The steepness of the hillslope is also such that it is perhaps unlikely that any significant archaeological remains would have been present here.



Photo 9: View northwest along the Brunant Highway repair area showing the significant terrace into the slope of the existing road line

7. SOURCES

Published

Cadw 1998. Register of Landscapes of Outstanding Historic Interest in Wales.

Database

Dyfed Archaeological Trust Historic Environment Record, housed with Dyfed Archaeological Trust in The Shire Hall, Llandeilo, Carmarthenshire, SA19 6AF

BRUNANT HIGHWAY SUPPORT SCHEME, PUMPSAINT, CARMARTHENSHIRE ARCHAEOLOGICAL WATCHING BRIEF

DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2015/23 RHIF Y DIGWYLLIAD / EVENT RECORD NO. 108470

> Ebrill 2015 April 2015

Paratowyd yr adroddiad hwn gan / This report has been prepared by:

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Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith This report has been checked and approved by

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf. on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position:

Llofnod / Signature Date: 20/04/2015

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report



