A Central Networks 11Kv distribution cable trench on the A38 at Little Abbey Camp, Alveston, South Gloucestershire

Archaeological Watching Brief Project
South Gloucestershire SMR 18168





For Central Networks Infrastructure Services

Andrew Young BA AIFA Avon Archaeological Unit Limited January 2008

Archaeological Monitoring of a Central Networks 11Kv electricity distribution cable trench on the A38 at Little Abbey Camp, Alveston, South Gloucestershire

NGR ST 6500 8870

Planning Reference - statutory undertaking

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Acknowledgements

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Note

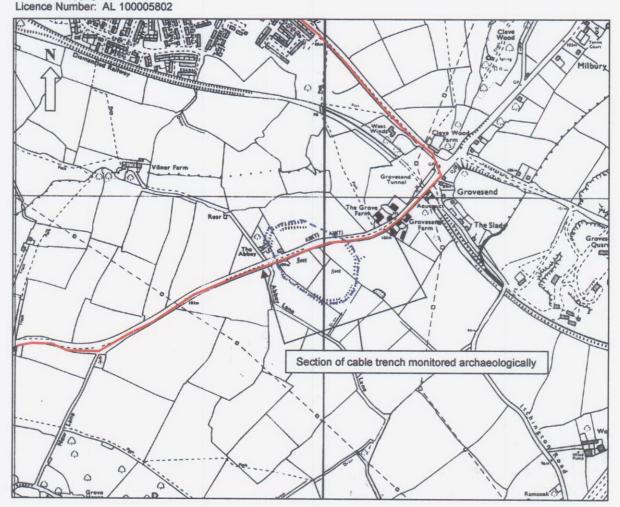
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Figure 1

ST 189N

The 11 Kv cable trench route (in red) through Little Abbey Camp (blue), Alveston, South Gloucestershire showing area of Archaeological Monitoring

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ST 365E

Scale 1: 12,500

Figure

The 11 Kv cable trench route (in red) through Little Abbey Camp (blue). Alveston South Gloucestershire showing area of Archaeological Monitoring

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Summary

The Watching Brief project was undertaken to monitor ground work for the construction of a new 11Kv underground electricity supply that passed through Abbey Camp, Alveston, South Gloucestershire. The camp is a Scheduled Ancient Monument of probable late prehistoric to Roman date that today sits astride the A38 carriageway, itself probably following the route of an original Roman road, and represents a site where no detailed modern archaeological research has been undertaken.

The project was commissioned and funded by E-ON UK and was undertaken in accordance with a Written Scheme of Work submitted to and approved by the Archaeological Officer for South Gloucestershire Council. The watching brief was required to ensure that all significant buried archaeology associated with Little Abbey Camp and affected by the cable trench was identified and recorded prior to destruction. The construction work involved the excavation of a 600 mm wide trench up to 1.2 m deep along the southbound side of the A38 carriageway and then via Grovesend Road into Thornbury. Overall the new 11 Kv supply was laid between c. ST64008850 and ST64608950 via the A38, Grovesend Road and Avon Way, although only the part of the trench that crossed the Scheduled Ancient Monument at Little Abbey Camp was monitored archaeologically.

Monitoring of the cable trench has provided an important transect across the scheduled monument that demonstrates two important points: firstly, that significant buried archaeological deposits of Romano-British date and including at least one human burial, are preserved intact immediately below the substantial modern road formation and, secondly, that complex and stratified archaeology of Roman date including varied cut soil features and masonry structures, in combination with stratified artefacts, are almost certainly preserved throughout the footprint of the earthwork and in adjacent areas outside the hillfort. The data recorded during the project broadly confirms the Sites & Monuments Record entry for the monument, which suggests it was a single-ramparted hillfort of probable late prehistoric origin although the identification of a substantial ditch, Ditch 518, seemingly well outside the spread bank of the fort on the eastern side of the monument, hints that the detailed physical form of the fort is likely to be more complex. Moreover, the presence of one and possibly two inhumation burials (in addition to a third inhumation burial reported during road widening in the 1920's), alongside postholes indicative of related earthfast structures, raises the possibility that a small extra-mural cemetery was located immediately adjacent to the northeastern side of the monument. Two AMS radiocarbon dates for the adult inhumation indicate a late 1st to early 2nd century AD date for the burial.

A small assemblage of pottery recovered from stratified deposits is entirely of Romano-British date, broadly of the 2nd century AD and later. The absence of any earlier finds, in particular prehistoric pottery, is consistent with previous material collected ad-hoc from the vicinity of the monument, most notably by Bill Solley, which suggests significant Romano-British settlement related activity from the 2nd century AD onwards.

No evidence of any contemporary Roman road surface or road formation was identified anywhere beneath the modern A38 road formation.

The evidence gathered during this small-scale and difficult archaeological monitoring reiterates how useful such projects can be and in this particular instance the very high potential for the preservation of shallowly buried Romano-British (and probably earlier) deposits, including human burials, both inside and in areas adjacent to Little Abbey Camp.

Central Networks 11 Kv electricity cable trench, Alveston, South Gloucestershire Archaeological Watching Brief Project

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1 Introduction

This report sets out the results of a programme of archaeological observation and recording work (Watching Brief) undertaken to monitor a specific section of the ground work for a new underground electricity supply installed between the A38 carriageway at Alveston, South Gloucestershire at c. 64008850, along the southbound A38 carriageway to a location off Avon Way, Thornbury at c. ST 64608950. The overall route of the trench was approximately 1.5 km. The Watching Brief was undertaken on behalf of Central Networks and was designed to monitor archaeologically all intrusive ground work associated with the project where it crossed the earthwork known as Little Abbey Camp (SMR 1487), a Scheduled Ancient Monument, as well as the suggested route of the Roman road that linked Sea Mills (*Abona*) and Gloucester (*Glevum*).

The programme of Archaeological Monitoring and Recording during ground disturbance was required by the Archaeology Officer of South Gloucestershire Council as a standard requirement of a statutory undertaking project and in accordance with the guidelines set out in PPG 16 (DoE 1990. *Planning and Archaeology*). The objective of the monitoring was to identify and record all significant archaeological deposits and finds revealed during the course of the trench excavation where it crossed the boundaries of the Scheduled Ancient Monument.

Avon Archaeological Unit Limited (The Unit) was commissioned by Central Networks to carry out the work as above and in accordance with the Relevant Guidelines of the Institute of Field Archaeologists, English Heritage's "Management of Archaeological Projects (2)" and the standard procedures of Avon Archaeological Unit Limited. A written Scheme of Work was produced by AAU and approved by the Archaeological Officer for South Gloucestershire Council.

The site monitoring and field recording was undertaken by Andrew Young in a period between the 18th September and the 3rd October 2007. The site work was followed by the submission of samples for C14 dating (below) and preparation of the project archive and this report.

The archaeological archive gathered during the project (South Gloucestershire Sites & Monuments Record 18168) will be temporarily stored at the offices of Avon Archaeological Unit Limited, Bristol, and will ultimately be deposited with Bristol City Museum & Art Gallery for long term curation and storage.

2 Methodology

2.1 Construction Methodology

The ground work for the 11Kv electricity supply involved the excavation of a single continuous trench along the southbound A38 carriageway, the northbound side of Grovesend Road and the westbound side of Avon Way, Thornbury. The trench was uniformly 600 mm wide and up to 2 m deep except where four test pits (Test Pits 1-4) were opened at right angles to the trench route. Excavation was carried out using a 600 mm rock wheel followed by a mini-360-degree tracked excavator equipped with a toothless bucket.

Once the trench was open a cable duct was inserted and the trench backfilled with scalpings and excavated material prior to resurfacing.

2.2 Archaeological Methodology

Ample provision was afforded to the writer to identify and inspect deposits of potential archaeological interest revealed in the cable trench although due to the restricted width close inspection of the base of the trench required some gymnastics. Artefacts, deposits and materials of possible archaeological interest revealed in the base of the trench were examined and recorded by means of a short stop of the excavation work. All archaeological and nonarchaeological features and deposits were recorded on standard Avon Archaeological Unit Limited sheets with scaled photographs as appropriate. Photographs were taken using digital and colour transparency stock.

Where identified all human remains were cleaned, recorded and then protected with a suitable membrane for preservation in-situ.

3 Historical and Archaeological Background

The part of the cable trench that followed the line of the A38 Gloucester Road ran parallel to the route known as the old Ridgeway, along which it is suggested ran the Roman Road from Sea Mills to Gloucester (SMR Number 1462). At Alveston both road and cable trench crossed the banks of the earthwork of later prehistoric type known as Little Abbey Camp, a hillfort and Scheduled Ancient Monument (SAM. number 1487). The South Gloucestershire Sites and Monuments Record entry for the hillfort is as follows:

South Gloucestershire Historic Environment Record

SMR Number

Name Hillfort Little Abbey Camp Alveston (Scheduled Ancient Monument)

Abbey Camp, in Alveston parish near the 11th milestone from Bristol, is a single ramparted hillfort, oval in shape, with an entrance on the S. An additional bank branches off from the main work at the sourtheast. {1} The earthwork is in a weak defensive position on the east facing slope of a low rise. The northwest portion of the rampart runs along the top of the ridge, and the south-east portion is on lower ground. The situation hardly warrants the description of the work as a hillfort, but the general construction and condition is suggestive of an Iron Age date. The additional bank referred to in {1} appears as a very slight south facing lynchet running in a north-easterly direction from the east side of the main rampart. It appears to be contemporary with the main work and is possibly the vestige of an annexe. Published survey (25' 1936) revised. {2} The bank is still 5'high in places and of tremendous breadth. Additional bank mentioned in {1} is probably that visible on aerial photographs 541/540 4005-6 and not that leaving the north-east side of the fort in a northerly direction {3} The scarp running off the north east is visible, but not the additional bank. Mainly pasture. Some hedges grubbed up on the south west side revealing Roman pottery at ST64918870 (now in Bristol Museum) [4] Intensive field walking by TWJ Solley revealed much Roman, but no Iron Age, material - including coins, quern stone and pottery. The latter mainly from ploughed fields to the south and south west of the earthwork, in area centred at last 12 years. [5] [6] The earthwork consisted of an oval enclosure on top of a hill, not following the

contour closely but thrust forward on the south-east down the slope. There is a substantial bank 3-4' high, which can be followed all the way round, and has a suggestion of a ditch on the outside and a hollow behind it. Only the N part is ploughed. Although the OS map does not mark it as an antiquity, they replied to an enquiry that they have no evidence that it is not ancient. It is evidently earlier than the field boundaries and might be of any date from Iron Age to Medieval. {7} Monument Description. The monument comprises a slight univallate hillfort of type la (unaltered sites

with dump rampart). It is of oval shape with single rampart and an entrance to the south. An additional bank branches off from the main earthwork at the south east. The site occupies a ridge top with commanding views to the north of the Forest of dean, Severn Valley and parts of the Cotswolds. The main bank survives in places to a height of 1.7m and a breadth of 5m.

Although the appearance of the site as a hillfort suggests an Iron Age date (1500-50BC), finds from the site are largely Roman; these include coins, pottery and quernstones, recovered by fieldwalking in fields

both within and immediately outside the earthwork. More recently, observations within the farmyard to the south of the road and on the eastern edge of the rampart, produced pottery and the appearance of roman fabrics within contemporary buildings. In addition the foundations of a building have been identified during turf stripping in a field east of the yard.

The modern road, which bisects the monument and its verge, is omitted from the scheduled area. Also omitted are the modern buildings within the scheduled area, although the ground beneath them is

ASSESSMENT OF IMPORTANCE

There are some 150 Iron Age hillforts of this class in England. Such monuments were a major form of settlement during the Iron Age acting both as defensive enclosures and economic centres. The site is unusual in that, although similar to other examples in the Severn Basin, it has produced Roman as opposed to Iron Age occupation. Therefore, in addition to intrinsic value, it has wider significance in terms of understanding the transition for the Iron Age to roman periods in this region. The earthwork itself is well preserved, while the abundance of finds from the interior suggests that archaeological deposits inside the monument will be of a high quality. {8} Site Discussed in {9}

Site Type HILLFORT

Grid Reference ST 65000 88700

The earthworks delineate an internal area of approximately 5.7 hectares with the spread earth bank on the east side preserved up to 1.7 m high and in excess of 5 m wide. The camp is suggested to be situated in a weak defensive position although it affords panoramic views across the Severn Vale to the north and is somewhat unfairly described as "hardly warranting the description of the work as a hill-fort".

Solley (1983) notes that the earthworks are best preserved on the south side of the A38 carriageway and describes a range of exclusively Roman finds, principally pottery but including a number of coins dating from the period Claudius to Constantine the Great, recovered from agricultural and chance exposures. He also notes the discovery of Roman finds during the construction of an extension to the property known as Little Abbey. In addition, foundations for a possible Romano-British building were located inside the enclosure during topsoil stripping and roof tiles indicative of a substantial building are among the finds recovered.

On the basis of the archaeological and documentary evidence available for the Little Abbey camp site the archaeological potential of the trench along the carriageway, not part of the scheduled area, was considered to be very high, with archaeological remains of Roman or earlier origin possibly preserved as subterranean features or deposits below the road formation.

4 Geology, Topography and Landuse

The underlying geology of the Study Area is surprisingly complex and in the area of Little Abbey Camp includes Upper Old Red Sandstone overlain unconformably by Dolomitic Conglomerate that is in turn overlain unconformably by patches of Mercia Mudstone (Keuper Marl). Outcrops of earlier, possibly Ordovician or Silurian sandstones (Thornbury Sandstones), are recorded further west at Grovesend whilst Lower Limestone Shales of Carboniferous date, again unconformable, occur just to the west of the camp.

The camp is set on a low hill with the bulk of the interior set on a gentle east facing slope. Ordnance Datum heights across the monument vary from c. 112 m OD at Little Abbey to c. 103.6 m OD on the A38 carriageway in the centre of the approximate monument to c. 100 m OD at Grovesend Farm to the northeast.

The entire route of the trench monitored archaeologically was set in the southbound carriageway of the A38. Whilst the carriageway passes through the Scheduled area it is not itself part of the Scheduled Monument and works did not therefore require Scheduled Monument Consent.

5 Site Observations

5.1 Test Pits 1-4 (shown on Figure 2)

Each of the test pits were opened in advance of the main trench through tarmac and at right angles to the trench line. Three were of standard size, 2 m by 700 mm wide and up to 1.2 m deep. Test Pit 4 was larger, 570 mm wide.

Test Pit 1 (NGR ST 64868 88799) - 112.76 m OD

The cutting (Plate A) was excavated to a maximum depth of 1050 mm and revealed the following sequence of deposits:

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Context 101 - 250 mm of tarmac

Context 102 - 300 mm modern scalpings and dust

Context 103 - 100 mm modern tarmac

Context 104 - 200 mm mixed stone and scalpings bedding

Context 105 - 150 mm of clean greenish-grey soil at 111.91 m OD overlying sandstone rubble

No finds were recovered from the cutting.

Test Pit 2 (NGR ST 64806 88774) - 109.83 m OD

The cutting (Plate B) was excavated to a maximum depth of 1000 mm and revealed the following sequence of deposits:

Context 201 - 640 mm of modern tarmac and bedding material

Context 202 – 360 mm clean pale green gritty clay with patches of darker red-brown clay. Interpreted as the top of the weathered Triassic Marl at 109.23 m OD.

No finds were recovered from the cutting.

Test Pit 3 (NGR ST 64966 88837) - 104.7 m OD

The cutting (Plate D) was excavated to a maximum depth of 1150 mm and revealed the following sequence of deposits:

Context 301 - 350 mm of tarmac

Context 302 – 650 mm modern scalpings and gravel

Context 303 - >100 mm of soft dark yellow-brown (10YR 4/4) fine sand silt clay. The top of the deposit was located at 105.22 m OD although the overall depth of the deposit was not ascertained.

No finds were recovered from the test pit.

Test Pit 4 (NGR ST 65172 88881) - 100.91 m OD

Cutting 4 (Plate E) was wider, 570 mm, and excavated to a maximum depth of 920 mm to reveal the following sequence of deposits:

Context 401 - 340 mm of tarmac

Context 402 – 90 mm modern scalpings and gravel

Context 403 - 360 mm modern tarmac

Context 404 - >100 mm mixed clean light reddish-brown clay soil with moderate small limestone inclusions.

No finds were recovered from the test pit.

5.2 The Cable Trench (Figures 2 and 3)

Archaeological monitoring of the cable trench (see cover plates) commenced on the 18th September in an area just to the west of the Abbey Camp monument (see Figure 2). Thereafter observations were made from this point on a day by day basis with each stretch of cable trench added cumulatively to the last. The location and distribution of recorded deposits are shown on Figure 3 where the horizontal width of the cable trench has been very much exaggerated to aid the presentation of data. Deposits and features are described below in the approximate order in which they were identified.

Details of the modern road formation are included above and in the project archive but are not repeated below unless specifically relevant to the recorded archaeology.

Natural 202

A deposit of clean pale greenish – grey gritty clay was revealed beneath 640 mm of modern road formation. The deposit, indicated at the waterline on Photograph B, was located at a depth of 109.23 m OD and interpreted as weathered natural substrata. No archaeological deposits were preserved above the natural material.

Ditch 504

The undisturbed natural gritty clay substrata was cut at c. ST364816.9E/188779.1N by a linear cut soil feature, Ditch 504, aligned at right angles to the cable trench, roughly NNW-SSE. The ditch was defined by a mixed soil deposit (504) revealed immediately below the modern road formation that incorporated redeposited grey/green and dark red natural marl (202) and very dark greyish-brown silt clay soil plus sparse small limestone and sandstone rubble. No finds were retrieved from the surface of the deposit, which extended for a distance of 8 m along the trench. The east side of the ditch cut was located at ST 364825E/188782.3N at which point the base of the trench returned to undisturbed natural substrata (202) for a distance of c. 8.5 m.

Deposit 502

This deposit of soft dark yellowish-brown (10YR 4/4) fine sand silt clay containing sparse small sandstone rubble (502) was revealed at ST 364834E/188785.5N at a depth of c. 900 mm (c. 110.43 m OD). The deposit occurred as a gradual boundary more indicative of a layer as opposed to a defined cut soil feature and extended for c. 9 m to the northeast where it was interrupted by, and probably butted, a section of rough drystone masonry (Wall 522). Sherds of Roman pottery including fragments of Samian ware were recovered from the surface of the deposit (see below). The overall depth of Deposit 502 was not ascertained.

Wall 522

Wall 522 (Plate C) was aligned at right angles to the trench, roughly NNW-SSE, and formed of sandstone and limestone rubble of drystone construction up to 700 mm wide. The masonry was preserved directly below the road formation at a depth of 850 mm (c. 107.69 m OD). No evidence was present to suggest that the masonry forming the wall was ever bonded.

Deposit 502

Deposit 502 continued for a distance of c. 6.5 m to the northeast of Wall 522 where it was texturally indistinguishable from the deposit on the southwest side of Wall 522. The deposit continued as far as ST 364848.6E/188791.8N and produced further small sherds of Romano-SGSMR 18168 - Avon Archaeological Unit Limited – January 2008

British pottery at a depth of c. 900 mm. Once again the overall depth of Deposit 502 was not ascertained.

The exposure of Deposit 502 ended at the coordinates cited above, from which point the cable trench was excavated entirely in the modern road formation for a distance of approximately 67 m and no archaeological deposits were exposed. Evidence from Test Pit 1 (context 105 above) indicated that the archaeological deposits were present below the base of the cable trench.

Deposits 505, 506 and 507

A deposit of friable very dark grey brown (2.5Y 3/2) clay silt (Deposit 505) was revealed in the base of the cable trench at ST364911.6E/188816.3N. The deposit was revealed at a depth of 850 mm (c. 107.24 m OD) immediately below the road formation and extended to the northeast for a distance of 8 m when it was replaced by a considerably more mixed soil and rubble deposit (Deposit 506). Deposit 506 was preserved immediately below the 800 mm road formation and overlay Deposit 505.

Deposit 506 was considerably mixed and consisted of a firm dark yellow-brown (10YR 4/6) silt clay containing moderate to common inclusions of sandstone stones and rubble. Examination of the deposit produced a handful of Romano-British pottery sherds (Section 6 below). The deposit extended in the base of the trench fairly uniformly for a distance of 24 m (ST364945E/188829N) where it was replaced by Deposit 507.

Deposit 507 was revealed in the base of the trench at a depth of c. 850 mm (105.34 m OD). The deposit consisted of very dark grey brown (10YR) soft fine sandy clay silt containing sparse small sub-rounded sandstone gravel inclusions. Small fragments of mollusc shell were also noted. The deposit ended abruptly some 6 m to the west of Test Pit 3 where the depth of modern road formation increased and the base of the cable trench remained in modern road deposits.

Data recovered from Test Pit 3 (above) located adjacent confirmed that archaeological deposits continued below the modern road formation at this point at a depth of 105.22 m OD, as indicated by context 303 (above).

Layer 510

The trench was cut entirely into modern road formation for a distance of 54 m northeast of TP3. At ST365019E/188852N a deposit of mixed and very stiff dark clay soil (Layer 510) was exposed in the base of the trench at a depth of 950 mm (c. 102.8 m OD). The layer extended for a distance of approximately 30 m before the depth the cable trench was reduced to 700 mm and the cutting was once again entirely within the modern road formation for a distance of approximately 25 m.

Ditch 511

A well defined soil boundary at ST365076E/188860N represented the western edge of a linear cut soil feature (Feature 511) aligned approximately NNW to SSE. The deposit (511) consisted of dark yellowish-brown (10YR 3/4) soft clay silt containing sparse gravel sized sandstone inclusions. Overall the deposit was approximately 4.5 m wide and clearly filled a well defined cut into the natural bedrock. No finds were recovered from surface cleaning of the deposit.

Grave 1 (context 512) Plate F

A shallow rock-cut grave (Grave 1, context 512) was revealed 3.4 m to the northeast of Ditch 511, immediately below the road formation at a depth of 880 mm (c. 101.31 m OD). The grave was 550 mm wide, orientated NNE-SSW (on a bearing 030 degrees) and contained a single adult inhumation laid out on its right side with legs slightly drawn up to the body. The trench only exposed the central portion of the skeleton (Plate F) including the pelvis, ribcage, vertebrae, upper leg, lower leg and a portion of one lower arm. The upper body and skull were not exposed but were judged to exist just outside the trench to the north-northeast.

The skeleton was cleaned and recorded as fully as the constraints of the trench would allow and a few small fragments of loose bone were retained for independent dating (see below). No grave goods or associated finds were present. The skeleton was subsequently protected and preserved in situ beneath the cable ducting.

Two AMS radiocarbon determinations (Section 6.2 below) were produced from bone fragments recovered during hand cleaning of the skeleton.

Postholes 514 and 515

A pair of small, intercutting postholes (Postholes 514/515) were located some 600 mm to the east of the grave, cut into the natural bedrock (513). Both were approximately 130 mm in diameter although neither was excavated.

Feature 516

This well defined soil feature was located 2.8 m east of the pair of postholes and 3.4 m east of Grave 1. The deposit was 600 mm wide and orientated approximately NNW- SSE, extending into the north facing trench section but terminating in a squared end in the cable trench. The deposit was preserved immediately below the road formation at a depth of 850 mm (c. 101.7 m OD) and appeared to fill a regular cut in the bedrock. No finds were recovered from the surface of the feature, which was interpreted to represent either part of a second grave or a narrow ditch terminal.

Posthole 517

A single rock-cut posthole (517) of 130 mm diameter was located 900 mm to the east of Feature 516. The feature was filled by dark brown silt clay but was not excavated.

Ditch 518

This clearly defined soil feature was located 2.9 m east of Posthole 518 at ST365100.7E/188862.9N and revealed immediately below the road formation at a depth of 750 mm (c. 101.81 m OD). The deposit was 9.5 m wide and consisted of soft clean dark yellowish-brown (10YR 3/4) clayey silt and sparse limestone rubble that appeared to fill a large rock-cut ditch aligned NNW-SSE (bearing 320 degrees).

No finds were retrieved from the surface of the deposit.

Deposit 520

This large but somewhat irregular soil feature up to 8.5 m wide was exposed 3 m east of Ditch 518 and also appeared to represent a large rock-cut feature located at a depth of between 720-

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750 mm. The deposit also consisted of soft yellowish-brown silt clay but compared to the fill of Ditch 518 contained significantly larger amounts of small to medium sized limestone and sandstone rubble. The western edge of the feature was fairly well defined and appeared to reflect a cut aligned just east of north (bearing 040 degrees) although the eastern side did not appear parallel, being aligned NNW-SSE. No finds were recovered from the surface of the deposit.

Natural 521

The remainder of the eastern end of the cable trench, as far as Test Pit 4, revealed weathered natural bedrock directly below the modern road formation and no further archaeological deposits or finds.

6 Finds

6.1 Pottery

The watching brief resulted in the recovery of only 11 sherds of pottery weighing a meagre 54g. Nonetheless, in view of the very difficult conditions for even identifying archaeological deposits let alone physically examining them, the collection is significant for two principal reasons. Firstly, because the assemblage dates exclusively to the Romano-British period, seemingly 2nd century AD and later, that is to say no indication of Roman military activity, plus an absence of any prehistoric sherds, Secondly More sherds were undoubtedly present but were not recovered due to the practical constraints of the cable trench.

The pottery came from three very similar deposits (105 and 304) and appears to include sherds ranging in date between the 2nd and 4th centuries AD. The sherds are moderately well preserved with an overall average sherd size of only 6g. For the purposes of the assessment the assemblage was scanned to determine the form and fabrics and the likely date of the pieces. These were quantified by sherd count and weight for each context. The resulting data is summarised in Table 1.

The group comprises a single continental import, regional traded wares and local products. The continental wares include fine wares of probable South Gaulish samian, consisting of two sherds from a shallow dish of 2nd century AD date.

Regional imports include a sherd of Dorset black burnished ware jar decorated with a burnished lattice, which is set at a just oblique angle implying a date in the early 3rd century. Accompanying this are generic oxidised sherds of Severn Valley Ware type and probable local pottery including generic grey wares.

Conclusions and Potential

The pottery assemblage is of considerable interest in terms of the location and the composition of the group is entirely consistent with previous material collected from the monument. It may be significant that both late prehistoric and post-Roman finds appear to be absent in this group. As a collection the present assemblage does not merit detailed publication in its own right but forms an addition to the growing corpus of material recovered from the locality.

Table 1 – Pottery Catalogue

Context	Find Type	Count	Weight (g)	Provisional date and comments		
502	Ceramic	3	28	Romano British, Samian Ware bowl, Type: Walters 79, date range 160 – 230 A.D.		
502	Ceramic	2	14	Romano British, Severn Valley Ware- c.3th - 4 th century A.D.		
502	Ceramic	2	6	Romano British, Locally produced grey wares 1 st - 4 th centuries A.D.		
502	Ceramic	2	1	Romano British oxidised Severn Valley ware, 2nd – 4 th centuries A.D.		
502	Ceramic	1	4	Romano British, Locally produced grey ware 2 nd - 4 th centuries A.D.		
506	Ceramic	1	1	Romano-British Dorset BB1, 3 rd century A.D +		

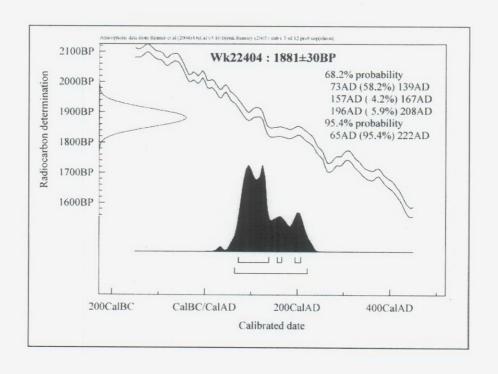
6.2 Radiocarbon Dating (see also Appendix 1)

Two samples of human bone recovered from Grave 1 were submitted to Waikato laboratories New Zealand for radiocarbon determination (Wk22404 and Wk 22405). The samples (Grave 1a and Grave 1b) were both recovered from the surface of Grave 1 (context 512) during cleaning and recording prior to preservation in situ.

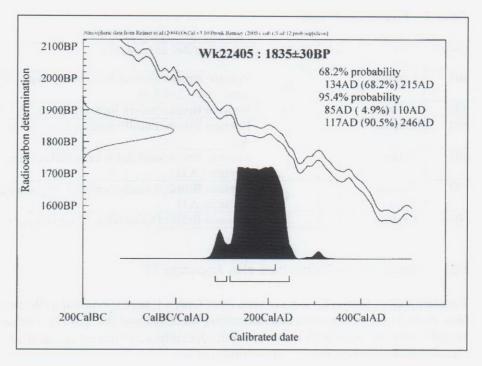
The summary C14 determinations were:

Site code	Wk	dC13	% Modern	Result
Grave 1a (SGSMR)	18168) Wk22404	4 -19.0 +/- 0.2	79.1 +/- 0.1	1881 +/- 30 BP
Grave 1b (SGSMR)	18168) Wk2240:	5 -19.1 +/- 0.2	79.6 +/- 0.1	1835 +/- 30 BP

C14 table 1 Wk 22404







7 Discussion and Conclusions

The archaeological Watching Brief has been undertaken during ground works affecting the Scheduled Ancient Monument known as Little Abbey Camp, Alveston, in accordance with the requirements of the Archaeological officer for South Gloucestershire Council and a Scheme of Work submitted by Avon Archaeological Unit Limited (Young 2007) and approved by the Local Planning Authority.

The Watching Brief project was undertaken to monitor ground work for the construction of a new Central Networks high voltage underground electricity supply that passed through Little Abbey Camp, Alveston, South Gloucestershire. The camp is a Scheduled Ancient Monument of probable late prehistoric to Roman date that today sits astride the A38 carriageway, itself probably following the route of an original Roman road, and represents a site where no detailed modern archaeological research has been undertaken.

Monitoring of the cable trench has provided an important transect across the scheduled monument and produced important new archaeological data concerning the potential and distribution of buried archaeological remains over the site. More specifically the data recovered highlights two important points: firstly, that significant buried archaeological deposits of Romano-British date and including at least one human burial, are preserved intact immediately below the substantial modern road formation and, secondly, that complex and stratified archaeology of Roman date including varied cut soil features, masonry structures, and earthfast timber features, in combination with stratified artefacts, are almost certainly preserved throughout the footprint of the earthwork and in adjacent areas outside the hillfort. The data recorded during the project broadly confirms the Sites & Monuments Record entry for the monument, which suggests it was a single-ramparted hillfort of probable late prehistoric origin although the identification of a substantial ditch, Ditch 518, seemingly well outside the spread bank of the fort on the eastern side of the monument, hints that the detailed physical form of the fort is likely to be more complex. Moreover, the presence of one and SGSMR 18168 - Avon Archaeological Unit Limited – January 2008

possibly two inhumation burials (in addition to a third inhumation burial reported during road widening in the 1920's), alongside postholes indicative of related earthfast structures, raises the possibility that a small extra-mural cemetery was located immediately adjacent to the northeastern side of the monument.

The two AMS radiocarbon dates for the adult inhumation indicate a late 1st to early 2nd century AD date for the burial, consistent with the body of Roman artefacts that have been recovered from the monument and its environs to date.

A small assemblage of pottery recovered from stratified deposits is entirely of Romano-British date, broadly of the 2nd century AD and later. The absence of any earlier finds, in particular prehistoric pottery, is consistent with previous material collected ad-hoc from the vicinity of the monument, most notably by Bill Solley (Solley 1983), which suggests significant Romano-British settlement related activity from the 2nd century AD onwards.

No evidence of any contemporary Roman road surface, the stretch of Roman road designated 541 by Margary (Margary 1967), or road formation was identified anywhere beneath the modern A38 road formation.

The evidence gathered during this small-scale and difficult archaeological monitoring reiterates how useful such projects can be and in this particular instance the very high potential for the preservation of shallowly buried Romano-British (and probably earlier) deposits, including human burials, both inside and in areas adjacent to Little Abbey Camp.

Finally, it is worth reiterating that the Little Abbey Camp monument is one of a number of premier archaeological sites in South Gloucestershire that remain essentially univestigated; a site that has the potential to produce flagship research to move forward our understanding of the late prehistoric and Roman periods in South Gloucestershire.

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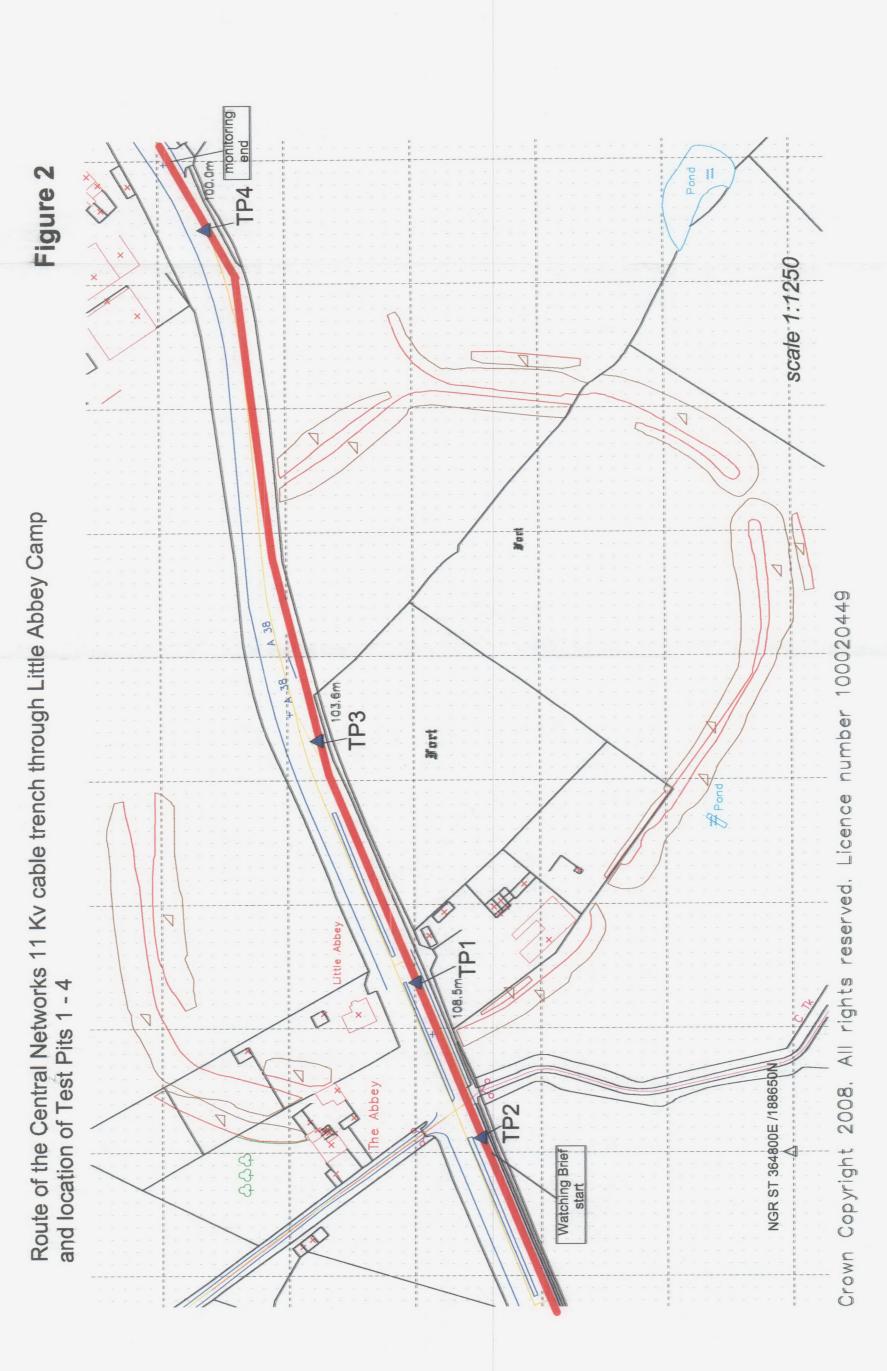
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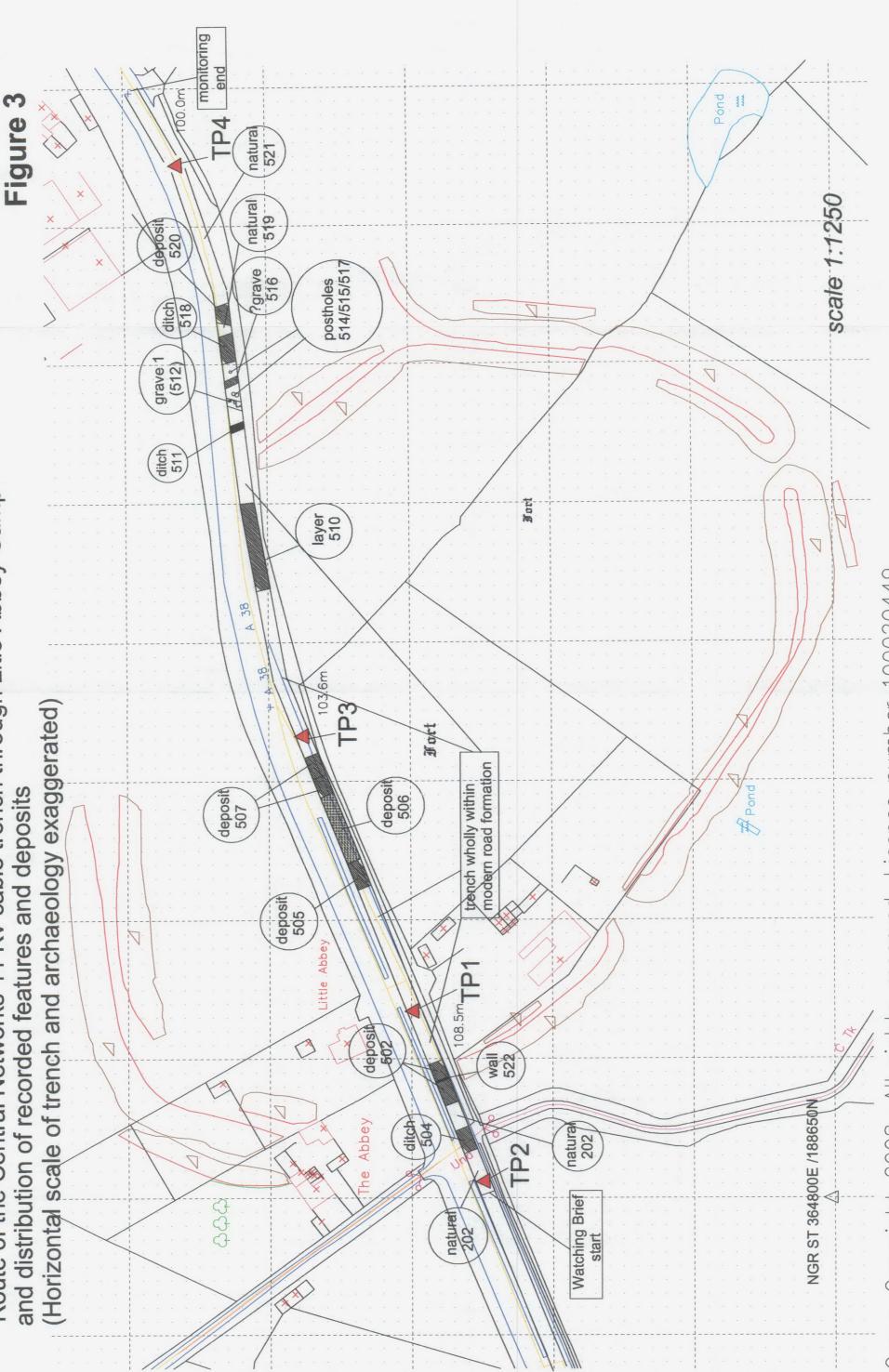
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Central Networks 11 Kv electricity cable trench, Alveston, South Gloucestershire Archaeological Watching Brief Project





Route of the Central Networks 11 Kv cable trench through Litle Abbey Camp

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Central Networks 11 Kv cable trench, Little Abbey Camp, Alveston, South Glos Archaeological Watching Brief



Plate A - Test Pit 1



Plate B - Test Pit 2

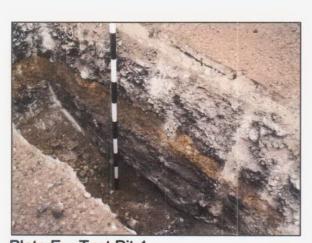


Plate E - Test Pit 4

SGSMR 18168

Photographs



Plate C - Wall 522



Plate D - Test Pit 3

Plate E - Grave 1 (context 512) scale 500 mm



Appendix 1

AMS Radiocarbon Dating Certificates

Rafter Laboratory University of Waikato New Zealand

Sample ID	Total N	δ ¹⁵ N vs Air	Total C	δ ¹³ C vs PDB	C:N
	%N	%o*	%C	%·*	
Ducker 22404	15.7	10.48	43.5	-19.01	3.2
Ducker 224o5	16.0	10.45	44.1	-19.06	3.2

*Precision = ± 0.2 %

Note: All isotope values measured on bone gelatin.

Isotope Analysis (δ^{15} N and δ^{13} C)- explanation:

Humans that obtain the majority (>90%) of their protein from marine food have $\delta15N$ values between 12 and 22 per mil. While those that consume only terrestrial protein (C3 pathway plants) have $\delta15N$ values ranging from 5 to 12 per mil. Similarly, human bone collagen $\delta13C$ values of -11 or -12 per mil indicate a diet composed almost entirely (>95%) of marine protein, while values of -20/-21 indicate a mainly (>95%) terrestrial protein diet.

These values suggest a predominantly terrestrial diet. The radiocarbon result has been calibrated accordingly.

Quality Control (%N, %C and C:N) - explanation:

Modern collagen has about 43% carbon and 16% nitrogen, and should have a C:N value of about 3.2. Most well preserved archaeological bone averages 35wt%C with between 11 and 16 wt%N and a CN ratio of 3.1-3.5. All results fall within acceptable parameters.

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email c14@waikato.ac.nz Head: Dr Alan Hogg

Report on Radiocarbon Age Determination for Wk- 22404

(AMS measurement)

Submitter

R.K. Ducker

Submitter's Code

Grave 1a (SGSMR18168)

Site & Location

Abby Camp, Thornbury, South Gloucestershire, United Kingdom

Sample Material

Human bone

Physical Pretreatment

Sample cleaned and ground.

Chemical Pretreatment

Sample was decalcified in 2% HCl, rinsed and dried. Then gelatinised at pH=3 with HCl at 90 degrees for 4 hours. Ultrafiltered and freezedried.

 δ^{13} C -19.0 ± 0.2 % D^{14} C -208.8 ± 1.3 % F^{14} C% 79.1 ± 0.1 %

Result 1881 ± 30 BP

Comments

19/12/07

- Result is Conventional Age or % Modern as per Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}C$, is expressed as % wrt PDB.
- $F^{1\,4}$ C% is also known as pMC (percent modern carbon).

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Report on Radiocarbon Age Determination for Wk- 22405

(AMS measurement)

Submitter

R.K. Ducker

Submitter's Code

Grave 1b (SGSMR18168)

Site & Location

Abby Camp, Thornbury, South Gloucestershire, United Kingdom

Sample Material

Human bone

Physical Pretreatment

Sample cleaned and ground.

Chemical Pretreatment

Sample was decalcified in 2% HCl, rinsed and dried. Then gelatinised at pH=3 with HCl at 90 degrees for 4 hours. Ultrafiltered and freezedried.

 -19.1 ± 0.2 -204.2 ± 1.3 79.6 ± 0.1

Result

 $1835 \pm 30 BP$

Comments

- The isotopic fractionation, $\delta^{13}C$, is expressed as % wrt PDB.
- F¹⁴ C% is also known as pMC (percent modern carbon).

Result is Conventional Age or % Modern as per Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.

Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error

