

# **Shobdon Mains Refurbishment Scheme**

Report on the  
Archaeological Excavation of  
Engineering Access Pits at

**Leen Farm  
Pembridge  
Herefordshire**

NGR SO 3740 5964 – NGR SO 3889 5919  
SMR No. 48670

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# 1. Non Technical Summary

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*Border Archaeology carried out a series of 18 access pit excavations in advance of drilling operations along an approximately 1.6km WNW/ESE section of the Shobdon Mains Refurbishment Scheme water pipeline route. The route crossed fields on the N side of the Arrow Valley floodplain, parallel with the unclassified road between Pembridge and Staunton on Arrow, and extended beneath the Rowe Ditch, a prominent post-Roman feature within this part of the Arrow Valley.*

*Immediately to the east of the Rowe Ditch, the excavations revealed a series of ditches and pits containing evidence of settlement activity apparently linked to an Iron Age / Romano-British farmstead situated approximately 120m to the north. On the opposite side of the Ditch, part of a single ditch circuit was revealed relating to a sub-circular enclosure, which had been previously identified from aerial reconnaissance as a Neolithic henge, a monument type dating from the third millennium BC and generally comprising a bank and internal ditch.*

*This enclosure ditch was exposed at two points along its circuit and evidence of eroded bank material was found within the ditch. It appears that the enclosure ditch was later incorporated into the farmstead complex, when it seems a fence or palisade was erected and subsequently removed. Roman pottery was found within the packing material associated with this fence/palisade.*

*A programme of geoarchaeological recording was also carried out, the results of which suggest that archaeological activity is likely to concentrate on and around 'gravel islands' concealed beneath the relatively level alluviated landscape and not readily recordable by normal archaeological reconnaissance. These islands represent undulations in the gravel palaeo-surface, which occurs at variable depths of between 0.31 and 1.02m.*

## 2. Introduction

Border Archaeology was instructed by Mr Mike Stokes of Laing O'Rourke (LOR) to undertake a programme of archaeological excavation at Leen Farm Pembridge Herefordshire on behalf of Dŵr Cymru Welsh Water (DCWW)/LOR in respect of that section of the Shobdon Mains Refurbishment Scheme (ref. E360) running approximately 1.6km WNW/ESE (NGR SO 37400 59640 to SO 38890 59190) through fields on the N side of the Arrow Valley floodplain. The route runs parallel with and to the N of an unclassified road running roughly E-W from Pembridge towards Staunton on Arrow.

This section of the pipeline route crosses a landscape containing evidence of prehistoric, Roman and early medieval activity, which has been the subject of a recent study by Herefordshire Archaeology. The pipeline passes through a large sub-circular ditched enclosure (SMR No 10418), provisionally identified as a henge monument, and directly beneath the Rowe Ditch, the most prominent feature within this part of the Arrow Valley (SAM Herefordshire 117), which appears to be of post-Roman date.

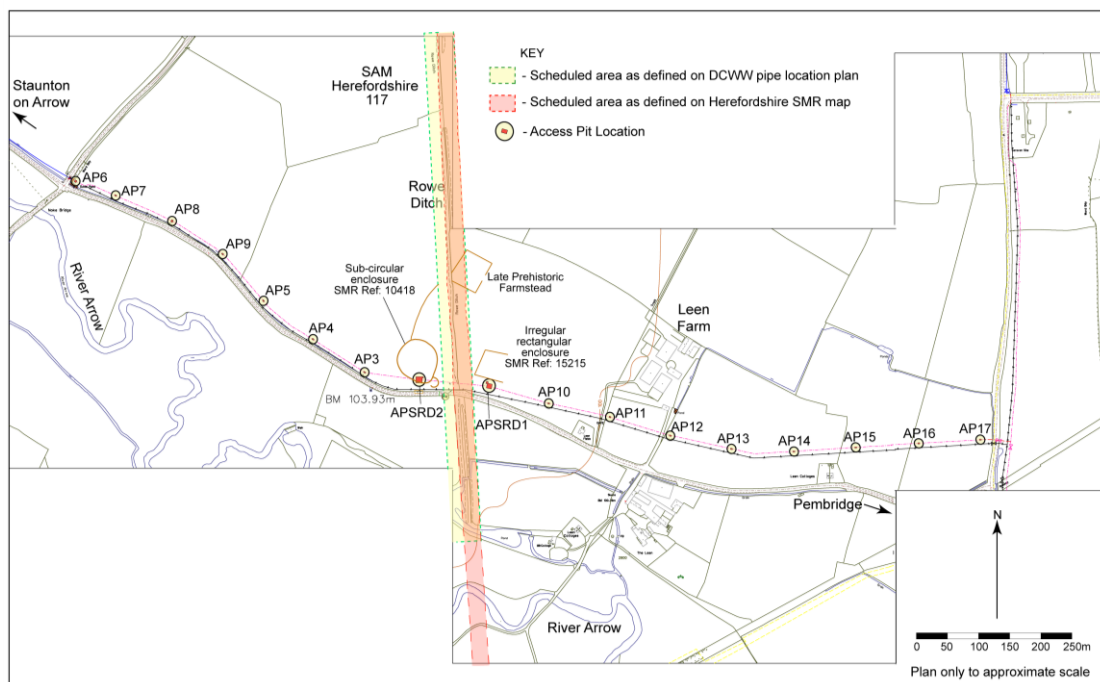


Fig. 1: Plan showing locations of access pits excavated by Border Archaeology

Details of the scheme route were supplied by DCWW/LOR to Julian Cotton, Archaeological Advisor, Herefordshire Council, who replied on October 22<sup>nd</sup> 2007 advising of the substantial sensitivities of the site.

Border Archaeology proposed a mitigation strategy in response to Mr Cotton's advice consistent with the designated engineering methodology (directional drill) and this proposal was duly submitted to him and approved. Concurrently, Border Archaeology discussed with Tony Fleming of English Heritage the issue of SMC in respect of excavations within the vicinity of the Rowe Ditch over a number of months.

As per the agreed strategy, Border Archaeology excavated all engineering pits falling within the 1.6km extent of the area of archaeological sensitivity to a designated engineering depth of 3m in the singular pits either side of Rowe Ditch (APSRD1 & 2) and 1m at all other locations (**Fig. 1**). The specific locations of the pits were identified in advance by DCWW/LOR's appointed drilling contractor MAS (Bromyard).

Border Archaeology subsequently undertook two further phases of archaeological work in the vicinity of Leen Farm, the first of these being the observation of 'emergency' engineering works undertaken immediately to the E of APSRD2 at the request of Mr Bill Hurrell of LOR to facilitate access to a damaged section of water main (**Fig. 19**). The second phase of archaeological work comprised the observation of trenching for the purpose of carrying out service connections.

This report details the company's findings to date but excludes the results of palaeoenvironmental analysis currently being undertaken on the company's behalf by Dr Charlotte O'Brien of Archaeological Services University of Durham. The final technical report containing a full set of results will be issued in due course and copies will be submitted to DCWW, LOR, Julian Cotton and the Herefordshire Sites & Monuments Record.

## 2.1 Soils & Geology

The soils encountered during the excavation programme were typical argillic brown earths of the Rowton series (571A). These consist of well-drained fine silty and fine loamy soils locally over gravel with some fine silty over clayey soils with slowly permeable subsoils and seasonal waterlogging and some slowly permeable seasonally waterlogged fine silty over clayey soils. The geology was revealed as being glaciofluvial or river terrace gravel and till (SSEW 1983).

## 3. Historical & Archaeological Background

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This area has been identified as one of high archaeological potential and archaeological investigations carried out as part of the Arrow Valley Archaeology, Landscape Change and Conservation Project by Herefordshire Archaeology have revealed evidence of Neolithic, Bronze Age, Iron Age and Romano-British occupation, particularly in the vicinity of The Leen Farm (White, 2003).

One specific area of high archaeological sensitivity is the point where the pipeline route traverses fields in the vicinity of The Leen Farm and crosses the line of the Rowe Ditch (SMR Record 356), an artificial earthwork of likely post-Roman date (c.650 AD), consisting of a bank with a ditch on the western side, which straddles the River Arrow in the parishes of Pembridge, Staunton and Shobdon.

The surviving remains of the Rowe Ditch, extending in a straight alignment N-S for approximately 2 miles 300 yards in length, consist of a single large bank of varying width, between 30ft (9.14m) wide to as much as 49ft (14.93m) wide in places, with a wide ditch on the W side of the bank, in places up to 5m wide and 2.5m deep. The earthworks have been designated as a Scheduled Ancient Monument (SAM Herefordshire 117).

Between 1978 and 1982, a series of trial excavations were carried out along the line of the Rowe Ditch (outside the area of the Scheduled Monument as it was then defined) as part of the Offa's Dyke Project carried out by the University of Manchester (Department of Extra Mural Studies).

These trial excavations showed that the width and depth of the existing bank and ditch varied to some extent. At NGR SO 382 576, the excavation showed a 4m wide ditch that was almost 2m deep, while at NGR SO 380 589, to the SW of Leen Farm, a ditch measuring 1.5m deep and 3.25m wide was revealed. AT NGR SO 379 605, to the NW of Miltons Cross, a full profile of the bank and ditch was revealed, the bank measuring approximately 11m wide with the western ditch measuring 5m wide and 2.5m deep with a V-shaped profile (Hill & Worthington, 2003).

More recently, excavations carried out in 2003 at Ox Pasture, Leen Farm (to the E of the Rowe Ditch) have revealed that the Rowe Ditch overlies an earlier occupation site, consisting of a large rectangular ditched enclosure which was occupied in the late Iron Age-early Romano-British period (White, 2003, 39-40).

Aerial reconnaissance has shown that this rectangular enclosure in Ox Pasture appears to have been connected by a series of smaller linear ditches to a large sub-circular ditched enclosure located in the SE corner of the field situated on the western side of Rowe Ditch (SMR Record 10418), provisionally interpreted as a Neolithic henge monument which was subsequently incorporated into a later prehistoric settlement (White, 2003, 39).

Another irregularly shaped rectangular enclosure has been identified from aerial photography in the SW corner of Ox Pasture, which might also have formed part of this Iron Age/Romano-British settlement complex (SMR Record 15215). Based on the evidence of aerial reconnaissance and recent archaeological investigation, it may be assumed that the proposed pipeline groundworks might well reveal evidence of buried deposits, features and finds relating to multiple phases of prehistoric and Romano-British settlement activity, particularly within the fields on either side of the Rowe Ditch.

## 4. Methodology

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Fieldwork was carried out in accordance with archaeological practices set out by the Institute for Archaeologists in *Standard and Guidance for archaeological excavation* (IfA, 1995; revised 2001) and *Standard and Guidance for an archaeological watching brief* (IfA, 1994; revised 2001). Border Archaeology adheres to the IfA *Code of conduct* and *Code of approved practice for the regulation of contractual arrangements in field archaeology* and to Herefordshire Archaeology's *Standards for Archaeological Projects in Herefordshire (Issue 1)* (Herefordshire Council, 2004).

Trench dimensions were as follows: APSRD1 and APSRD2 measured 8m × 8m × 3m and AP3 – AP17 were 3m × 2m × 1m. Dimensions were subject to change where archaeological deposits were encountered. APSRD1, APSRD2 and AP8<sup>1</sup> were extended to fully define the archaeological features encountered. Trench dimensions also varied in AP6<sup>2</sup> where a greater depth and width were required to fully expose the existing water main (as specified for engineering purposes).

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<sup>1</sup> AP8 final dimensions were 4.38m N-S × 3m E-W

<sup>2</sup> AP6 final dimensions were 4m N-S × 3m E-W

The two singular access pits located immediately outside the Scheduled Area on either side of the Rowe Ditch (APSRD1 & 2) were of sufficient size to facilitate the 3m-depth necessary to clear the base of the ditch and thus avoid any impact on the monument. To attain this depth, an initial access pit measuring 8m × 8m was excavated down to 1.5m and a second pit measuring 3m × 2m × 1.50m sunk at its centre to achieve a stepped profile.

Soil was removed by machine in 50mm spits to the top of any archaeological deposits and thereafter manually. All archaeological features were excavated by hand, with large linears, smaller linears and discrete features being fully excavated. Where no archaeological deposits, features or structures were revealed, material was removed by machine to the designated engineering depth.

A third pit (APSRD 3) was subsequently excavated by LOR to facilitate access to a damaged section of water main (Phase 2). The pit was located approximately 15m to the E of APSRD 2 and measured 5m E-W × 4m N-S. The 'emergency' excavation was carried out under watching brief and detailed observations were recorded of all finds and features.

In addition, a series of trenches were excavated by LOR between 01/10/08 and 03/10/08 in order to carry out service connections. These trenches were located as follows: Trench 1 SO 38717 59123, Trench 2 SO 38717 59123, Trench 3 SO 38641 59200, Trench 4 SO 38349 59223 to SO 38351 59223, Trench 5 SO 38245 59242 – SO 38238 59249, Trench 6 SO 37923 59292 & Trench 7 SO 37391 59659.

All finds were retained, including unstratified material identified during a metal detecting survey of the spoil.

Full written, drawn and photographic records were made in accordance with archaeological practices set out by the Institute of Field Archaeologists. A detailed stratigraphic record was made using a sequential context numbering system and a Harris matrix was produced for each Access Pit. Archaeological deposits and features were recorded at a scale of 1:20 and photographed using a high-resolution 10.3MPX digital camera.

A temporary benchmark of 103.93 OD was derived from an OS benchmark located on the bridge c.115m W of Rowe Ditch and from this TBM all site levels were taken.

Environmental samples were taken from deposits rich in environmental indicators such as shell and charcoal and from features such as ditches/pits.

## 5. Results

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### 5.1 APSRD1 (SO 38072 59306)

This Access Pit was located in the SW corner of Ox Pasture, Leen Farm, approximately 120m to the S of the Late Iron Age / Romano-British farmstead investigated by Herefordshire Archaeology in 2003 (White 2003) (**Fig. 1**). A sequence of four deposits was identified within APSRD1. The uppermost deposits consisted of topsoil (101) and subsoil (102). (101) was a friable, mid brown clayey silt with frequent small sub-



rounded stones and occasional medium sub-rounded stones. (102) was a moderately compacted, reddish-brown sandy silt with moderate to frequent small sub-rounded stones and occasional medium sub-rounded stones, 2% charcoal flecking and occasional ceramic sherds, animal bone fragments and a single flint flake. The frequency of small stones throughout these deposits can be attributed to frequent ploughing with underlying gravels being brought to the surface. This process is likely to have redeposited earlier material into (102).

Underlying (102) was a well-sorted Holocene floodplain alluvium (108) consisting of moderately compacted, yellowish-brown clayey silt with moderate small to medium sub-rounded stones. This deposit appeared to be incorporated into and sealing several earlier features and was then cut by later Romano-British features. Underlying (108) were friable reddish-brown gravels in a silty clay matrix exhibiting subtle undulations in the gravel surface (121).

Five phases of activity were identified, the earliest of which includes two linear features ([126] and [139]) and two pits ([128] and [135]). Phase 2 comprises linears [103], [124] and [139]; Phase 3 pits [117], [122] and [106]; Phase 4 stake-holes [109], [111], [113] and [115] and Phase 5 the modern ploughsoil (101).

#### 5.1.1 Phase 1

Cutting gravels (121) was a series of early features. The southern part of a sub-circular pit [128] extending into the NE corner of the trench was filled by a yellowish-brown silty deposit (129), similar to the overlying alluvium (108). The nature of the fill indicates that the pit was not deliberately backfilled but was infilled gradually by a combination of aeolian and alluvial processes. The northern part of a sub-circular pit [135] situated on the gravel rise and extending into the SW corner of the trench contained two fills, the primary fill (137) being a yellowish-brown silty alluvium and the secondary fill (136) a mid brown sandy silt with frequent small to medium rounded stones. Again, the pit appeared to have been filled gradually by aeolian and alluvial processes prior to an episode of deliberate backfilling with a jumble of common medium stones. The function of pits [128] and [135] remains unclear, due partly to the sterility of the fill material and partly to limited exposure.



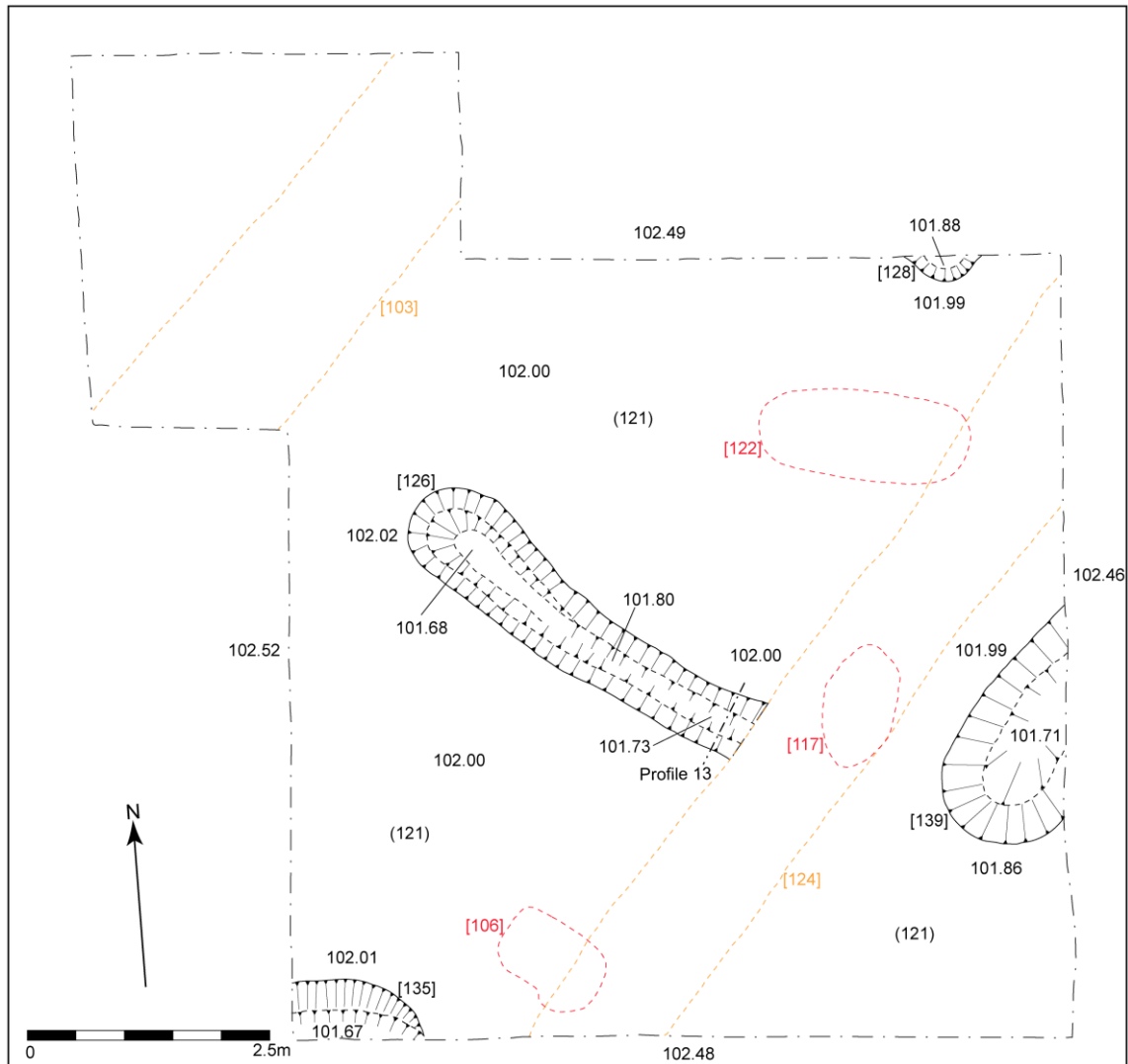


Fig. 2: Plan showing Phase 1 features

Two linear features were also identified within this early phase. Running NW-SE across the trench was [126] (**Plate 1**), which had been truncated at its SE end by Phase 2 ditch [124]. A partly revealed irregular linear feature [139] located against the eastern edge of the trench contained a gradual accumulation of yellowish-brown silt (138), which again was similar to the overlying alluvium (108). Due to its limited exposure within the pit, the extent and function of this feature remain unclear.



Plate 1: View NW showing terminal of [126]

### 5.1.2 Phase 2

Alluvial deposit (108) consisted of moderately compacted, pale yellowish-brown clayey silt, with moderate small to medium sub-rounded stones, and produced a single samian sherd and 17 sherds of 2<sup>nd</sup> century Severn Valley ware. This deposit was cut by two linear features. The first of these was a NE-SW ditch [124] running across the trench and truncating the SE terminus of Phase 1 linear [126]. The ditch abutted gravels (121) on its SW side and cut overbank floodplain alluvium on its NE side. It was filled by a charcoal flecked yellowish-brown slightly stony silty alluvium (125) containing 71 Severn Valley Ware sherds and a tubby jar in Malvernian ware. The deposit exhibited a biotically mixed and pedogenically weathered facies at its surface. The ditch was itself truncated by Phase 3 features [117], [122] and [106].

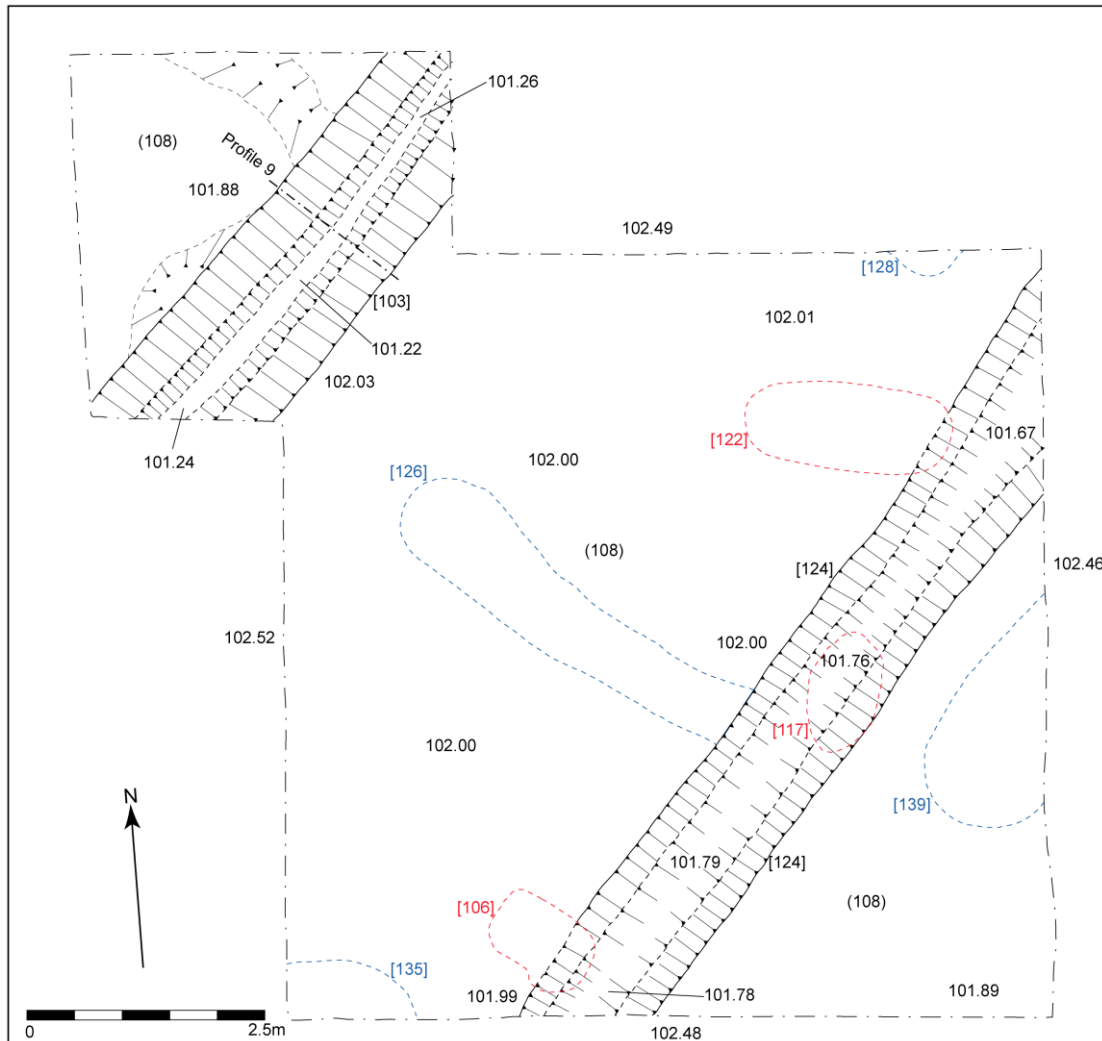


Fig. 3: Plan showing Phase 2 features

Running parallel to [124] approximately 5.5m to the NW was linear ditch [103]. Only a small portion of this ditch was revealed within the original excavation area; however, in order to better evaluate the feature, a 4m x 2m extension was excavated and this revealed a 5.7m section of ditch. The depth and profile of [103] differed significantly from [124], its sides sloping steeply to a depth of 0.81m. The ditch cut overbank alluvium and had a stony infill (ploughing). Its base was uniformly flat and consistently measured between 0.20m and 0.25m wide.



Plate 2: View NE showing ditch [124]



Plate 3: View NE of ditch [103]



Three fills were identified within ditch [103]. The primary fill (120) consisted of a mid greyish-brown clayey silt incorporating both gravelly material from the sides of the ditch and aeolian material, which appears to have accumulated immediately post-use. The secondary fill (104) consisted of pale yellow and greyish-brown clayey silt containing frequent charcoal flecking & fragments. The fill produced frequent Romano-British occupation debris, including 11 samian sherds, three amphora sherds, 51 sherds of Severn Valley ware, a single sherd of Dorset black burnished ware, one large brick or *pila* fragment and 17 other CBM fragments, in addition to animal bone, daub and fire-cracked stones.

The pottery appeared relatively unabraded and the frequent occurrence of daub and CBM suggests the proximity of settlement activity, possibly associated with the previously investigated Late Iron Age / Romano-British farmstead located some 120m to the N. The upper fill (105) consisted of a thin layer of dark greyish-brown clayey silt containing seven sherds of Roman pottery, including three Severn Valley ware sherds.

### 5.1.3 Phase 3

Three pits were identified cutting earlier Romano-British deposits. These included irregular pits [117] and [106] and ovoid pit [122]. Pits [117] and [106] both truncated ditch fill (125) and appeared as slightly irregular sub-ovoid features. The form of these pits, consisting of irregular sides and undulating concave bases, suggests they were natural features, probably tree boles, and both incorporated Romano-British material within their upper fills. Feature [117] revealed two fills, the primary fill (119) being orangey-brown clayey silt, which contained frequent small stones towards its base, suggesting root disturbance. The secondary fill (118) consisted of pale yellowish-brown clayey silt incorporating three sherds of Severn Valley ware. Filling pit [106] was a mid brown silt (107) with frequent small rounded gravels, a single sherd of Severn Valley ware, very occasional CBM fragments and a single iron object, as yet unidentified.



Plate 4: View W of pit [122]

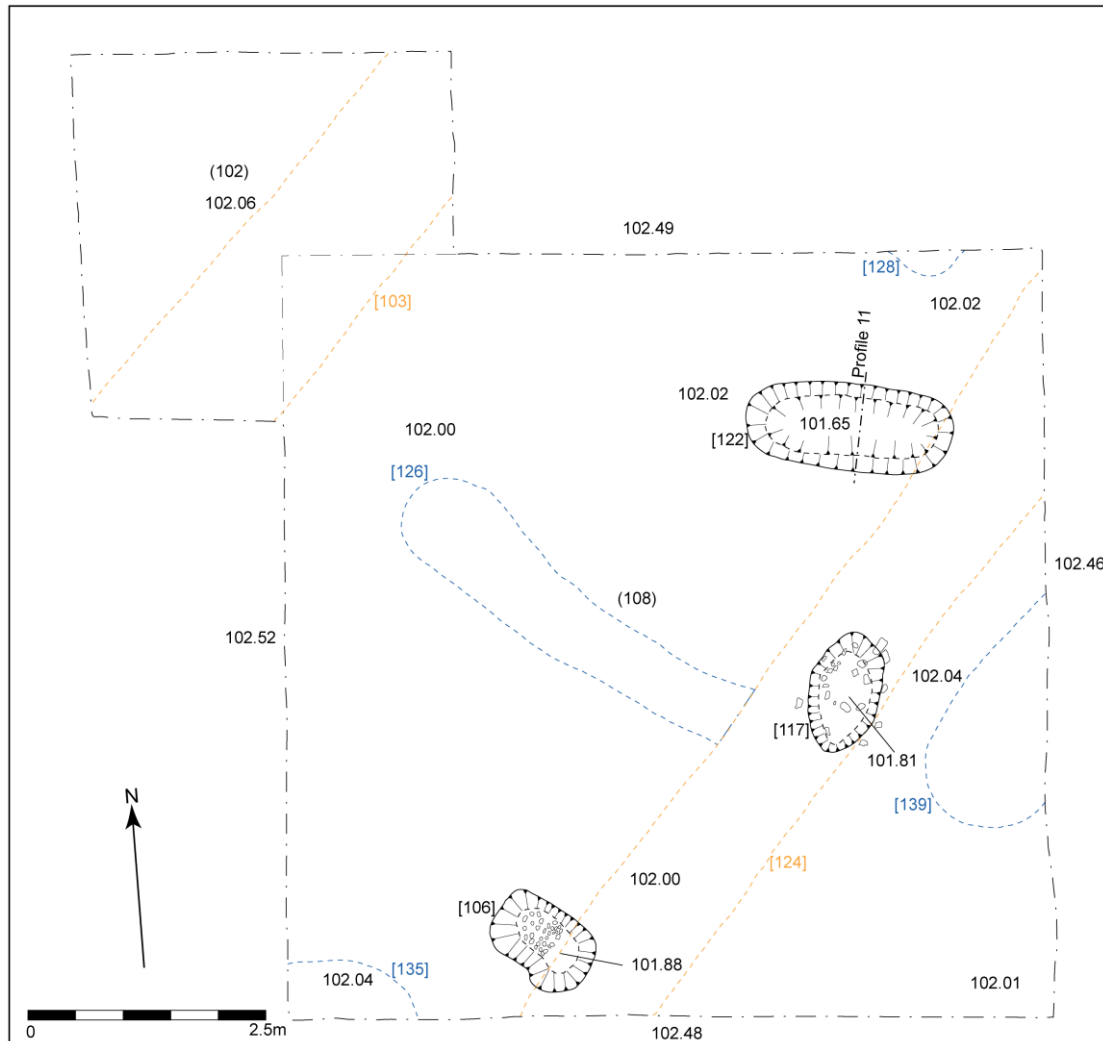


Fig. 4: Plan showing Phase 3 features

Truncating the western edge of ditch [124] was ovoid pit [122] containing two fills, (134) and (123). The primary fill (134) consisted of a thin layer of greyish-brown clayey silt at the base of the pit, which probably represented a washing-in of silty material prior to the deposition of backfill (123), a reddish-brown clayey silt containing large quantities of cattle bone, four Severn Valley ware sherds and a single sherd of Dorset black burnished ware. It is thus clear that [122] was used for the disposal of butchery remains, although its relatively shallow depth suggests that it may originally have served a different purpose, being backfilled with (123) only after it had gone out of use.

#### 5.1.4 Phase 4

Cutting subsoil (102) was a cluster of four apparently contemporary stake-holes ([109], [111], [113], [115]) located against the eastern edge of the trench. The dimensions and fills of these features were broadly similar and their presence indicates a post-Roman phase of activity. The subsoil itself contained 41 sherds of Severn Valley Ware and a double-handled flagon. A small glazed sherd of possible post-medieval date was also found.



Plate 5: View E showing stake-holes

### 5.1.5 Phase 5

Phase 5 is represented by the modern ploughsoil (101) overlying the excavation area.

## 5.2 APSRD2 (SO 37974 59311)

A friable, mid brown clayey silt with frequent small sub-rounded stones and occasional small subangular stones (201) overlay an alluvial deposit (202) consisting of moderately to well-compacted, pale yellowish-brown clayey silt containing occasional small sub-rounded and subangular stones. Beneath (202) was (209), a well-sorted Holocene floodplain alluvium composed of moderately compacted, mid yellowish-brown clayey silt containing moderate small sub-rounded stones. Underlying (209) was (210), consisting of periglacially altered, and cryoturbated, glacial outwash gravels.

The upper deposits of a single ditch circuit were exposed at a depth of 0.5m below the existing ground surface and were clearly distinguishable from the surrounding material. The ditch was cut from (209) and measured c. 4m wide at the top of the cut and 0.3m at its base. Excavation revealed a v-shaped profile extending to a depth of 1.38m.

Overlying fill (208) were two deposits that differed markedly in terms of stoniness. The material on the S side of the ditch consisted of yellowish-brown silty clay loam with some fine sand, frequent rounded stones and rare charcoal pieces (207). That this appeared to be natural infill rather than dumped material is suggested by the orientation of the platy stones located on the sides and towards the base of the fill, which clearly showed tipping towards the centre. This material contrasted with the stone-free secondary fill on the N side (215) indicating the presence of different source material (bank) eroding into the ditch. It can thus be suggested that the ditch was cut and material removed formed an adjacent bank.





Plate 6: View W showing ditch [205]

Within the centre of the ditch was a mixture of small, medium and occasional large stones in the form of a vertical stack or a 'pipe' (206), the origin of which was unclear. Located near the base of the ditch were the extremely degraded remains of two posts within sub-circular cuts ([213] & [216]) measuring 0.16m (NW-SE) × 0.10m (NE-SW) (**Plate 8, Fig. 5**). The only other feature revealed within the pit was an oval pit [203] cut through alluvium (209) and which may have been dug to extract gravel.



Plate 7: View W of section through ditch [205] showing central stone stack or 'pipe' (206)



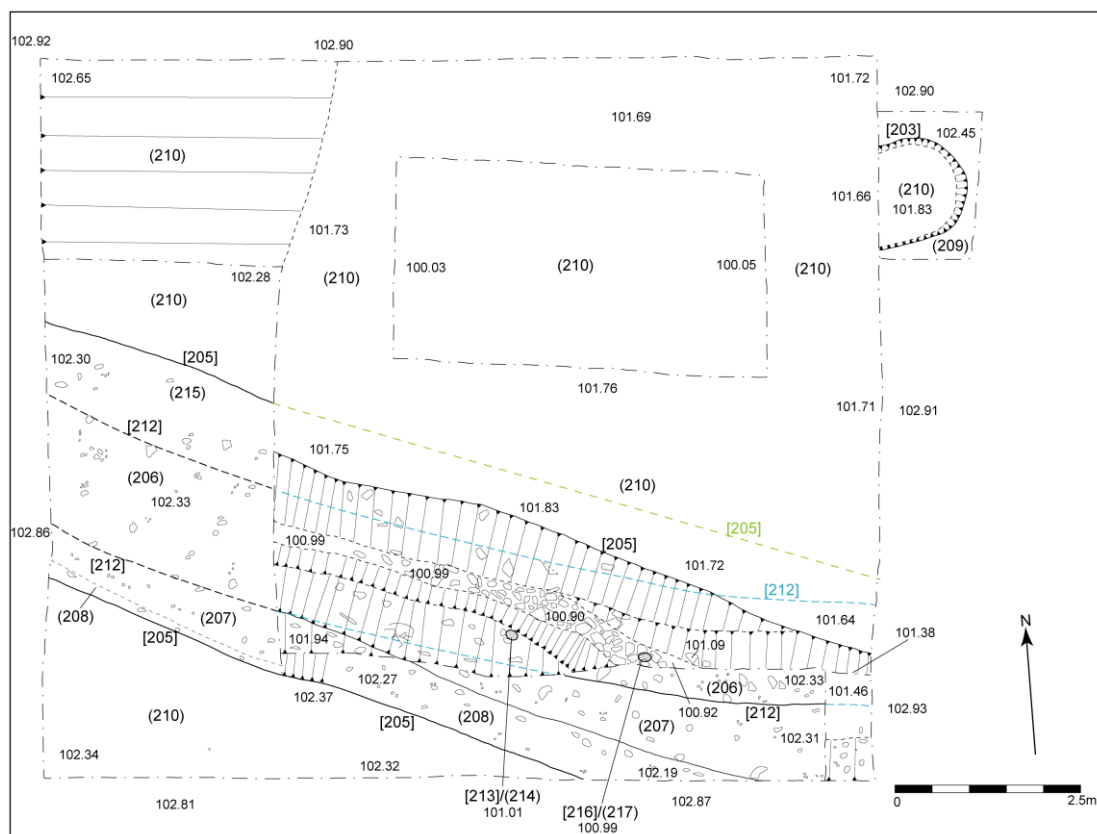


Fig. 5: Post-excavation plan showing ditch [205]



Plate 8: View W showing location of possible posthole [213]



Plate 9: View E showing ditch [205] in W-facing section of APSRD2

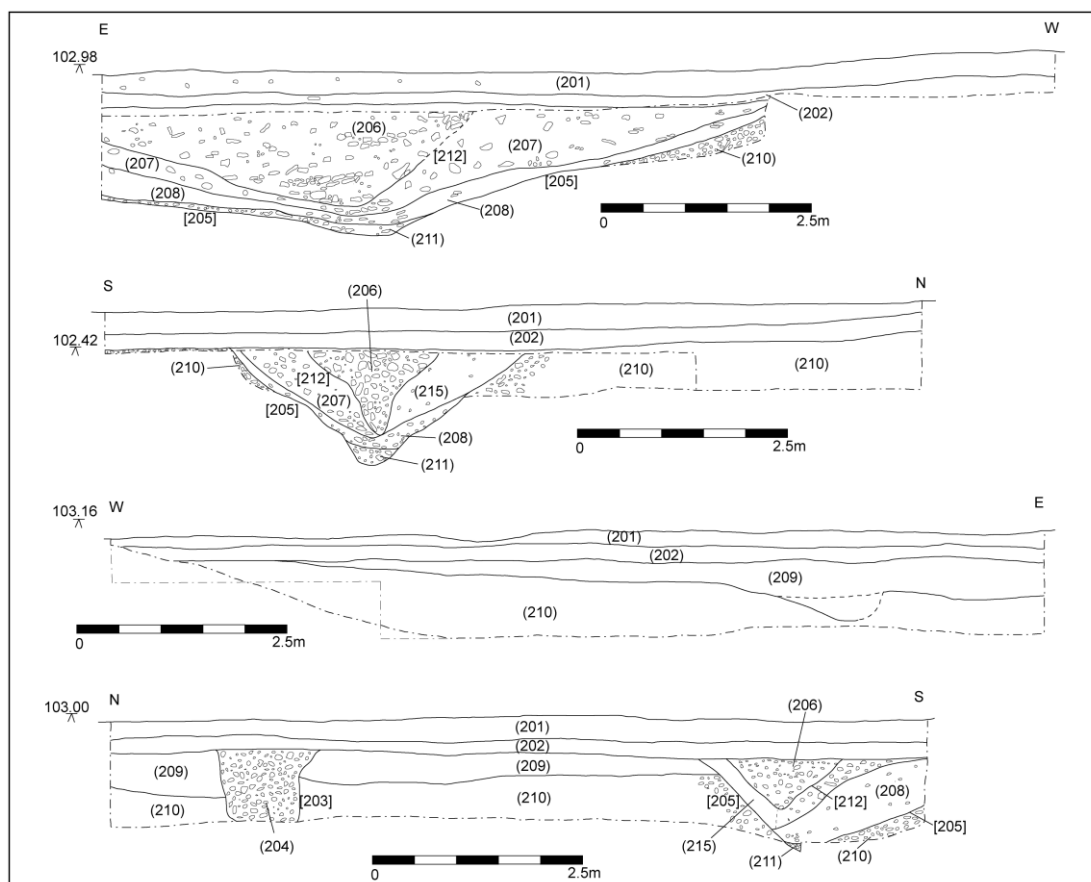




Fig. 6: N-, E-, S- and W-facing sections of APSRD2

### 5.3 AP3 (SO 37873 59338)

A sequence of four deposits was identified, the uppermost of which (301) consisted of friable, mid brown clayey silt with frequent small sub-rounded and subangular stones. The frequency of these small stones can be attributed to frequent ploughing, with underlying gravels being brought to the surface.

A well-sorted floodplain alluvium (302) representing the latest phase of alluvial deposition underlay (301). This was composed of firm pale yellowish-brown clayey silt with moderate small rounded and subangular stones and 1% charcoal flecking. An early phase of Holocene alluviation (318) was then revealed consisting of moderately compacted to firm pale greyish-brown sandy silt exhibiting red striations and containing occasional very small rounded and sub-rounded gravels. This deposit infilled a number of channels that were evident within the upper surface of the underlying fluvio-glacial outwash gravels (319). These channels had been formed through water action and frost heave events and were typical of the periglacial deformation that had occurred across the site.



Plate 10: W-facing section showing [317]. View E.

The fluvioglacial material (319) consisted of well-sorted reddish-brown gravels within a clayey silt matrix. Visible within its surface was [317], an irregular depression consistent with a tree bole, infilled with overlying alluvium (318).

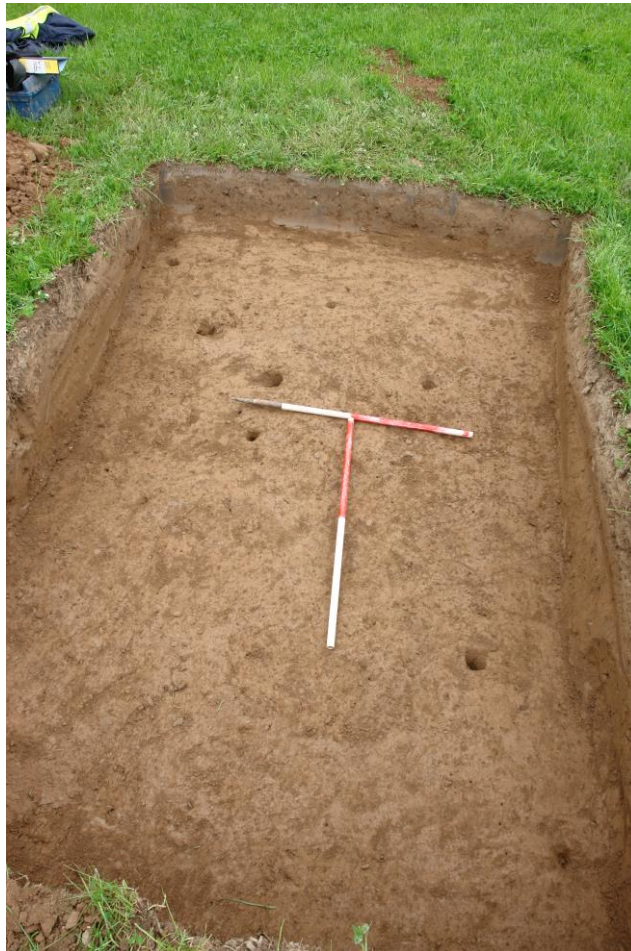


Plate 11: Stake-holes [303], [305], [307], [309], [311], [313] and [315], looking W

A single phase of archaeological activity was revealed characterised by a series of stake-holes ([303], [305], [307], [309], [311], [313] & [315]) cutting (302). These features appeared very similar in size and form, with an average diameter of 50mm, and appeared to have been driven vertically into the soil. All cuts were filled by identical material, consisting of loose to moderately compacted clayey silt ((304), (306), (308), (310), (312), (314) & (316)). The shallow depth of these stake-holes suggests truncation, probably during the course of ploughing.

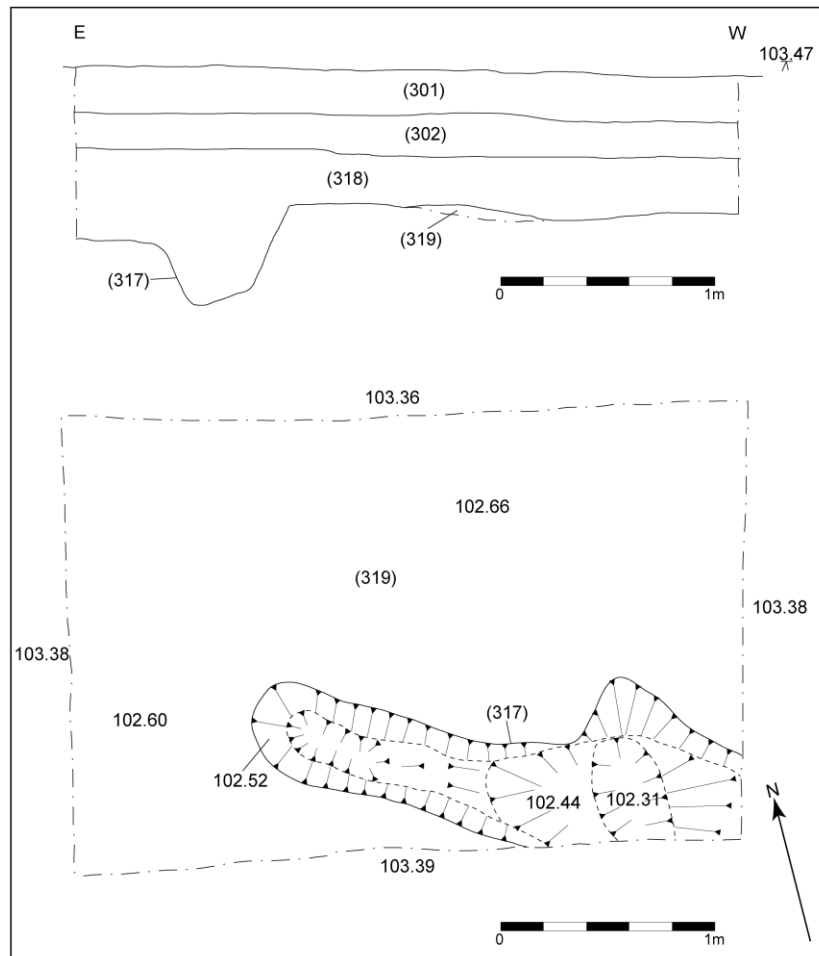


Fig. 7: Plan and N-facing section of AP3

#### 5.4 AP4 (SO 37787 59386)

The uppermost deposit (401) was a friable, mid greyish-brown clayey silt containing moderate small sub-rounded stones resulting from ploughing activity.

Beneath this was floodplain alluvium (402) consisting of pale orangey-brown clayey silt with occasional small rounded stones. This material overlay well-sorted reddish-brown gravels (403), the deposition of which appeared to be consistent with a process of fluvio-glacial deposition throughout the Arrow Valley forming the Pleistocene terrace.

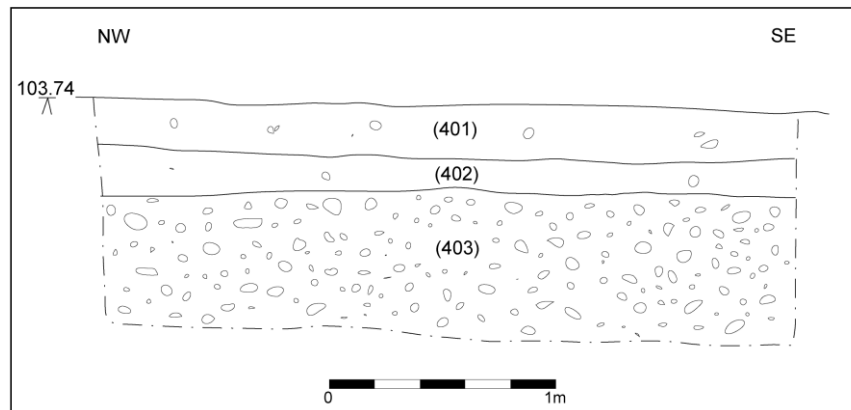


Fig. 8: SW-facing section of AP4

### 5.5 AP5 (SO 37707 59448)

Topsoil (501) consisted of a friable, mid brown clayey silt with moderate small to medium sub-rounded stones and 4% charcoal flecking.

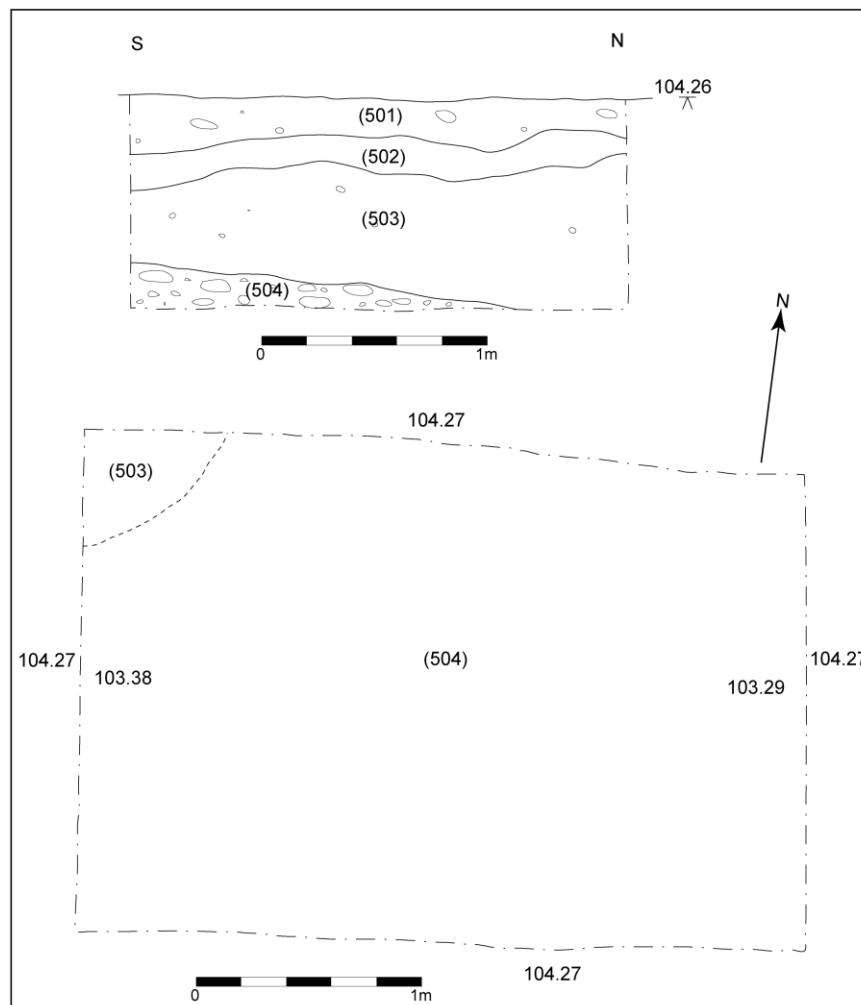


Fig. 9: Plan and E-facing section of AP5

Underlying (501) was floodplain alluvium (502) consisting of firm pale yellowish-brown clayey silt with occasional medium sub-rounded and subangular stones and 2% charcoal flecking. An earlier phase of Holocene alluviation (503) was then revealed consisting of firm reddish-brown sandy silt containing very occasional small rounded and sub-rounded gravels. This deposit filled the periglacial channels and depressions in the upper surface of the fluvio-glacial gravels (504).

## 5.6 AP6 (SO 37398 59654)

The upper topsoil/subsoil deposit (601) consisted of a friable, mid greyish-brown sandy silt with moderate small to medium rounded and subangular stones, 5% charcoal flecking and very occasional modern glass fragments.

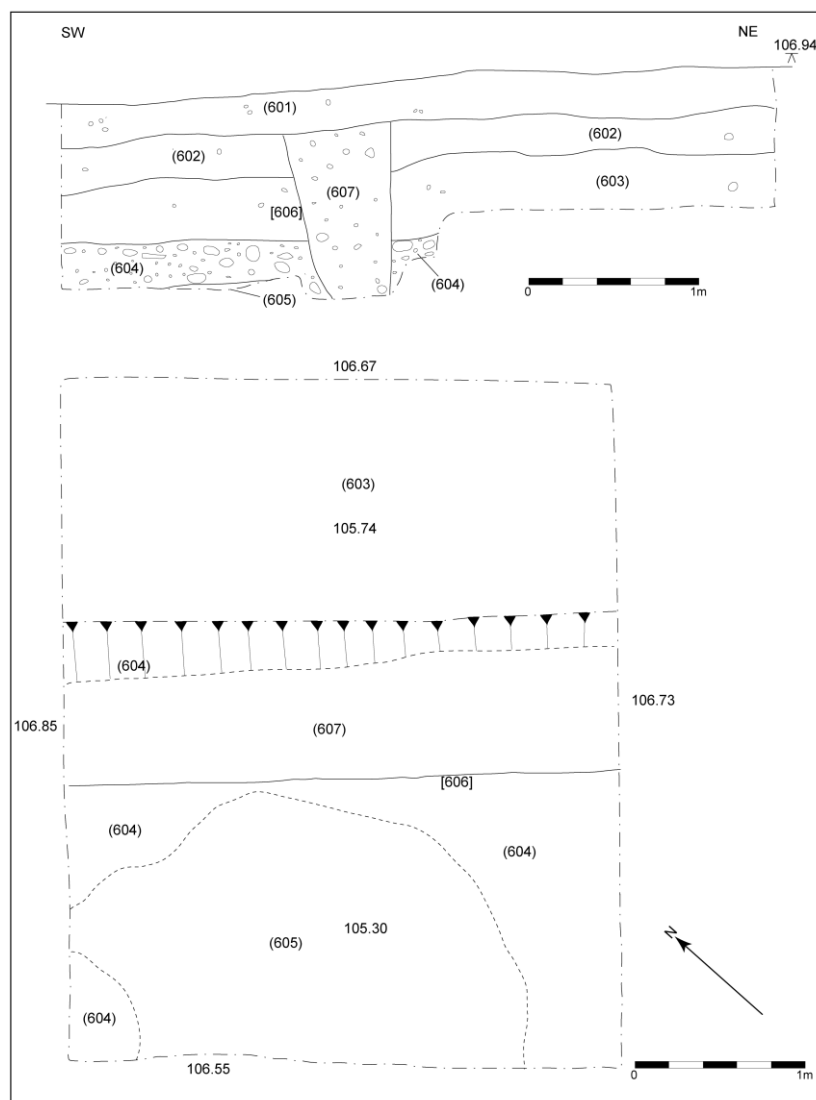


Fig. 10: Plan and SE-facing section of AP6

Underlying (601) was alluvial floodplain deposit (602), consisting of well-compacted, pale yellowish-brown clayey silt with occasional small sub-rounded and subangular stones and 1% charcoal flecking. Underlying this, and infilling channels and depressions in the gravel surface formed through water action and frost heave events,

was a second alluvial deposit (603) composed of moderate to well-compacted, pale greyish-brown sandy silt with red striations, containing occasional small sub-rounded stones.

Underlying alluvium (602) and (603) were moderately compacted greyish-brown gravels (604) formed by fluvio-glacial outwash material, which appeared to have been periglacially altered and cryoturbated. Underlying (604) was a brownish-red clay deposit (605) with moderate small sub-rounded and subangular stones.

Cutting alluvial deposit (602) was the cut for the existing water pipe [606], which] was filled by moderately compacted, greyish-brown silty clay with occasional small to medium sub-rounded stones (607).

## 5.7 AP7 (SO 37459 59634)

Topsoil (701) consisted of a friable, mid brown sandy silt with moderate small sub-rounded stones.

Underlying (701) was floodplain alluvium (702) consisting of well-compacted, pale yellowish-brown clayey silt with occasional small sub-rounded stones. Underlying this was a second alluvial deposit (703) infilling channels and hollows in the gravel surface. This material consisted of well-compacted, pale greyish-brown sandy silt with red striations and very occasional small rounded and sub-rounded gravels.

Underlying alluvium (702) and (703) were friable reddish-brown gravels within a silty clay matrix (704). Significant periglacial activity was evident in the clearly undulating cryoturbated gravel surface.

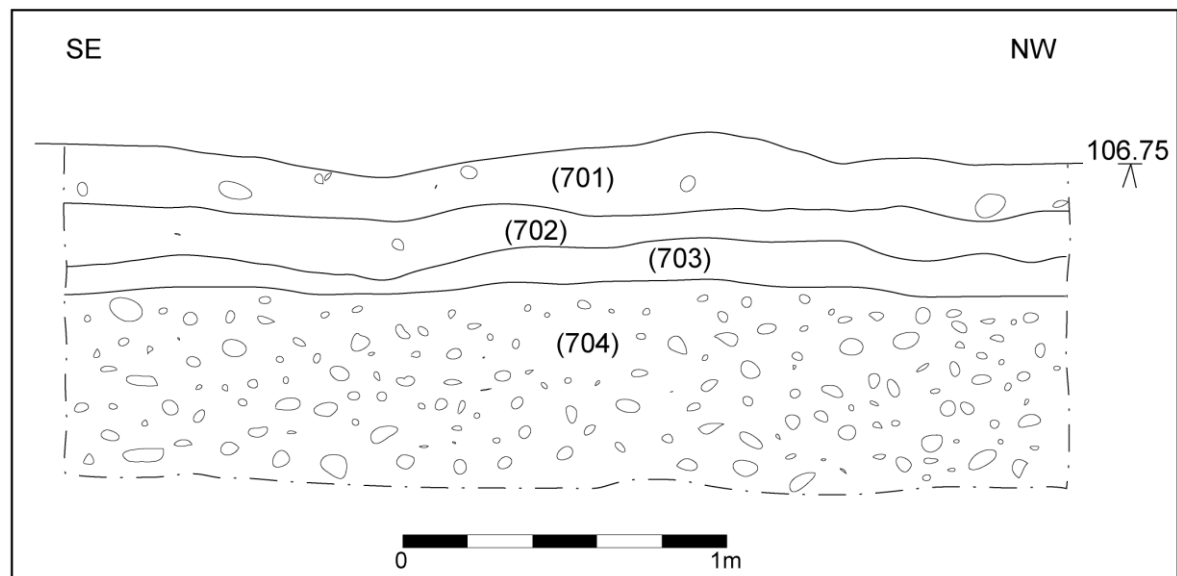


Fig. 11: NE-facing section of AP7



## 5.8 AP8 (SO 37555 59586)

The uppermost deposit was topsoil (801) consisting of friable, mid brown sandy silt with moderate small to medium rounded and sub-rounded stones and 2% charcoal flecking. Beneath this was a moderately compacted, dark reddish-brown sandy silt (802) with moderate small sub-rounded stones and 2% charcoal flecking.

Underlying (802) was a well-sorted Holocene floodplain alluvium (803) composed of well-compacted, pale yellowish-brown clayey silt with occasional small rounded stones, 3% charcoal flecking and two flint flakes. Underlying this was a second alluvial deposit (804) consisting of well-compacted, greyish-brown sandy silt with red striations containing occasional small rounded and sub-rounded stones. This material infilled a series of cryoturbated features on the gravel surface.

Fluvio-glacial outwash gravels (807) were revealed at the base of the excavation consisting of friable mid brown gravels within a silty clay matrix. The gravels appeared to be sloping sharply from W to E with cryoturbation evident on the surface.

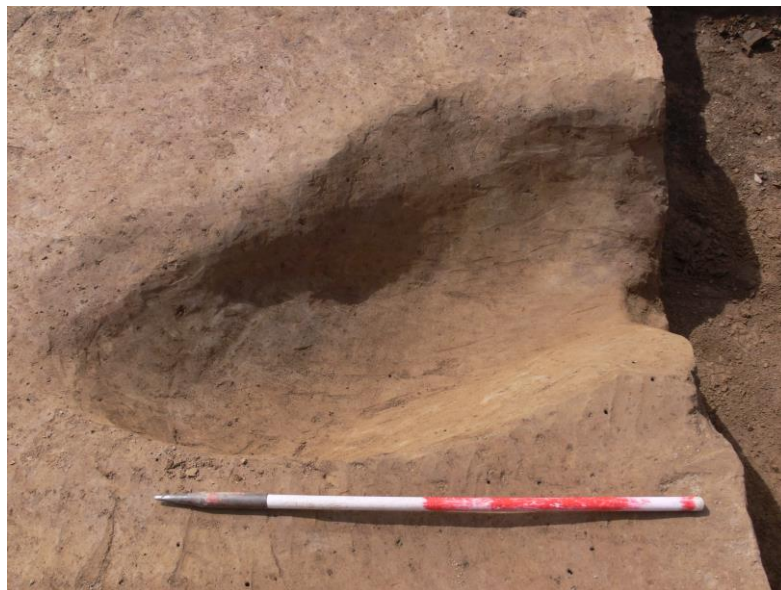


Plate 11: Vertical view showing pit [805]

A single phase of archaeological activity was identified underlying (803) and cutting (804). This was a slightly irregular sub-ovoid pit [805] measuring 1.45m NNW-SSE × 0.85m NNE-SSW, which was extended to an average depth of 0.28m. Filling [805] was a moderately compacted, dark yellowish-brown silt (806) with occasional small rounded stones and 3% charcoal flecking, which was very similar to the overlying alluvium. In order to fully assess the nature and extent of [805] the excavation area was extended from 3m E-W × 2m N-S to 3m E-W × 4.38m N-S.

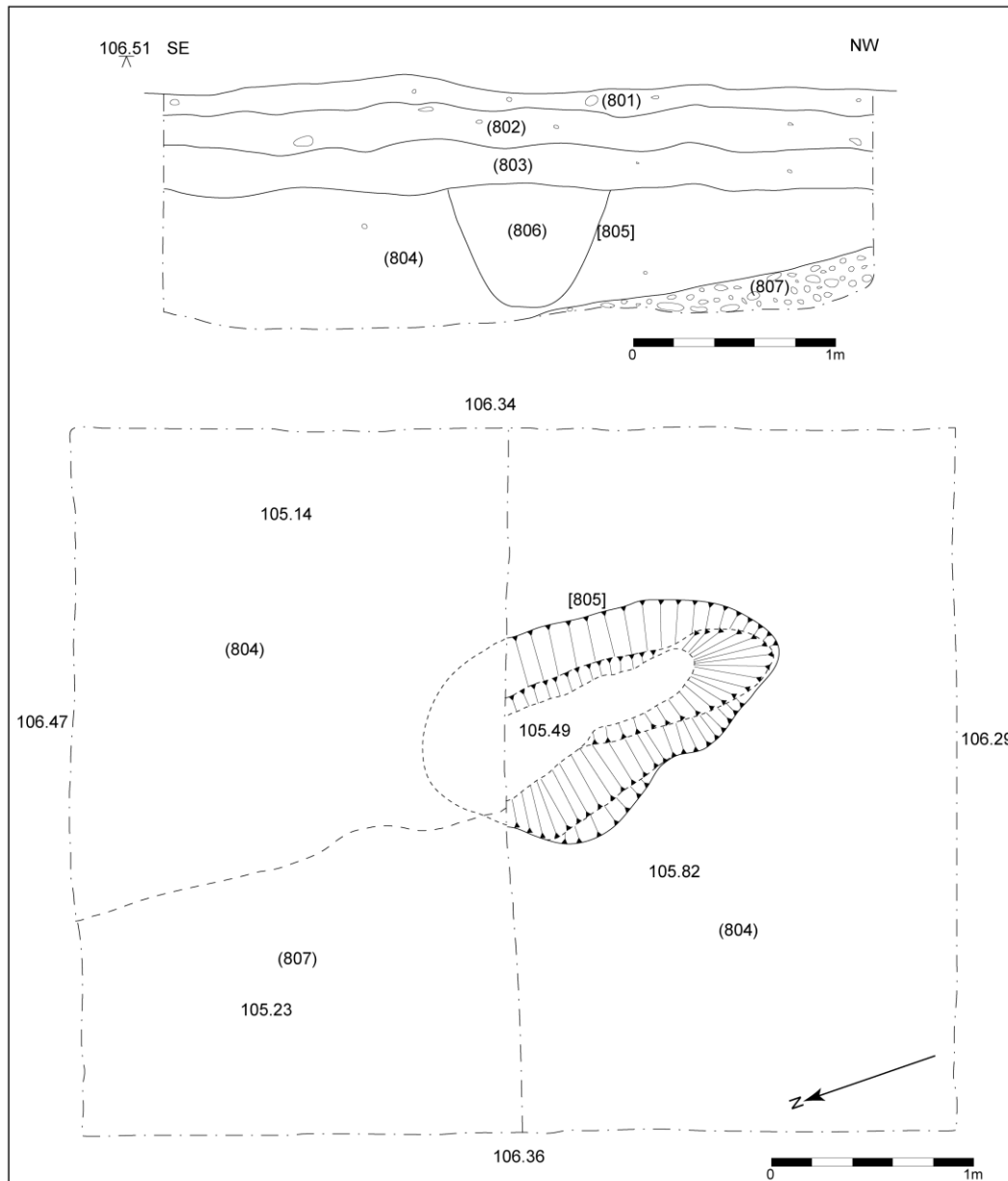


Fig. 12: Plan and NE-facing section of AP8

## 5.9 AP9 (SO 37638 59528)

The uppermost deposit consisted of a friable, greyish-brown sandy silt topsoil (901) with moderate small rounded and sub-rounded stones. Underlying this was (902), a moderately compacted, mid brown sandy silt with moderate small to medium sub-rounded and subangular stones and 1% charcoal flecking.

Underlying (902) was a well-sorted floodplain alluvium (903) composed of well-compacted, yellowish-brown clayey silt with very occasional small rounded and sub-rounded stones. Underlying (903) were friable mid brown gravels (904) formed by the outwash of fluvio-glacial material.

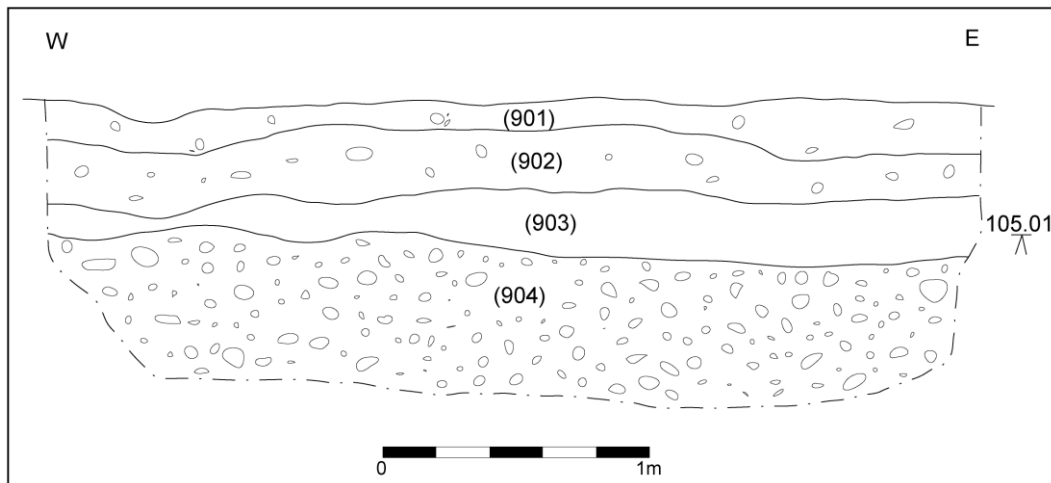


Fig.13: S-facing section of AP9

### 5.10 AP10 (SO 38171 59275)

The topsoil (1001) was a friable, mid to dark brown sandy silt with moderate small rounded and sub-rounded stones and 1% charcoal flecking. Beneath this was (1002), a moderately compacted, greyish-brown sandy silt with moderate small rounded and sub-rounded stones, 2% charcoal flecking and 1% CBM flecking.

Underlying (1002) was a floodplain alluvium consisting of well-compacted, pale yellowish-brown clayey silt (1003) overlying a well-compacted, greyish-brown sandy silt (1005) with red striations and occasional small rounded & sub-rounded stones infilling cryoturbated channels and hollows in the gravel surface.

Underlying (1005) were friable mid brown fluvio-glacial outwash gravels (1004), which appear to have been periglacially altered and cryoturbated, as evidenced by the presence of shallow channel features.

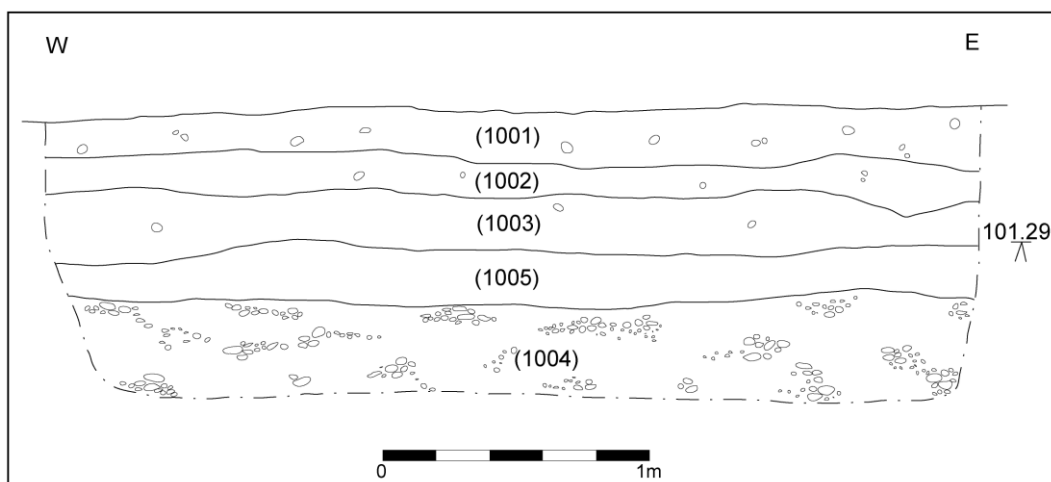


Fig. 14: S-facing section of AP10

### 5.11 AP11 (SO 38267 59248)

The uppermost deposit was topsoil, consisting of friable, mid brown sandy silt with frequent small sub-rounded stones and 2% charcoal flecking (1101). Underlying this was (1102), was a moderately compacted, reddish-brown sandy silt with frequent small sub-rounded and subangular stones and 1% charcoal flecking.

Underlying (1102) was alluvial deposit (1103), consisting of moderate to well-compacted, yellowish-brown clayey silt with very occasional small rounded and sub-rounded stones towards the base. The underlying gravels (1104) sloped significantly from E to W and consisted of heavily cryoturbated mid brown gravels representing outwash of fluvio-glacial material.

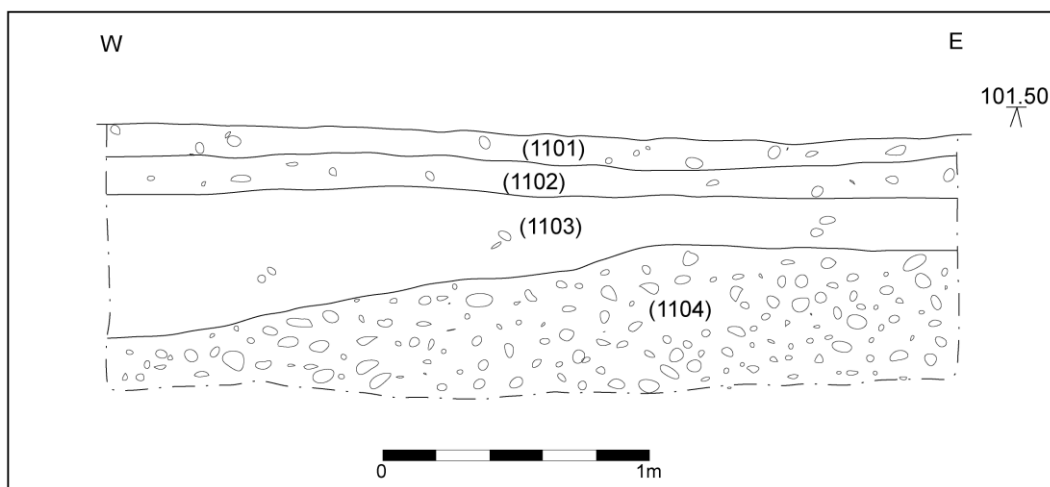


Fig. 15: S-facing section of AP11

### 5.12 AP12 (SO 38359 59189)

The uppermost deposit was a friable, mid brown sandy silty topsoil (1201) with frequent small rounded and sub-rounded stones and 1% charcoal flecking. Underlying this was (1202), a moderately compacted, greyish-brown sandy silt with frequent small sub-rounded stones and 2% charcoal flecking.

Underlying (1202) was a well-sorted Holocene floodplain alluvium composed of well-compacted, pale yellowish-brown clayey silt (1203). An earlier alluvial deposit (1204) beneath this consisted of well-compacted, reddish-brown sandy silt infilling cryoturbated channels and hollows in the surface of underlying gravels (1205).

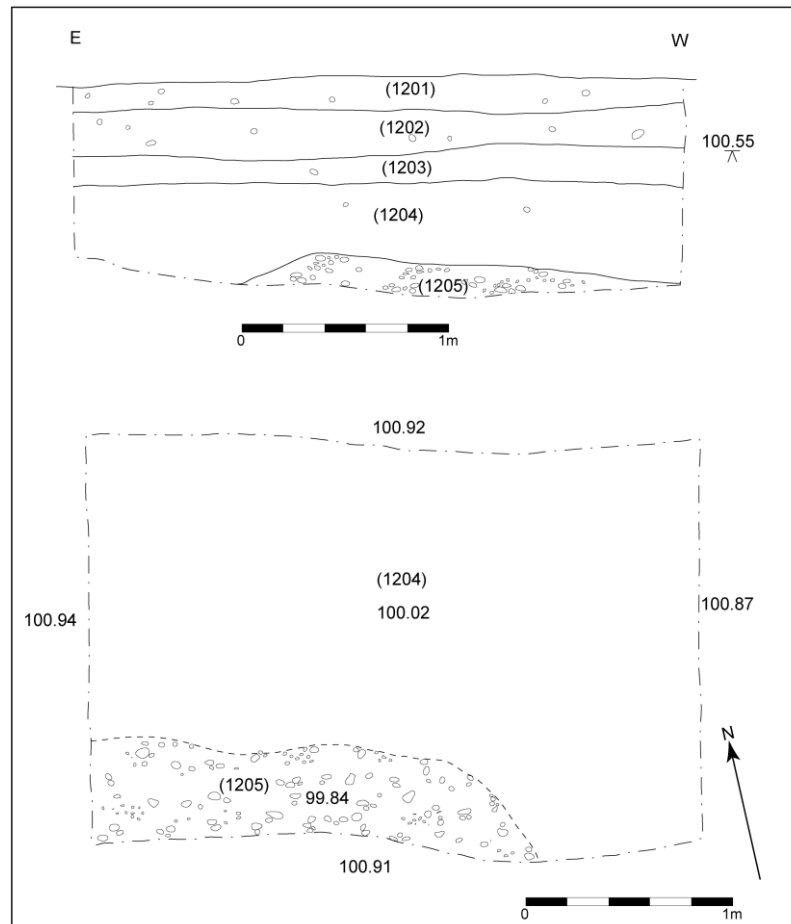


Fig. 16: Plan and N-facing section of AP12

### 5.13 AP13 (SO 38457 59213)

The uppermost deposit (1301) was a friable, mid brown sandy silty topsoil containing occasional small rounded and sub-rounded stones and 1% charcoal flecking. Beneath this was (1302), a moderately compacted, mid brown sandy silt with occasional medium sub-rounded and subangular stones, 2% charcoal flecking and moderate post-medieval CBM fragments and ceramic sherds. As elsewhere, the frequency of small stones throughout these deposits can be attributed to frequent ploughing with underlying gravels being brought to the surface.

The underlying alluvial deposits consisted of well-compacted, pale yellowish-brown clayey silt (1305) and well-compacted, reddish- or greyish-brown sandy silt (1303). At the base of the pit were friable well sorted mid brown gravels (1304). These appear to have been periglacially altered and cryoturbated with a shallow channel feature visible within the base.

### 5.14 AP14 (SO 38579 59270)

A sequence of four deposits was identified within AP14. The topsoil (1401) consisted of friable, mid greyish-brown sandy silt with moderate small rounded and sub-rounded

stones. Underlying this was (1402), a moderately compacted, mid brown sandy silt with frequent small subangular stones and 1% charcoal flecking.

Underlying (1402) was alluvial deposit (1403) consisting of well-compacted, yellowish-brown clayey silt with very occasional small rounded and sub-rounded stones and 1% charcoal flecking. This, as elsewhere on the site, was as a well-sorted Holocene floodplain alluvium representing the latest phase of alluvial build-up across the Arrow Valley. Underlying alluvial deposit (1403) were friable mid brown gravels (1404).

### 5.15 AP15 (SO 38687 59229)

The topsoil (1501) was composed of friable, mid brown sandy silt with moderate small rounded and sub-rounded stones and a single post-medieval ceramic sherd. (1502) was a moderately compacted, greyish-brown sandy silt with frequent small rounded sub-rounded and subangular stones.



Plate 12: View W showing E-facing section of AP15

Underlying (1502) was a well-compacted, yellowish-brown clayey silt alluvial deposit with very occasional small rounded stones (1503) and a well-compacted, greyish-brown sandy silt with red banding (1505) deposited during an earlier phase of Holocene alluviation and which infilled cryoturbated channels and hollows in the gravel surface. Underlying alluvial deposit (1505) were periglacially altered and cryoturbated gravels (1504).

### 5.16 AP16 (SO 38780 59217)

A sequence of four deposits was identified within AP16. The uppermost topsoil deposit (1601) was a friable, mid brown sandy silt with occasional small rounded and sub-



rounded stones beneath which was (1602), a moderately compacted, dark greyish-brown sandy silt with occasional small sub-rounded and subangular stones.

Underlying (1602) was alluvial deposit (1603) consisting of well-compacted, yellowish-brown clayey silt with occasional small rounded and sub-rounded stones. This deposit was a well-sorted Holocene floodplain alluvium representing the latest phase of alluvial build-up across the Arrow Valley.

Underlying alluvial deposit (1603) were friable mid brown gravels within a silty clay matrix (1604) formed by an outwash of fluvio-glacial material. This deposit appeared to have been periglacially altered and cryoturbated.

### 5.17 AP17 (SO 38869 59226)

A sequence of four deposits was identified within AP17, the uppermost of which was topsoil (1701) composed of friable, mid brown sandy silt with moderate small and medium subangular and sub-rounded stones and 2% charcoal flecking. Underlying this was (1702), a moderately compacted, greyish-brown sandy silt with occasional small rounded and sub-rounded stones and 2% charcoal flecking.

Underlying (1702) was a well-compacted, pale yellowish-brown clayey silt with very occasional small rounded and sub-rounded stones (1703). This deposit is classified as a well-sorted Holocene floodplain alluvium representing the latest phase of alluvial deposition across the Arrow Valley.

Underlying alluvial deposit (1703) was (1704) consisting of friable mid brown gravels within a silty clay matrix. (1704) was formed by an outwash of fluvio-glacial material and appears to have been periglacially altered and cryoturbated.



Plate 13: View W showing E-facing section of AP17

## 6. Phase 2: APSRD3

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A sequence of five phases of deposition was identified within APSRD3. These are described as follows:

### 6.1 Phase 1

The earliest phase is characterised by the deposition of a well-sorted Holocene floodplain alluvium (3009), consisting of friable, mid yellowish-brown clayey silt containing moderate small rounded and sub-rounded stones. This material overlay glacial outwash gravels (3010) generally exhibiting surface undulations providing opportunities for early settlement activity on the drier, higher ridges.

### 6.2 Phase 2

Cutting (3009) was a section of ditch [3003] forming part of a large sub-circular enclosure (SMR 10418) of probable prehistoric date visible from aerial reconnaissance. A continuation of this ditch was previously identified to the W in APSRD2 ([205]). [3003] appeared curvilinear in plan and extended across the trench on a NNE-SSW alignment. Due to the limited extent of exposure, the full width of the ditch was not revealed with only its eastern edge being visible within the trench. The inner, western face can be seen rising up from the base of the trench, extending into the western baulk some 1.35m from the present day ground surface.

Unfortunately, due to the unstable nature of the S-facing section within APSRD3 it was not possible to fully bottom [3003], although its visible profile appeared very similar to [205] in APSRD2, strongly suggesting that these were two section of the same ditch feature. Filling [3003] were two distinct deposits, (3008) and (3007). The primary fill (3008), consisting of moderately compacted stone-rich mid reddish-brown clayey silt, appeared to have been the result of natural infilling. This process would have happened rapidly once the ditch was no longer being maintained. The secondary fill (3007) consisted of a less stony, cohesive pale reddish-brown clayey silt with very occasional fragmentary degraded bone and charcoal flecking.

### 6.3 Phase 3

Cutting upper fill (3007) was a V-shaped linear feature [3011] orientated NNE-SSW and measuring 3.94m wide at the top of the cut and 1.38m deep. This feature appeared to follow the alignment of ditch [3003], running along the centre of its axis, and was similar in profile, shape and size to that revealed within the easternmost (W-facing) section of APSRD 2. Filling [3011] were three distinct deposits, (3006), (3005) and (3004). The primary fill (3006) consisted of friable, mid-greyish brown clayey silt with frequent small rounded and sub-rounded stones and very occasional charcoal flecking. The secondary fill (3005) was a friable, mid greyish-brown clayey silt with occasional charcoal flecking and pottery sherds while the upper, tertiary fill consisted of friable light brown clayey silt with moderate small rounded and sub-rounded stones (3004).



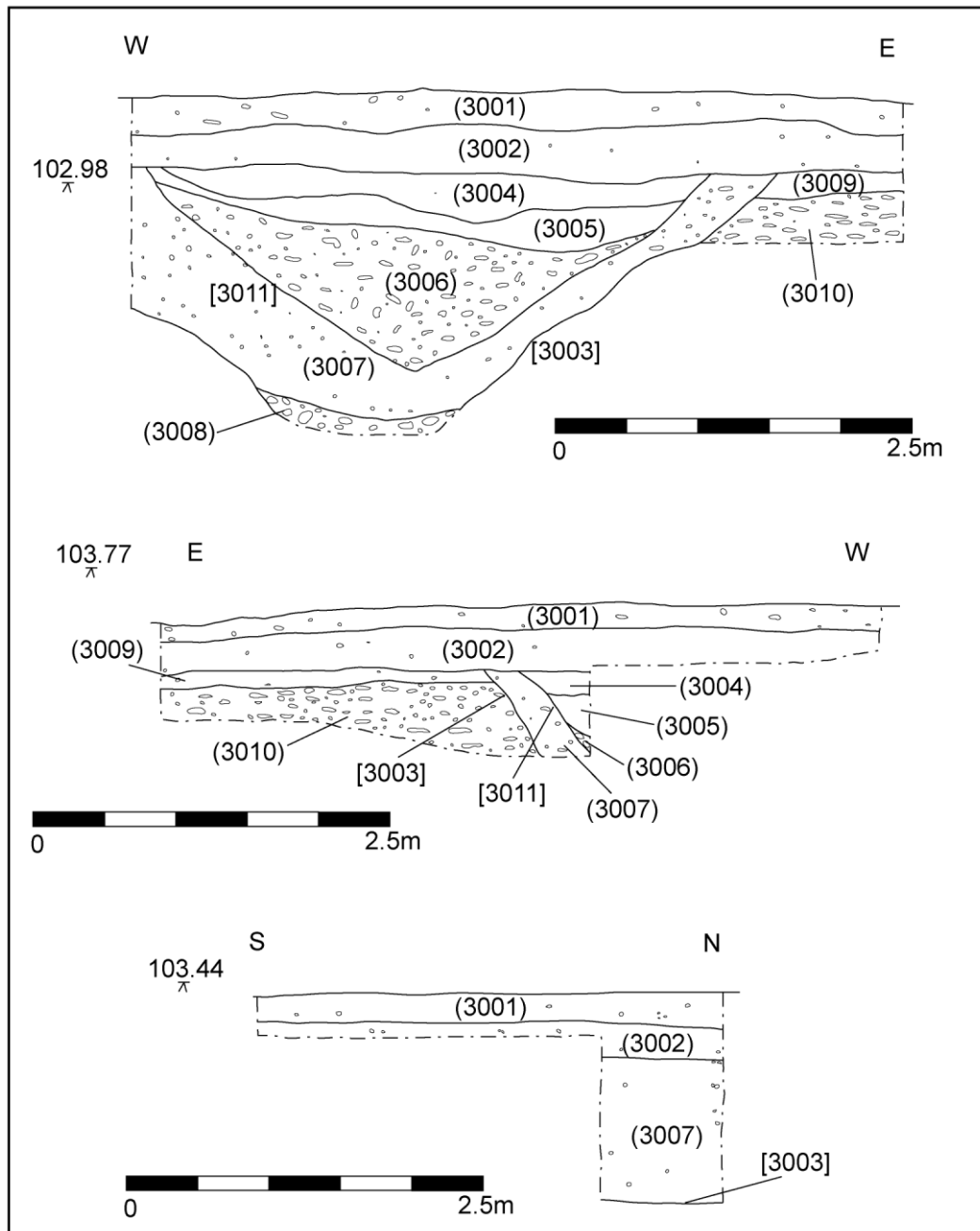


Fig. 17: Ditch sections as revealed in APSRD 3

## 6.4 Phase 4

This phase relates to post-Roman land use and is characterised by deposit (3002), consisting of moderate to well compacted, mid greyish-brown sandy silt with occasional small stones and very occasional CBM fragments and charcoal flecking.

## 6.5 Phase 5

The uppermost A-horizon material (3001) consisted of moderately compacted, mid greyish-brown clayey silt loam with moderate small rounded and sub-rounded stones and rare charcoal flecking. The frequency of small stones is an indication that the underlying gravels have been brought to the surface by plough action, a process observed in all previously excavated trenches.

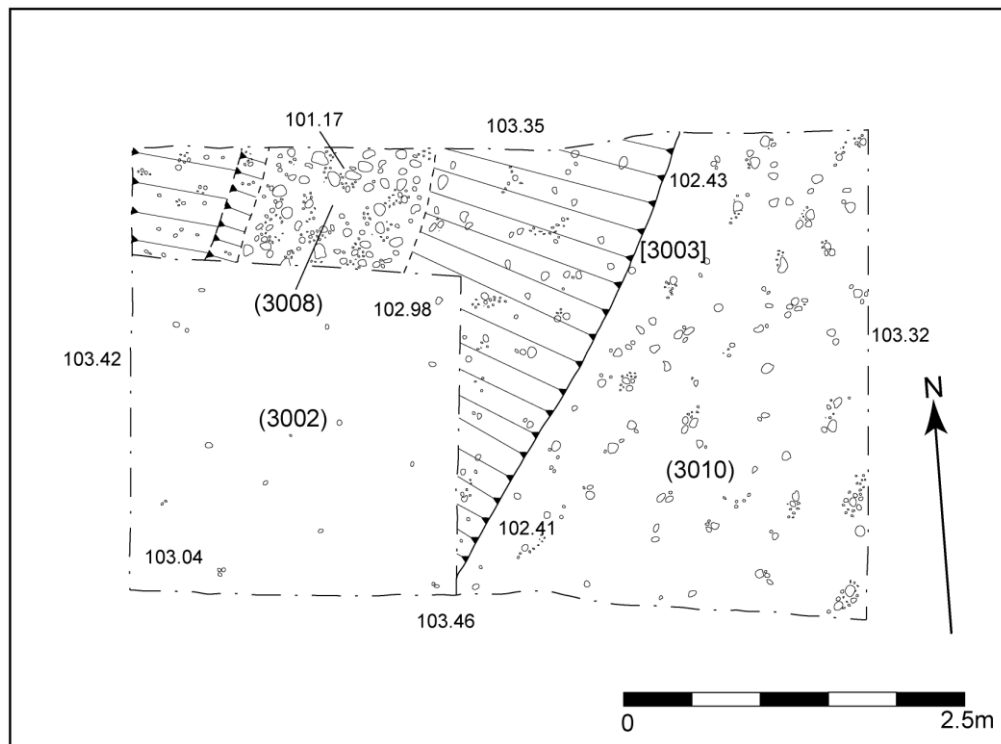


Fig. 18: Post-excavation plan of APSRD 3



Plate 14: View NW showing ditch section in APSRD 3

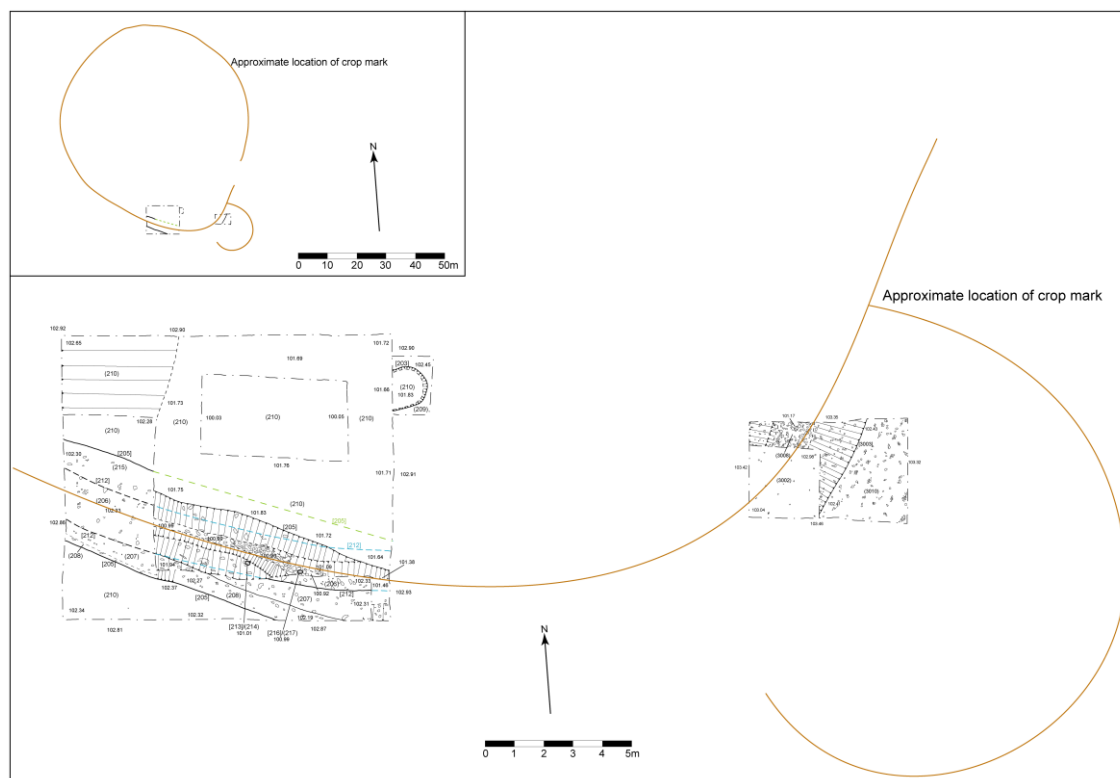


Fig. 19: Plan showing APSRD 2 & 3 in relation to each other and to the enclosure ditch as identified from aerial reconnaissance

## 7. Phase 3: Service connections

Seven trench excavations were carried out by LOR under archaeological observation between October 1<sup>st</sup> and October 3<sup>rd</sup> 2008. The results are appended to this report (see 12.3). No trenches excavated during this phase revealed archaeological features or deposits, despite Trench 6 (located c.13m W of APSRD2) being excavated close to a known archaeological feature. However, the archaeological observation confirmed that no structures, features or deposits of archaeological significance were damaged during the course of the engineering works.

## 8. Interpretation

Border Archaeology's 18 access-pit (AP) excavations were carried out on the Pleistocene terrace above the River Arrow. This terrace lies above and to the N of the study area previously investigated as part of the Arrow Valley Archaeology, Landscape Change and Conservation Project (Macklin *et al.* 2003).

The three substantial pits located immediately E (APSRD 1) and W (APSRD 2 & 3) of Rowe Ditch revealed significant archaeological features, these being part of a large sub-circular ditched enclosure (APSRD2 & 3) previously identified from aerial reconnaissance as a possible Neolithic henge monument (SMR Record 10418) and a further series of previously unrecorded ditch and pit features of probable Romano-



British date (APSRD1). Of the remaining pits, AP3 and AP8 each revealed a single phase of archaeological activity consisting of a series of stake-holes ([303], [305], [307], [309], [311], [313] & [315]) cutting (302) in AP3 and a slightly irregular sub-ovoid pit [805] cutting alluvial deposit (804) in AP8.

No further archaeological remains were identified; however, a geoarchaeological record of all exposed profiles was made and a sequence of events established based on this record.

## 8.1 APSRD 1 (SO 38072 59306)

This large pit was located in Ox Pasture, Leen Farm, on the E side of Rowe Ditch some 120m to the S of the Late Iron Age / Romano-British farmstead investigated as part of the Arrow Valley Archaeology, Landscape Change and Conservation Project (White 2003, 39-42). The pit was located close to an irregularly shaped rectangular enclosure (SMR Record 15215) identified from aerial photography in the SW corner of Ox Pasture, which might have formed part of the farmstead complex. It was thus anticipated that the proposed pipeline groundworks would reveal further evidence of buried deposits, features and finds relating to Romano-British settlement activity.

Five phases of activity were identified, the earliest of which comprised three pits of unknown function and a shallow linear or curvilinear feature oriented NW-SE with a rounded terminal at its NW end [126], which had been truncated at the SE end by Phase 2 ditch [124]. Ditch [124] itself was an interesting NE-SW aligned feature abutting a rise in the gravel, which revealed characteristic evidence of disturbance associated with rooting and burrowing activity at the base of a former hedge line. This suggests the presence of a hedge and ditched boundary, which may well have related in some way to the nearby farmstead. The ditch was filled by a dark yellowish-brown silty deposit (125) containing frequent Severn Valley ware sherds and 14 sherds of Malvernian ware of 1<sup>st</sup> to 2<sup>nd</sup> century date.

Phase 2 ditch [103] ran parallel to [124] approximately 5.5m to the NW but revealed a very different profile, with sides sloping steeply to a depth of 0.81m. The base of the ditch was uniformly flat and consistently measured between 0.20m and 0.25m wide, suggesting regular maintenance. The secondary fill (104) contained Romano-British occupation debris in the form of pottery and CBM (including a large brick or *pila* fragment), animal bone, daub and fire-cracked stones, again, strongly suggesting an association with the nearby farmstead. The pottery recovered from (104) was of 2<sup>nd</sup> century date and included continental imports represented by sherds of Central Gaulish samian ware and fragments of amphora, together with 51 fragments of Severn Valley ware. The amphora sherds were from a Baetican olive oil container (Dressel 20) from southern Spain, one of the commonest amphora types found in Britain, dating from the 1<sup>st</sup> to the 3<sup>rd</sup> centuries.

Phase 3 is represented by three features ([117], [122] & [106]) cutting earlier Romano-British deposits, [117] and [106] both truncating the fill of ditch [124]. Features [117] and [106] appeared to have a natural origin, although both contained occasional sherds of Severn Valley ware. Ovoid feature [122], which truncated the western edge of ditch [124], contained two fills, (134) and (123), the upper fill (123) containing large quantities of cattle bone together with occasional sherds of Severn Valley ware and Dorset black burnished ware of 2<sup>nd</sup> century date. The large amount of bone recovered from this feature indicates that it was probably used for the disposal of butchery refuse; however,

its relatively shallow depth suggests that it may originally have served a different purpose, being backfilled with (123) only after it had gone out of use.

Phase 4 is represented by stake-holes [109], [111], [113] and [115] cutting subsoil (102). This cluster of apparently contemporary features was located against the eastern edge of the trench. The final phase is represented by the modern ploughsoil (101).

The pottery dates detailed above are consistent with those obtained from the assemblage recovered during Herefordshire Archaeology's investigations to the N of the APSRD1 in 2003, on the basis of which it was suggested that the farmstead site was constructed between 100 BC and AD 100 and abandoned around the middle of the 2<sup>nd</sup> century AD (White 2003, 42).

## 8.2 APSRD 2 (SO 37974 59311)

The second substantial pit was located immediately W of Rowe Ditch directly over the southern section of the sub-circular enclosure ditch presumed to be of Neolithic date. This ditched enclosure appears subsequently to have been incorporated into the farmstead complex described above that went out of use at some point during of the Romano-British period, possibly as early as the mid 2<sup>nd</sup> century AD (White 2003, 39-42).

A single ditch circuit was revealed at a depth of 0.5m below the existing ground surface. The ditch measured c. 4m wide at the top and 0.3m at its base with a v-shaped profile extending to a depth of 1.38m.

The differing nature of the secondary ditch fills is significant, with the stone-free fill on the N side (215) possibly representing an adjacent bank eroding into the ditch. Within the centre of the ditch was a mixture of small, medium and occasional large stones forming a vertical stack or 'pipe' (**Fig. 6**). The origin of this feature is not entirely clear and it may represent either an archaeological or a natural infill feature. There is no clear cut, nor a post-pipe to confirm a posthole, nor any sign of post removal. Furthermore, the configuration of (206), with its wide upper profile, does not resemble a posthole. However, if this feature does represent a posthole, it probably relates to posthole evidence seen elsewhere in the ditch (**Plate 8, Fig. 5**) and may be associated with the incorporation of the ditched enclosure into the Late Iron Age/Romano-British farmstead complex.

No internal features relating to the enclosure were revealed within the pit; neither was there any trace of an entrance. The excavation was thus unable to confirm the enclosure's function.

## 8.3 APSRD 3 (SO 37891 59386)

The ditch revealed in APSRD3 [3003] was similar to [205] exposed in APSRD 2 in terms of profile, form, size and infill history and is thus interpreted as a continuation of this enclosure feature (**Fig. 19**). A more V-shaped profile ditch [3011], similar to [212], was subsequently cut through this ditch, possibly to accommodate a fence/palisade structure. The fill (3005) of this re-cut contained three sherds of Roman Severn Valley ware pottery, corroborating the suggestion that the ditched enclosure was subsequently incorporated into the Late Iron Age/Romano-British farmstead complex.

## 8.4 Access Pit 3 (SO 37873 59338) and Access Pit 8 (SO 37555 59586)

AP 3 revealed a series of stake-holes ([303], [305], [307], [309], [311], [313] & [315]) cutting (302), which were filled by loose to moderately compacted clayey silt and which had clearly been truncated by ploughing.

AP8 contained a single phase of archaeological activity represented by a sub-ovoid pit [805] of unknown function measuring 1.45m NNW-SSE × 0.85m NNE-SSW underlying (803) and cutting (804). This was a maximum of 0.28m deep and was filled by moderately compacted, dark yellowish-brown silt (806) with occasional small rounded stones and 3% charcoal flecking, which was very similar to the overlying alluvium.

## 8.5 Service connections

A series of engineering excavations were carried out by Laing O'Rourke under archaeological observation, the results of which are appended to the report (Appendix 1). These excavations produced negative findings.

## 8.6 Geoarchaeology

A comprehensive programme of geoarchaeological recording was carried out by Dr M. Allen as part of the project and the results have been interpreted in light of earlier research carried out by Macklin et al. in 2003. A sequence of events has been identified based on these geoarchaeological records consisting of 1a) glacial outwash gravels, 1b) minor braided channels forming in the gravel surface, 2) periglacial disturbance, 3) Holocene overbank alluvium and 4) soil formation (ploughing and pasture) (Allen *vide infra*). A detailed description of this sequence is given in Appendix 3.

The excavation and geoarchaeological recording of APSRD 1, 2 & 3 has demonstrated the potential for the spatial concentration of archaeological activity around former islands and drier areas represented by undulations in the surface of the gravel terrace. These gravels were at a higher altitude in APSRD 1 and APSRD 2/3 and the alluvial facies was thin or negligible.

# 9. Conclusion

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This series of excavations has indicated the potential archaeology that may be concealed beneath alluvium in this part of the Arrow Valley. In particular, the excavations either side of Rowe Ditch (APSRD 1, 2 & 3) has shown that archaeological activity is likely to concentrate on and around 'gravel islands' concealed beneath the relatively level alluviated landscape and not readily recordable by normal archaeological reconnaissance. These islands represent undulations in the gravel palaeo-surface, which occurs at variable depths of between 0.31 and 1.02m.

The excavation of APSRD1 revealed a series of ditches and pits containing evidence of settlement activity apparently linked to the Iron Age/Romano-British farmstead situated



approximately 120m to the N. The diversity of the pottery assemblage recovered from APSRD1 (including a mixture of local and imported wares) and the presence of CBM of probable Romano-British date implies the existence of a substantial, relatively high-status settlement in the vicinity, rather than a small, isolated rural farmstead (Timby, *vide infra*).

APSRD 2 & 3 revealed two sections of a single ditch circuit relating to a sub-circular ditched enclosure previously identified from aerial reconnaissance as a Neolithic henge monument. The excavation exposed the ditch profile and evidence of eroded bank material was identified within the ditch. Evidence of reuse was identified in the form of a V-shaped re-cut through the almost completely infilled ditch, containing probable packing material representing a fence or palisade. This was possibly associated with the incorporation of the enclosure into the later Iron Age/Romano-British farmstead complex, as suggested also by the aerial photographic evidence, which shows a linear feature linking the two sites (**Plate 15**). Three sherds of Severn Valley ware were recovered from this packing material. Study of the nature of these packing deposits suggests either that the fence/palisade was removed when the deposits were still loose ('young') (i.e. the void left by the posts collapsed, rather than being infilled with topsoil and overbank alluvium).



Plate 15: Aerial photograph showing Rowe Ditch running across the centre of the picture with the Romano-British farmstead enclosure in the foreground and the sub-circular ditched enclosure to the SW

## 10. Copyright

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the client for the use of the report by the client in all matters directly relating to the project as described in the Project Specification.

## 11. Bibliography & Cartography

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### 11.1 Bibliography

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### 11.2 Cartography

(All cartographic materials have been obtained from the Herefordshire Record Office unless otherwise stated)

1754 Isaac Taylor's Map of Herefordshire

1842 Tithe Map of Pembridge

1888 OS 1st edition 6-inch map (Herefordshire 11 SE, SW)

1904 OS 2nd edition 6-inch map (Herefordshire 11 SE, SW)

1952 OS provisional edition 6-inch map (Herefordshire 11 SE, SW)





### **11.3 Aerial Photography**

Aerial photographic records relating to the study area were consulted at the Herefordshire Archaeology Sites and Monuments Record and the National Monuments Record Centre, Swindon.

## 12. APPENDIX 1: Context Register

### 12.1 Phase 1

#### 12.1.1 APSRD 1

Context No	Description
(101)	Friable mid brown clayey silt, frequent small sub-rounded stones, occasional medium sub-rounded stones. Extended trench wide (8m × 8m) to an average thickness of 0.15m. Overlies (102).
<i>INTERPRETATION:</i>	<i>Topsoil.</i>
(102)	Moderately compacted, reddish-brown sandy silt, moderate to frequent small sub-rounded stones, occasional medium sub-rounded stones, 41 SVW sherds, 1 sherd of possible post-medieval pottery, one piece of worked flint, 2% charcoal flecking. Extended trench wide (8m × 8m) to an average thickness of 0.20m. Underlies (101). Cut by [115], [113], [109], [111].
<i>INTERPRETATION:</i>	<i>Floodplain alluvium.</i>
[103]	NE-SW cut, linear in plan, measuring >4.70m (NE-SW) × 1.50m (NW-SE) × 0.80m, sharp break of slope at top, sides 40° to 60° slightly concave, sharp break of slope at base, base flat. Cuts (108), filled by (105), (104), (120).
<i>INTERPRETATION:</i>	<i>Short section of ditch associated with Romano-British farmstead enclosure located to N of site</i>
(104)	Friable mixture of pale yellow/dark greyish-brown clay silt, frequent charcoal flecking & fragments, fragments of red clay (daub), 11 samian sherds, 3 amphora sherds, 51 SVW, 1 sherd of Dorset black burnished ware, 1 large brick or pila fragment + 17 other CBM fragments, moderate fire-cracked stones occasional (Fe) objects. Deposit measured up to 0.48m in thickness. Underlies (105), overlies (120), fills [103].
<i>INTERPRETATION:</i>	<i>Secondary fill of [103] containing abundant occupation debris. Pottery appears unabraded.</i>
(105)	Friable, dark greyish-brown clay silt with moderate charcoal flecking, 3 SVW sherds. Deposit measured up to 0.06m in thickness. Underlies (102), overlies (104), fills [103].
<i>INTERPRETATION:</i>	<i>Tertiary fill of [103]. Fill appears to represent 'dishing' of organic rich subsoil from above.</i>
[106]	NW-SE cut, roughly ovoid in plan, measures 1.10m (NW-SE) × 0.80m (NW-SE) × 0.12m, moderate break of slope at top, sides moderately sloping, moderate to gentle break of slope at base, base concave. Cuts (108), filled by (107).
<i>INTERPRETATION:</i>	<i>Cut of irregular pit, possibly related to a tree bole.</i>
(107)	Moderately compacted (friable), mid brown gravelly silt containing a single SVW sherd, very occasional CBM sherds and (Fe) objects, 1% charcoal flecking. Measures 1.10m (NW-SE) × 0.80m (NW-SE) × 0.12m in thickness. Underlies

Context No	Description
	(102), fills [106].
<b>INTERPRETATION:</b>	<i>Fill of [106]</i>
(108)	Moderately compacted (friable), pale yellowish-brown clayey silt with moderate small to medium sub-rounded stones, 1 samian sherd, 17 SVW sherds. Extends trench wide (8m × 8m) to an average thickness of 0.12m. Underlies (102), overlies, (129), (136), (127), cut by [103], [106], [117] & [124].
<b>INTERPRETATION:</b>	<i>Silty alluvial deposit, which appears to be incorporated into, and to seal, several early features. This is then cut by the later Romano-British features.</i>
[109]	Cut, sub-circular in plan, measures 90mm in diameter and 70mm in depth, sharp break of slope at top, sides steeply sloping, tapered at base. Cuts (102), filled by (110).
<b>INTERPRETATION:</b>	<i>Cut of stake-hole.</i>
(110)	Moderately compacted (friable), mid orangey-brown clayey silt with very occasional small sub-rounded stones. Measures 90mm in diameter and 70mm in depth. Fills [109].
<b>INTERPRETATION:</b>	<i>Fill of [109].</i>
[111]	Cut, circular in plan, measures 50mm in diameter and 80mm in depth, sharp break of slope at top, sides steeply sloping, tapered at base. Cuts (102), filled by (112).
<b>INTERPRETATION:</b>	<i>Cut of stake-hole.</i>
(112)	Moderately compacted (friable), mid orangey-brown clayey silt with very occasional small sub-rounded stones. Measures 50mm in diameter and 80mm in depth. Fills [111].
<b>INTERPRETATION:</b>	<i>Fill of [111].</i>
[113]	Cut, circular in plan, measures 70mm in diameter and 90mm in depth, sharp break of slope at top, sides steeply sloping, tapered at base. Cuts (102), filled by (114).
<b>INTERPRETATION:</b>	<i>Cut of stake-hole.</i>
(114)	Moderately compacted (friable), mid orangey-brown clayey silt with very occasional small sub-rounded stones. Measures 70mm in diameter and 90mm in depth. Fills [113].
<b>INTERPRETATION:</b>	<i>Fill of [113].</i>
[115]	Cut, circular in plan, measures 100mm in diameter and 102mm in depth, sharp break of slope at top, sides steeply sloping, tapered at base. Cuts (102), filled by (116).
<b>INTERPRETATION:</b>	<i>Cut of stake-hole.</i>
(116)	Moderately compacted (friable), mid orangey-brown clayey silt with very occasional small sub-rounded stones. Measures 100mm in diameter and 102mm in depth. Fills [115].
<b>INTERPRETATION:</b>	<i>Fill of [115].</i>
[117]	NE-SW cut, ovoid in plan, measures 1.11m (NE-SW) × 0.65m (NW-SE) × 0.24m, sharp break of slope at top, sides moderate to steeply sloping, gradual break of slope at base, base concave. Cuts (108), filled by (118), (119).
<b>INTERPRETATION:</b>	<i>Cut of pit of uncertain function; appears to have been slightly truncated by ploughing.</i>
(118)	Moderately compacted (friable), mid orangey-brown clayey silt with frequent small sub-rounded stones, 3 SVW sherds, 2% charcoal flecking, single (Fe) object. Deposit measures

Context No	Description
	1.11m (NE-SW) × 0.65m (NW-SE) × 0.18m in thickness. Underlies (102), overlies (119), fills [117].
<i>INTERPRETATION:</i>	<i>Secondary fill of pit [117].</i>
(119)	Moderately compacted (friable), mid orangey-brown clayey silt with frequent small sub-rounded stones. Deposit measures 1.11m (NE-SW) × 0.65m (NW-SE) × 60mm in thickness. Underlies (118), fills [117].
<i>INTERPRETATION:</i>	<i>Primary fill of pit [117].</i>
(120)	Friable, mid greyish-brown gravels in a clay silt matrix with 1% charcoal flecking, 4 SVW sherds. Deposit measures up to 0.31m in thickness. Underlies (104), fills [103].
<i>INTERPRETATION:</i>	<i>Primary fill of [103]. Deposit incorporates near natural and aeolian material.</i>
(121)	Friable, reddish-brown gravels within a clay silt matrix. Deposit extended trench-wide (8m E-W × 8m N-S) × up to at least 2.5m thick. Cut by [128], [126], [135].
<i>INTERPRETATION:</i>	<i>Fluvio-glacial gravels.</i>
[122]	E-W cut, ovoid in plan, measures 2.29m (E-W) × 0.90m (N-S) × 0.40m, sharp break of slope at top, sides steeply sloping (vertical at top), moderate break of slope at base, base slightly concave. Cuts (108), (125), filled by (123), (124).
<i>INTERPRETATION:</i>	<i>Cut of Romano-British pit that appears to have been used for disposal of butchery refuse</i>
(123)	Loose to moderately compacted, mid reddish-brown clayey silt with frequent small rounded pebbles, frequent butchered animal bone, occasional SVW sherds & a single BB1 sherd. Deposit measured 2.29m (E-W) × 0.90m (N-S) × 0.26m maximum thickness. Underlies (102), overlies (134), fills [122].
<i>INTERPRETATION:</i>	<i>Secondary fill of [122].</i>
[124]	NE-SW cut, linear in plan, measures >9.80m (NE-SW) × 1.30m (NW-SE) × 0.46m, sharp break of slope at top, sides moderately to sloping, moderate to sharp break of slope at base, base flat slightly undulating. Cuts (108), (127); filled by (125).
<i>INTERPRETATION:</i>	<i>Linear ditch forming part of a Romano-British enclosure.</i>
(125)	Moderately compacted, dark yellowish-brown clayey silt with moderate small and medium subangular stones, 71 SVW sherds, 14 Malvernian ware, occasional (Fe) objects, 2% charcoal flecking. Underlies (102), cut by [106], [117], [122], fills [124].
<i>INTERPRETATION:</i>	<i>Fill of linear ditch [124].</i>
[126]	NW-SE cut, linear in plan, measures >4m (NW-SE) × 0.90m (NE-SW) × 0.26m, moderate break of slope at top, sides 40° to 50°, moderate to gradual break of slope at base, base concave. Cuts (121), filled by (127).
<i>INTERPRETATION:</i>	<i>Shallow ditch of unknown function, truncated at SE end by ditch [124].</i>
(127)	Cohesive, pale yellowish-brown clayey silt with 5% small rounded gravels and 1% charcoal flecking. Deposit measured >4m (NW-SE) × 0.90m (NE-SW) × 0.26m. Fills [126]; cut by

Context No	Description
	[124].
<i>INTERPRETATION:</i>	<i>Fill representing gradual silting of [126].</i>
[128]	Cut, sub-circular in plan, measures 0.80m (E-W) × >0.40m (N-S) × 0.18m, moderate break of slope at top, moderate to gradually sloping sides, moderate to gradual break of slope at base, base flattish but slightly concave in places. Cuts (121), filled by (129).
<i>INTERPRETATION:</i>	<i>Cut of small sub-circular pit.</i>
(129)	Friable, yellowish-brown sandy silt with 5% small rounded gravels. Deposit measured 0.80m (E-W) × >0.40m (N-S) × 0.18m. Underlies (108), fills [128].
<i>INTERPRETATION:</i>	<i>Fill representing gradual silting of [128].</i>
130	VOID
131	VOID
132	VOID
133	VOID
(134)	Moderately compacted (friable), greyish-brown clayey silt with frequent small rounded pebbles. Deposit measures 2.29m (E-W) × 0.55m (N-S) × 50mm. Underlies (123), fills [122].
<i>INTERPRETATION:</i>	<i>Primary fill of [122].</i>
[135]	Cut, appears sub-circular in plan, measures >0.65m (N-S) × >1.10m (E-W) × 0.40m, sharp break of slope at top, moderately sloping sides, moderate to sharp break of slope at base, base flat. Cuts (108), filled by (136), (137).
<i>INTERPRETATION:</i>	<i>Only part of the feature extends into the SW corner of the trench and its nature and extent are thus unclear.</i>
(136)	Moderate to well compacted, mid brown sandy silt with frequent small rounded gravels. Deposit measures >0.22m (N-S) × >0.70m (E-W) × 0.19m. Underlies (108), overlies (137), fills [135].
<i>INTERPRETATION:</i>	<i>Secondary fill of [135].</i>
(137)	Moderately compacted, yellowish-brown clayey silt with occasional small rounded pebbles. Deposit measured >0.65m (N-S) × >1.10m (E-W) × 0.28m. Underlies (136), fills [135].
<i>INTERPRETATION:</i>	<i>Primary fill of [135].</i>
(138)	Friable, mid orangey-brown silt with 10% small rounded gravels and 1% charcoal flecking. Deposit measured >3.64m (N-S) × 1.38m (E-W) × 0.28m. Underlies (108), fills [139].
<i>INTERPRETATION:</i>	<i>Fill representing gradual silting of [139].</i>
[139]	NE-SW cut, linear in plan, measured >3.64m (N-S) × 1.38m (E-W) × 0.28m, moderate break of slope at top, fairly gradual and somewhat irregularly sloping sides, gradual break of slope at base, base irregular/undulating. Cuts (121), filled by (138).
<i>INTERPRETATION:</i>	<i>Short section of slightly irregular ditch</i>



## 12.1.2 APSRD 2

Context No	Description
(201)	Friable, dark to mid brown humic (slightly clayey) silt with frequent small sub-rounded stones and occasional small subangular stones. Deposit extended trench wide (8m N-S × 11m E-W) and measured up to 0.30m in thickness. Overlies (202).
<i>INTERPRETATION:</i>	<i>Topsoil and subsoil.</i>
(202)	Moderately compacted (friable), pale yellowish-brown clayey silt with occasional small sub-rounded stones and subangular stones, occasional ceramic sherds, including 1 post-medieval, and post-Roman CBM fragments and 1% charcoal flecking. Deposit extended trench wide (8m N-S × 11m E-W) × 0.18m (average thickness). Underlies (201), overlies (209).
<i>INTERPRETATION:</i>	<i>Floodplain alluvium.</i>
[203]	Cut, ovoid in plan, measures 1.60m (E-W) × 1.15m (N-S) × 0.85m, sharp break of slope at top, sides vertical, break of slope at base imperceptible, no clearly defined base. Cuts (209), filled by (204).
<i>INTERPRETATION:</i>	<i>Pit of unknown function.</i>
(204)	Loose to moderately compacted, mid brown gravels within a clay silt matrix. Deposit measured 1.60m (E-W) × 1.15m (N-S) × 0.85m. Underlies (202), fills [203].
<i>INTERPRETATION:</i>	<i>Fill of [203], which appears to comprise redeposited gravels.</i>
[205]	E-W cut, curvilinear in plan, measures >11.0m (E-W) × 4.10m (N-S) × 1.58m (maximum depth), sharp break of slope at top, sides moderately sloping, sharp break of slope at base, base concave. Cuts (209) and is filled by (211), same as [3003].
<i>INTERPRETATION:</i>	<i>Part of curvilinear enclosure ditch.</i>
(206)	A jumble of small and medium and rare large stones in a brown silt loam, some orientation present, 1% charcoal flecking, single SVW sherd and one possible flint scraper. Deposit measures >11m E-W × 2.90m N-S × 1.22m (maximum thickness). Underlies (202), fills [212].
<i>INTERPRETATION:</i>	<i>Origin of feature unclear and it may represent either an archaeological or a natural infill feature.</i>
(207)	Moderately compacted, mid greyish- / yellowish-brown silty clay with frequent small sub-rounded and subangular stones and 1% charcoal flecking. >11m E-W × 1.60m N-S × 0.90m (maximum thickness). Contemporary with (215), overlies (208), fills [205], cut by [212].
<i>INTERPRETATION:</i>	<i>Fill of [205].</i>
(208)	Moderately compacted, light orangey-brown clay silt with moderate small sub-rounded stones, 1% charcoal flecking. Deposit measures >11m E-W × 3.60m N-S × up to 0.22m (maximum thickness). Underlies (207), (215), overlies (211), fills [205].
<i>INTERPRETATION:</i>	<i>Fill of [205].</i>
(209)	Moderately compact, mid yellowish-brown clayey silt with occasional to moderate small sub-rounded stones, 1% charcoal flecking. Deposit measures >11m E-W × 8m N-S ×

Context No	Description
	0.56m. Overlies (210), cut by [203], [205].
<i>INTERPRETATION:</i>	<i>Alluvial silt</i>
(210)	Moderate to well-compacted (friable), pinkish-brown gravels with occasional large sub-rounded stones. Deposit measures >11m E-W × 8m N-S × up to 2.30m. Underlies (209).
<i>INTERPRETATION:</i>	<i>Glacially deposited gravels.</i>
(211)	Moderately compacted, mid yellowish-brown gravels with 1-2% charcoal flecking and small fragments, one possible microlith. Deposit measures >11m E-W × 0.60m N-S × 0.20m (maximum thickness). Underlies (208), fills [205].
<i>INTERPRETATION:</i>	<i>Primary fill of [205].</i>
[212]	Possible cut, curvilinear in plan, measures >11m E/W × 2.90m (N-S) × 1.22m (maximum depth), moderate break of slope at top, sides moderately sloping at top and steeply sloping towards base, tapered break of slope at base, base v-shaped. Cuts (207); filled by (206).
<i>INTERPRETATION:</i>	<i>Possible slot containing (206). No clear cut observed but if this was a cut feature it might relate to others seen elsewhere in ditch [205]</i>
[213]	Cut, sub-circular in plan, measures 0.16m (NW-SE) × 0.10m (NE-SW) × 90mm (visible depth), break of slope at top not visible, sides vertical, sharp break of slope at base, base flat. Cuts (207), filled by (214).
<i>INTERPRETATION:</i>	<i>Remains of stake-/posthole.</i>
(214)	Moderately compacted, dark greyish-brown humic deposit measuring 0.16m (NW-SE) × 0.10m (NE-SW) × 90mm (visible depth). Fills [213].
<i>INTERPRETATION:</i>	<i>Fill of stake- / posthole</i>
(215)	Moderately compacted, mid yellowish-brown silty clay with very occasional small sub-rounded stones. >11m E-W × 1.65m N-S × 0.86m (maximum thickness). Contemporary with (207), overlies (208), fills [205], cut by [212].
<i>INTERPRETATION:</i>	<i>Material forming adjacent bank eroding into ditch</i>
[216]	Cut, circular in plan, measures 0.19m (NW-SE) × 0.08m (NE-SW) × 70mm (visible depth), break of slope at top not visible, sides vertical, break of slope at base sharp, base flat. Cuts (207), filled by (217).
<i>INTERPRETATION:</i>	<i>Remains of stake-hole/posthole.</i>
(217)	Moderately compacted, dark greyish-brown humic deposit measuring 0.19m (NW-SE) × 0.08m (NE-SW) × 70mm (visible depth). Fills [216].
<i>INTERPRETATION:</i>	<i>Fill of stake-hole / posthole</i>

## 12.2 Phase 2

### 12.2.1 APSRD 3

Context No	Description
(3001)	Moderately compacted, mid-greyish brown clay silt loam with moderate small rounded and sub-rounded stones with 2% charcoal flecking. Deposit extended trench-wide (3.40m N-S × 5.40m E-W × 0.20m in thickness. Overlies (3002).
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(3002)	Moderate to firmly compacted, mid brown with a greyish hue sandy silt with moderate small rounded and sub-rounded stones and very occasional ceramic sherds and 1% charcoal flecking. Deposit extended trench-wide (3.40m N-S × 5.40m E-W × 0.18m in thickness. Overlies (3004).
<i>INTERPRETATION:</i>	<i>Ploughed overbank alluvium</i>
[3003]	Cut, curvilinear in plan, measures >4.50m (E-W) × >3.50m (N-S) × >1.86m deep, sharp break of slope at top, sides moderate to steeply sloping, break of slope at base undefined, base undefined. Cut orientated NNE-SSW. Cuts (3008), filled by (3008) & (3007), same as [205].
<i>INTERPRETATION:</i>	<i>Short section of ditch (as revealed) relating to large prehistoric circular enclosure. Appears to represent the same ditch as revealed in APSRD2.</i>
(3004)	Friable, light brown slightly clayey silt with 10% small rounded and sub-rounded stones. Deposit extends 3.82m E-W × >3.40m N-S × 0.35m in thickness. Fills [3011], overlies (3005).
<i>INTERPRETATION:</i>	<i>Tertiary fill of re-cut [3011].</i>
(3005)	Friable, mid-greyish brown clayey silt with 5% mixed gravels with 3 × sherds SVW and 5% charcoal flecking. Deposit extends 3.76m E-W × >3.40m × 0.30m in thickness. Fills [3011], overlies (3006).
<i>INTERPRETATION:</i>	<i>Secondary fill of re-cut [3011].</i>
(3006)	Friable, mid-greyish brown clayey silt with 80% small rounded and sub-rounded stones and 1% charcoal flecking. Deposit extends 3.48m E-W × >3.40m N-S × 1.0m in thickness. Fills [3011].
<i>INTERPRETATION:</i>	<i>Primary fill (deliberate packing fill) of re-cut [3011].</i>
(3007)	Cohesive, mid to pale reddish-brown clayey silt with 20% small to very small rounded gravels, very occasional degraded bone fragments and 2% charcoal flecking. Deposit measured >4.50m E-W × >3.40m N-S × 0.80m in thickness. Fills [3003].
<i>INTERPRETATION:</i>	<i>Secondary fill of [3003].</i>
(3008)	Moderate to loosely compacted, reddish-brown clayey silt with 90% mid sized rounded and sub-rounded stones. Deposit measured 1.40m E-W × >1.0m × >0.14m in thickness. Fills [3003].
<i>INTERPRETATION:</i>	<i>Primary fill of [3003].</i>
(3009)	Moderately compacted, yellowish-brown clayey silt with moderate small rounded and sub-rounded stones and 1%

Context No	Description
	charcoal flecking. Deposit extends trench-wide (3.40m × 5.40m) × 0.16m in thickness. Cut by [3003].
<i>INTERPRETATION:</i> (3010)	<i>Well-sorted overbank floodplain alluvium.</i> Loosely compacted, reddish brown gravels. Deposit extends trench-wide (3.40m × 5.40m) × >0.30m in thickness. Underlies (3009).
<i>INTERPRETATION:</i> [3011]	<i>Glacial outwash gravels.</i> Cut, linear in plan, measures 3.94m E-W × >3.40m N-S × 1.38m in depth, sharp break of slope at top, sides moderate to steeply sloping, tapered at base. Cuts (3007), filled by (3006), (3005) and (3004).
<i>INTERPRETATION:</i>	<i>Re-cut within ditch [3003].</i>

## 12.3 Phase 3: Service connections

### 12.3.1 Trench 1 (SO38717 59123)

Context No	Description
(401)	Mid brown loamy deposit with frequent small rounded stones, extending to a thickness of 0.15m. Overlies (402)
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(402)	Mid greyish-brown clayey silt with moderate small rounded stones, extending to a thickness of 0.15m. Underlies (401), overlies (403)
<i>INTERPRETATION:</i>	<i>Ploughsoil</i>
(403)	Mid yellowish-brown clayey silt, extending to a thickness of 0.18m. Overlies (404), underlies (402).
<i>INTERPRETATION:</i>	<i>Well-sorted floodplain alluvium</i>
(404)	Mid reddish-brown matrix free gravels, extending beyond base of excavation at 0.85m. Underlies (403)
<i>INTERPRETATION:</i>	<i>Glacial gravels.</i>

### 12.3.2 Trench 2 (SO38707 to SO 38729 59202)

Context No	Description
(501)	Light brown silty loam with moderate small pebbles, to a depth of 0.15m. Overlies (502)
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(502)	Mid greyish-brown clayey silt, extending to a thickness of 0.10m. Underlies (501), overlies (503)
<i>INTERPRETATION:</i>	<i>Ploughsoil</i>
(503)	Light yellowish-brown clayey silt, extending to a thickness of 0.07m. Underlies (502), overlies (504)
<i>INTERPRETATION:</i>	<i>Alluvium</i>
(504)	Mid reddish-brown matrix free gravels, extending beyond base of excavation at 1m.
<i>INTERPRETATION:</i>	<i>Glacial gravels</i>

## 12.3.3 Trench 3 (SO38641 59200)

Context No	Description
(601)	Light brown silty loam with moderate small pebbles, to a depth of 0.15m. Overlies (602)
<i>INTERPRETATION:</i>	<i>Topsoil.</i>
(602)	Mid greyish-brown clayey silt, extending to a thickness of 0.15m. Underlies (601), overlies (603)
<i>INTERPRETATION:</i>	<i>Ploughsoil</i>
(603)	Light yellowish-brown clayey silt, extending to a thickness of 0.22m. Underlies (602), overlies (604)
<i>INTERPRETATION:</i>	<i>Alluvium</i>
(604)	Mid reddish-brown matrix free gravels, extending beyond base of excavation at 1m. Underlies (603)
<i>INTERPRETATION:</i>	<i>Glacial gravels</i>

## 12.3.4 Trench 4 (SO38349 50223 to SO38351 59223)

Context No	Description
(701)	Mid brown silty loam, extending to a thickness of 0.12m. Overlies (702)
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(702)	Mid greyish-brown clayey silt, extending to a thickness of 0.20m. Underlies (701), overlies (703)
<i>INTERPRETATION:</i>	<i>Ploughsoil.</i>
(703)	Light yellowish-brown clayey silt, extending to a thickness of 0.50m. Underlies (702), overlies (704)
<i>INTERPRETATION:</i>	<i>Alluvium</i>
(704)	Mid reddish-brown matrix free gravels, extending beyond base of excavation at 0.95m.
<i>INTERPRETATION:</i>	<i>Glacial gravels.</i>

## 12.3.5 Trench 5 (SO38245 59242 to SO38238 59242)

Context No	Description
(801)	Mid brown silty loam with occasional post-medieval ceramic sherds, extending to a thickness of 0.11m. Overlies (802)
<i>INTERPRETATION:</i>	<i>Topsoil.</i>
(802)	Mid greyish-brown clayey silt, extending to a thickness of 0.23m. Underlies (801), overlies (803)
<i>INTERPRETATION:</i>	<i>Ploughsoil.</i>
(803)	Light yellowish-brown clayey silt, extending to a thickness of 0.30m. Underlies (804), overlies (804)
<i>INTERPRETATION:</i>	<i>Alluvium.</i>
(804)	Mid reddish-brown matrix free gravels, extending beyond base of excavation at 0.78m.
<i>INTERPRETATION:</i>	<i>Glacial gravels.</i>



## 12.3.6 Trench 6 (SO37923 59292)

Context No	Description
(901)	Mid brown silty loam extending to a thickness of 0.10m. Overlies (902)
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(902)	Mid greyish-brown clayey silt, extending to a thickness of 0.18m. Underlies (901), overlies (903)
<i>INTERPRETATION:</i>	<i>Ploughsoil</i>
(903)	Light yellowish-brown clayey silt, extending to a thickness of 0.22m. Underlies (902), overlies (904)
<i>INTERPRETATION:</i>	<i>Alluvium</i>
(904)	Mid reddish brown matrix free gravels, extending beyond base of excavation at 0.65m. Underlies (903)
<i>INTERPRETATION:</i>	<i>Glacial gravels.</i>

## 12.3.7 Trench 7 (SO37931 59659)

Context No	Description
(1001)	Indurated tarmac surface, extending to a thickness of 0.20m. Overlies (1002)
<i>INTERPRETATION:</i>	<i>Modern road surface</i>
(1002)	Light grey compacted gravel, extending to a thickness of 0.20m. Underlies (1001), overlies (1003)
<i>INTERPRETATION:</i>	<i>Gravel sub-base for modern road</i>
(1003)	Mid reddish-brown clayey silt with some obvious disturbance, extending beyond base of trench at 1.13m. Underlies (1002)
<i>INTERPRETATION:</i>	<i>Disturbed natural deposition, possibly resulting from earlier utility/construction activity</i>

## 13. Appendix 2: Pottery Assessment

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Jane Timby  
September 2008

### **1 Introduction and methodology**

- 1.1 The archaeological work at Rowe Ditch resulted in the recovery of 286 sherds of pottery weighing 5899 g dating to the Roman, and post-medieval periods. In addition 27 pieces of ceramic building material/fired clay were recovered.
- 1.2 The assemblage was in relatively good condition with an overall average sherd size of 20.6 g. Sherds were generally well preserved in terms of surface treatments and at least three semi-complete vessels are present, two with complete profiles.
- 1.3 Pottery was recorded from 12 individual contexts with seven sherds from unstratified collection.
- 1.4 The assemblage was scanned to determine the main fabrics present and quantified by sherd count and weight for each recorded context. The resulting data is summarised in Table 1.
- 1.5 No library research has been carried out at this stage to consider the site in its local or regional context. The pottery data has not been compared against the site evidence.

### **2 Roman**

- 2.1 Some 279 sherds of Roman pottery are present with a mixture of continental and regional imports and local coarsewares.
- 2.2 Amongst the continental imports are 13 sherds of samian and three sherds of amphorae. The samian seems to be mainly Central Gaulish with examples of cups (Dr 27), dishes (Dr 36) and decorated bowl (Dr 37). The amphora sherds are from a Baetican olive oil container (Dressel 20) from southern Spain. This latter type is one of the commonest amphora types to be found on Roman sites in Britain imported from the 1<sup>st</sup> to 3<sup>rd</sup> centuries.
- 2.3 Regional imports are limited to two sherds of Dorset black burnished ware and two sherds from a whiteware bowl with red-painted decoration, possibly an early Oxfordshire product.

- 2.4 The local wares are dominated by products of the Severn Valley with a mixture of oxidised handmade storage jars, wheel made jars, tankards and bowls and reduced wares. An almost complete necked jar was recovered from context 125.
- 2.5 Also present is a tubby jar in Malvernian ware from 125 and various grey wares. Of note in the latter is a double-handled flagon from 102 and a short rimmed globular jar/beaker from 120. Other wares include sherds of white-slipped oxidised flagon and a small glazed sherd from 102 which may be Roman or post-medieval.
- 2.6 Overall the range of material present is typical of the later 1<sup>st</sup> and 2<sup>nd</sup> centuries AD. There is no late Roman pottery present

### **3 Post-medieval-modern**

- 3.1 Seven sherds of post-medieval wares were present mainly from context 1302 with a single sherd from 202.

### **4 Ceramic building material**

- 4.1 Some 25 fragments of ceramic building material(CBM) was recovered. This includes one large brick or pila fragment from 104 which on the basis of the pottery is likely to be Roman. A further 17 disintegrated fragments of probably CBM was also recovered from 104.
- 4.2 Seven small fragments from contexts 202, 1302 and unstratified are undated but may be post-Roman.
- 4.3 Two fragments of undiagnostic fired clay came from context 102.

### **5 Potential and recommendations**

- 5.1 This is quite a small assemblage but clearly demonstrates the presence of early Roman activity at or on the vicinity of the site. The assemblage is quite diverse with a mixture of imports and local wares. Potentially it would appear to be a site of some note rather than an isolated rural farmstead. This is particularly reflected in the number of samian sherds which effectively account for 4.5% of the group.
- 5.2 If further work is undertaken at the site the above assemblage should be taken into account.

Context	samian	amphor	SVW	BB1	Malv	other	Pmed	Tot No	Tot Wt	Date	CBM/fc
102	0	0	41	0	0	1	0	42	1109	C1/2?	2
104	11	3	51	1	5	25	0	96	1688	C2	18
105	0	0	3	0	0	4	0	7	132	C1 AD	
107	0	0	1	0	0	0	0	1	5	Roman	
108	1	0	17	0	0	0	0	18	341	C2	
118	0	0	3	0	0	0	0	3	270	Roman	
120	0	0	4	0	0	4	0	8	69	C2	
123	0	0	4	1	0	0	0	5	155	C2	
125	0	0	71	0	14	6	0	91	2030	C1-C2	
202	0	0	0	0	0	0	1	1	7	postmed	4
206	0	0	1	0	0	0	0	1	1	Roman	
1302	0	0	0	0	0	0	6	6	21	postmed	2
us	1	0	6	0	0	0	0	7	71	C2	1
<b>TOTAL</b>	<b>13</b>	<b>3</b>	<b>202</b>	<b>2</b>	<b>19</b>	<b>40</b>	<b>7</b>	<b>286</b>	<b>5899</b>		<b>27</b>

Table 1: Summary of pottery from Rowe Ditch

## Appendix 2.1

K. H Crooks, Border Archaeology

Not included in the original report was a substantially complete Malvernian (Malv) hand-made dish from context (125). The vessel had slightly flaring sides and an external lattice decoration, a form appearing to derive from Black Burnished ware. The fabric was fairly coarse with one particular inclusion measuring 12mm, suggesting a 2<sup>nd</sup> century date for this vessel. The majority of examples imitating Black Burnished ware forms in this fabric are of the later wheel-thrown type and date to the 3<sup>rd</sup> to 4<sup>th</sup> centuries.

During Phase 2 of the work (APSRD3) a further three sherds (127.4g) of Severn Valley ware were recovered from context (3005) the secondary fill of ditch recut [3011]. These sherds were not considered in the initial assessment. All three were moderately abraded. They included the rim of a large storage jar, similar to that of a vessel recovered from context (105) and a further sherd from a jar with grooves at the neck similar to one found at Deansway (Bryant & Evans Fig. 154:10). A date in the 1<sup>st</sup> or 2<sup>nd</sup> century is likely.

A single fragment of non-diagnostic fired clay was found in the same trench in context (3002).

## Reference

Bryant, V., & Evans J., 2004, *The Iron Age and Romano British pottery*, in Dalwood, H., & Evans, R., *Excavations at Deansway, Worcester, 1988-9: Romano-British small town to late medieval city*, C.B.A

## 14. Appendix 3: Geoarchaeology of the Arrow Valley Pleistocene Terrace

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23<sup>rd</sup> July 2008, revised 28<sup>th</sup> August 2008. Additional work 14<sup>th</sup> November 2008

### 14.1 Introduction

Investigations conducted by Border Archaeology along the Arrow Valley floodplain at The Leen, Pembridge were visited on 4<sup>th</sup> July 2008 with the aims of: -

- a) Recording of the geoarchaeology of relevant features
- b) Recording the deposits and commenting on the geoarchaeology of the Arrow Valley, and
- b) Placing this into a wider context in the light of other research conducted in the area (e.g. White 2003)

In order to accomplish this satisfactory this report is divided into two parts: part one concentrating on the archaeological geoarchaeology, and part two on the geoarchaeology of the Arrow Valley.

All of the access pits and profiles examined were located on the Pleistocene terrace above the main River Arrow itself, and in the Devensian glacial outwash plain. As such, this lies on the northern fringes of, and at higher altitude than, detailed areas of geoarchaeological study by Macklin *et al.* (2003).

#### 14.1.1 Methods

Where sediments were described in detail terminology followed that outlined in Hodgson (1976) and all Munsell colours were recorded moist. All detailed descriptions are contained in the reports or presented in the Appendix.

### 14.2 Part 1: Geoarchaeology of the archaeological features (APSRD1 & APSRD2)

Archaeological features and their infill deposits were examined in the limited area excavation of AP 1 and 2 at the entrance and exit borehole bits on the W and E side of the Rowe Ditch schedule ancient monument.

#### 14.2.1 Features in APSRD2

##### 14.2.1.1 Ditch 2005

The ditch is V-shaped 0.3m at base and 1.38m deep, and c 4m wide. The stony secondary fill of the S side (207) contrasts with the stone-free secondary fill on the N side (215) indicating presence of difference source material (bank) eroding into the ditch. We can suggest that the ditch was cut and material removed formed an adjacent bank. This protected the ground deposits on one side but created a reservoir of material to erode into the ditch. The open side shows uniform, though different infilling



relating to a differing source material, but also indicating the possibility of ploughing aiding the infill process.

The central 'pipe' (206): 'Pipes' of coarse stony material are common in ditches where, during the infill process of stony deposits, stones roll into and lie in the bottom of the ditch creating a vertical stack or 'pipe' of stones in the centre, often seen as a different fill or even a feature. They are characterised by i) limited orientation of the stones, and ii) no clear feature cut.

No clear-cut edge is noticed and some stone orientation is present. The density of stones throughout this 'context' is striking. This suggests a stone 'pipe', or stones falling into the void left by a removed post, or that these are the packing in a posthole which must have been cut through the naturally silted and completely infilled ditch. As such, a clear cut for the posthole would be expected, and perhaps a post pipe present, but neither were observed in this section. . This may, however, be caused by the removal of a post, and disruption of stones. Although it is not clear whether this is an archaeological or natural infill feature, on balance this is probably a posthole cut through the entirely infilled ditch and packed with stone, and from which the post has later been removed.

<b>Context</b>	<b>Unit</b>	<b>Description</b>
(206)	Pipe	A jumble of small and medium and rear large stones in a brown (10YR 4/3) silt loam, some orientation present in basal especially – no clear cut for this deposit – but this <u>might</u> relate to postholes seen elsewhere in this feature
(207)	2ndry fill	N side – almost stone-free secondary fill on N side – Brown (10YR 5/3) to yellowish brown (10YR 5/4) silty clay loam
(215)	2ndry fill	S side – stony secondary fill on S side – Yellowish brown silty clay loam with some fine sand, common rounded stones, rare charcoal pieces. Platy stones on sides and towards the base of this fill show clear orientation tipping towards centre – indicating this is a natural, rather than dumped (back) fill
(208)	Primary	Coarse vacuous medium platy stone in and mixed dark yellowish brown (10YR 4/4) silty loam
(209)	Primary	Largely non-matrix supported loose fine and medium stones

Table 1: Descriptions of the contexts in E-facing section of ditch [205]



Fig. 1: E-facing section of ditch [205]

## 14.2.2 Features in APSRD1

### 14.2.2.1 Gravel undulations

Excavation of APSRD2 showed a shallow sequence (c. 30cm of overbank alluvium) over gravel. The gravel form a higher 'ridge' of land or 'island' within which and on the edge of which are archaeological features. Subtle undulations in the gravel surface provide opportunities for settlement and activity on drier pieces of land within the prehistoric and early historic Arrow Valley floodplain. These subtle, but significant, topographic features have now been buried and hidden by a blanket of overbank alluvium.

### 14.2.2.2 Ditch against gravel rise [124]

The shallow ditch abuts gravel on its SW side, and cuts overbank floodplain alluvium on its NE side. The ditch containing a mixed, slightly stony, infill abuts a rise in the gravel with a clearly biotically mixed and pedogenically weathered facies at its surface. We may suggest that this is formed by rooting of, and burrowing at the base of, a former hedge line suggesting the presence of hedge and ditched boundary.

### 14.2.2.3 Comments

Ditch [124] on gravel edge (hedged) abuts the gravel ridge, and contains a thin alluvial (overbank flooding) facies at its base

Romano-British ditch [103] cuts the overbank alluvium, and has a stony infill (ploughing)

Pit [135] on the gravel rise has an alluvial infill at base (overbank flooding), but is deliberately back-filled with a jumble of common medium stones

## 14.3 Part 2: Geoarchaeology of the Arrow Valley floodplain

### 14.3.1 Introduction

A series of 17 Access Pits were machine excavated in the Arrow Valley at Leen Farm, Pembridge, between Staunton on Arrow and Pembridge. The investigated area lies N of the unclassified road, on the Pleistocene terrace to the N of the Arrow valley itself. The study area lies on undivided Old Red Sandstone where the River Arrow 'meanders over the Lower Old Red Sandstone till and alluvium covered lowlands following the course of the Late Devensian outwash plain that was constructed at the front of the Kington-Orleton Moraine' (Macklin *et al.* 2003, 53).

### 14.3.2 Methods

Profiles in 16 of the 17 access pits were inspected and recorded; the sedimentary sequence was described in full and in detail in APSRD2, which acts as the key sequence, and depths of the main units were recorded in the remaining exposures (Appendix).

### 14.3.3 Outline geoarchaeological and archaeological potential

As the sedimentary sequences examined lie on the higher altitude Pleistocene terrace, the potential for deeply stratified sediment and waterlogged organic deposits was relatively low. Nevertheless, the geoarchaeology of the Pleistocene terrace was not



characterised nor geoarchaeologically examined by Macklin *et al.* (2003), and this study provides the opportunity to do just that. The self-defined aims were, therefore,

- 1) To characterise the geoarchaeology of the Arrow valley Pleistocene terrace
- 2) To define the sedimentary architecture
- 3) To attempt to relate any sedimentary facies to alluviation phases identified by Macklin *et al.* (2003), and
- 4) To provide comment of the archaeological potential of this landscape in light of the recorded geoarchaeology

#### 14.3.4 Geoarchaeology of the Arrow Valley Pleistocene terrace

The exposed profiles were largely gravels of a Pleistocene outwash plain forming the terrace, mantled by inorganic, minerogenic overbank alluvium. No organic waterlogged or buried soils were recorded within this facies. No direct dating of the sediments was possible and, as such, no sampling of undisturbed sediment was deemed necessary. The geoarchaeological records (**Table 2, Appendix**) provide an archaeological record of the sediment history of the Arrow Valley Pleistocene terrace.

The main sequence of events is defined as follows:

- 1a) Glacial outwash fluvial gravel
- 1b) Minor braided channels in the gravel surface
- 2) Periglacial disturbance
- 3) Holocene overbank alluvium
- 4) Soil formation (ploughing and pasture)

##### 14.3.4.1 The basal Pleistocene gravels

The basal gravels were recorded as at least 2.4m deep and comprised sorted and unsorted banded, largely non-matrix supported small, medium and few large subrounded and subangular gravel. Banding of finer (small and medium) gravel was separated by bands typically 0.2m thick) of coarser (medium and large) gravel. These represent glacial meltwater outwash and gravel deposits across the whole of the Arrow Valley and form the extensive Pleistocene terrace of the Arrow Valley (cf. Macklin *et al.* 2003, fig. 33-37).

The surface of the gravel has been subjected to limited channelling, typically infilled with a stone-free reddish-brown silty clay. Subsequently, both these channel infills and the gravel surface have been extensively subjected to periglacial deformation, with cryoturbation pockets, stone orientation in small involution pockets; that is the stones are aligned and orientated due to frost-heave action.

Beneath the relatively level alluviated landscape, the gravel palaeo-surface undulates considerably, occurring at depth varying between 0.31 and 1.02m. The significance, relevance and potential of this to the archaeology of the terrace are outlined below.

##### 14.3.4.2 Channel infills

The surface of this terrace is dissected with Pleistocene channels infilled with a uniform, stone-free reddish brown clay and silty clay alluvium (e.g. AP 9 & 13), and sealed by Holocene alluvium. The reddish brown coloration, presence of fine sand grains and rapid microscopic examination suggests that this alluvium may largely be derived from (Lower) Old Red Sandstone facies, and contrasts with most of the Holocene alluvium.

#### 14.3.4.3 Holocene overbank alluvium

Mantling the Pleistocene outwash gravel was a yellowish-brown stone-free overbank floodplain alluvium. It was characteristically a minerogenic well-sorted silt and silty clay, containing no obvious alluvial structures. It varied between 0.05 and 0.48m thickness under the present-day ploughed or pasture soil (typical brown earths). Variation in thickness largely reflects the fluctuations in altitude of the underlying gravel surface. The A and B horizons of the soil developed in the overbank alluvium constitute the full alluvial brown soil and are recorded as a single unit in the summary descriptions presented in the Appendix.

Context	Unit	Depth	Description
(201)	A	0-18	Dark greyish-brown (10YR 4/2) humic silty (loam), with medium blocky structure, many medium and small rounded stones, abrupt wavy boundary <u>A horizon</u>
(202)	B	18-38 / 42	Yellowish-brown (10YR 5/4) almost stone-free <u>silt</u> , with weak large block structure, clear wavy boundary <u>Well developed pasture soil in overbank alluvium</u>
(209)	B1	42-83	Yellowish-brown (10YR 5/4) stone-free (very rare very small and small stones), well-sorted fine fluvial overbank silt, massive structure, abundant very fine macropores, occasional clear vertical macropores (to 8mm) containing humic dark greyish brown humic silty loam (A-horizon) material, rare fine charcoal flecks towards top, and some voids (10 × 7cm) indicating biotic activity (burrowing) near base, abrupt wavy boundary <u>Well-sorted Holocene overbank floodplain deposits</u>
(210)	R	83-120 (320+)	Non-matrix supported gravel comprising small, medium and few large rounded gravel (in dusting of a silty loam). The surface of this facies shows undulations and cryoturbation features with stone orientation, typically 35-45cm across and a minimum of 15cm deep. At depth the gravel is sorted and crudely banded fine and medium gravel alternating with bands (20cm) of coarser (medium and large) gravel glacial outwash fluvial gravel. <u>Periglacially altered, and cryoturbated, glacial outwash gravel</u>

Table 2: Description of the Arrow Valley sediments from APSRD2 (E-facing section)



Fig. 2: Typical profile of the sediments on the Pleistocene terrace, seen here in E-facing section of APSRD2

There are two distinct alluvial facies. The lower alluvial facies are Devensian channel fills, while the upper alluvial facies (Alluvium 1 in Appendix) is clearly Holocene and is cut by Romano-British and later features in places and potentially seals other features elsewhere.

The upper alluvial facies (Holocene fine-grained overbank alluvium) shows, in a number of locations, post-depositional changes, such as increased mottling, changes in colour and texture (largely on interped surfaces – but giving a more clay-rich or silt-rich deposit). Also, at the base of the deposits, the contact with the fluvio-glacial gravel is generally clear to abrupt, but at several locations there is a clear thin transition zone where sand and gravel have been incorporated into the initial alluvium as a result of alluviation and former *in situ* soil weathering. These two zones in the alluvium do not represent different sedimentary events or depositional modes so are not differentiated in the summary descriptions presented in the Appendix.

#### 14.3.5 The geoarchaeological wider picture

The overbank floodplain alluviation seen here has not been recorded in previous geoarchaeological studies, as they have largely concentrated upon channel fills, near channel fills and the lower river terraces (e.g. Barber & Coope 1987; Dinn & Roseff 1992; Higgs 1987; White 2003 etc.). As such, the relationship between the alluvial patterns seen in the Arrow, Lugg and Severn valley will not always be directly comparable. The Pleistocene floodplain is likely to receive overbank alluviation from

- i) Exceptional flooding events from the river, and
- ii) Discharge onto the Pleistocene terrace from the interfluves

Flooding from the Arrow itself will only represent exceptional and high level events and thus the amplitude, rather than occurrence, of the main alluviation phase identified by



Macklin *et al.* (2003, 58) is significant. Nevertheless, phases of alluviation are likely to occur during the phases they have identified.

<b>Alluviation Periods</b>	<b>Archaeological Period</b>
AD 1660-Present	Modern
AD 660-1230	Medieval
AD 50-390	Romano-British
480-110 BC	Iron Age
1510-12330 BC	Bronze Age
4250-3640 BC	Neolithic
5900-5500 BC	Mesolithic

Although Macklin *et al.* (2003) relate this phases of alluviation to national (Macklin & Lewin 2003) and global (Macklin *et al.* 2003, 39) events, alluviation may result from clearly anthropogenic activity of deforestation, agriculture and settlement (e.g. Bell 1981; 1982; Limbrey 1987) which may locally over-ride and mask wider-scale trends.

### 14.3.6 Relevance of alluviation to the Archaeology of the Arrow valley

The presence, age and extent of alluvium have a direct implication for the occurrence, visibility and recognition of archaeological evidence and on its palaeo-environmental significance. Comments on these main topics are addressed below.

#### 14.3.6.1 Age of deposits

All of the deposits observed (Appendix) were minerogenic overbank alluvium with no organic or waterlogged elements. As such, there is no potential for absolute dating via radiocarbon dating, though the potential for optically stimulated luminescence (OSL) dating certainly exists (cf. Bailiff 1992). Relative ages of the alluvial packs (*sensu* Macklin & Needham 1992), can be defined via the archaeological record, though it must be recognised that the alluvium does not represent a single-date event. It may accumulate in an undifferentiated fashion during long periods and this cannot be considered in terms of an archaeological context. Episodes of alluviation, may therefore be related chronologically by the present of features sealed by, within or cut into the main alluvial facies.

The main alluvial facies is cut by Romano-British features, but some other Roman-British features seem to contain alluvium. Whether features cut the alluvium or the underlying gravel of the Pleistocene terrace is, in part, due to their location and altitude. Examination of the archaeological evidence (not available to AEA) will help to define some of the chronological parameters of alluviation. Rapid and cursory field investigation and examination of the archaeology (APSRD1 and APSRD2) seems to indicate an immediate pre-Roman and possibly Romano-British phase of alluviation, and a post-Roman phase of alluviation which cannot be differentiated in the main alluvial sequence (**Table 2; Fig 2**). Nevertheless these could broadly fit into two previously defined phase of alluviation namely; Iron Age and Romano-British (480-110 BC and AD 50-390) and medieval (AD 660-1230)

#### 14.3.6.2 Extent of deposits

From the limited investigations along a very restricted part of the Pleistocene terrace it is clear that overbank alluvium extend across all of the examined area, excepting those areas where the gravel attain a locally higher altitude. We can surprise that much of the Pleistocene terrace within this locality contains, therefore, a blanket of alluvium varying

in thickness between about 0.2m and 0.3m beneath the present soil (**Table 3**). This provides depths to the base of the alluvium of about 0.5m.

<b>AP</b>	<b>6</b>	<b>7</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Base of topsoil	28	34	31	28	34	32	28	38
Base of alluvium	48	47	52	68	38	80	48	83
Alluvium thickness	30cm	13cm	21cm	40cm	4cm	48cm	20cm	45cm
Top of gravel	48	47	31	68	38	80	48	83

<b>AP</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>
Base of topsoil	35	31	35	32	25	30	32	23/33
Base of alluvium	68	51	73/102	58	43	46/62	52	38
Alluvium thickness	33cm	20cm	64cm	26cm	18cm	32cm	20cm	5cm
Top of gravel	68	51	102	58	43	62	52	38

Table 3: Depth and thickness of main geoarchaeological facies (all depths in cm)

#### 14.3.6.3 Palaeo-environmental potential

The sediments themselves constitute a record of palaeo-environmental change, by their presence and their inherent chemical and physical properties, and contained potential palaeo-microfossils (pollen). They can thus provide a 'fingerprint' of past human activity in the valley and its interfluvies. Apart from a basic geoarchaeological record, as provided here and in Macklin *et al.* (2003), probably one of the best source of proxy palaeo-environmental information would be a) the palynological record of a dated sequence, and b) sediment or soil micromorphology of deposits associated with archaeological activity.

As no suitable dating evidence was recovered from key alluvial sequences no sampling was undertaken during this phase of work, but should remain a potential for future work. Whether pollen survives in the alluvium here has also yet to be established.

The potential of buried soils and sealed palaeo-environmental information, although not recorded within the 17 access pits excavated, remains a distinct possibility for this area - see below.

#### 14.3.6.4 Archaeological significance and bias

The fluvio-glacial Pleistocene gravel terrace gravel in the Arrow Valley NW of Pembridge contains clear undulations in its surface potentially giving rise to former islands and dryer areas within the Arrow valley. The gravel is mantled by variable depths (depending on the altitude of the underlying gravel), of fine-grained well-sorted Holocene overbank floodplain alluvium.

The presence of buried gravel islands provides the potential for spatial concentration of archaeological activity on and around these locales. Indeed excavation of Access Pit 1 and Access Pit 2 clearly demonstrated this as here the gravel is at a higher altitude and the alluvial facies is thin or negligible. The alluvium can also, therefore, bury, seal and contain significant archaeological evidence that is not readily recordable by normal archaeological reconnaissance. Historic Environment Records (or Sites and Monuments records) will thus be biased against the presence of archaeological activity in these alluviated landscapes. Whole categories or periods of archaeological activity may thus remain unrecorded.

Such data is enhanced by the potential of containing buried land surfaces and stratigraphically related deposits containing pollen and other geoarchaeological fingerprints. That entire classes, or periods of archaeological evidence can lie hidden from archaeologists is exemplified by the relatively recent discovery of, for instance, Beaker sites, on the chalkland of southern England. These were buried under hillwash (Allen 2005); a considerably more local deposits than alluvium.

## 14.4 Phase 2: Geoarchaeology of APSRD3

The geoarchaeology of ditch [205] was described previously (AEA 2008, report AEA 048.1.02, August 2008). The excavation of an additional pit (APSRD 3) c. 20m to the E of AP 2 (APSRD 2) revealed another section of the ditch. Comments on the infills and comparison with profiles described previously were made on the basis of photographs and drawings supplied by Border Archaeology.

### 14.4.1 Ditch 205/3003

The main areas of interpretation discussed here are the nature and history of the re-cuts within the main U-shaped ditches, i.e. [212] in ditch [205] and [3011] in [3003].

*Ditch [205] profile in APSRD 2 (described in previously (AEA 2008, report AEA 048.1.02, August 2008)*

The profiles described in ditch [205] contained asymmetrical fills (207) and (215), suggesting that the secondary fills represent differing infills on the N and S sides, possibly suggesting the presence of a bank on the southern (outer/exterior) side. This is consistent with both drawn sections in APSRD2.

The re-cut [212] into this was V-shaped of a possible post or palisade construction, though no post-pipe was detected in the field, but the stony infill (206) did indicate a deliberately selected, possible packing material. The possible post feature is less obvious, if present at all, in the eastern (i.e. west-facing) profile. The re-cut on the eastern (W-facing) section was, however, a broad V-shape, with no indication of post-pipe or posthole and is very similar to the re-cut [3011] recorded in ditch [3003] in AOPSRD 3.

### 14.4.2 Ditch [3003] Profile in APSRD 3

The profiles (as seen from drawings and photographs, and context descriptions) of ditch [3003] show similar general histories to that recorded in APSRD 2, that is, a broadly U-shaped ditch with only slightly asymmetrical secondary fills (note that context 3007 is drawn with slightly more inclusions on the W (interior) side of the ditch)

The re-cut [3011] is consistent in profile, shape and size with that seen on the closest, E (i.e. W-facing) section of APSRD 2. This is clearly a re-cut with more stony infills, which, in view of the nature of the primary and lower fills of this ditch (i.e. context 3007 and 215, 207 and 208) strongly suggests the purposeful of a stonier matrix. No obvious post-pipe, posthole or palisade feature can be seen in this profile.

#### 14.4.2.1 Context interpretations for APSRD 3

The contexts are listed in stratigraphic order and interpretative statements added:

- 3001 – a horizontal material = ‘topsoil’
- 3002 – ploughed overbank alluvium
- 3004 – upper tertiary fill of re-cut 3011
- 3005 – secondary/tertiary fill of re-cut 3011; this is probably tertiary fill
- 3006 – primary fill, deliberate packing fill
- [3011] – re-cut within ditch [3003]
- 3007 – secondary fill of [3003]
- 3008 – primary fill of [3003]
- [3003] – ditch, same as [205]
- 3009 – well-sorted overbank floodplain alluvium
- 3010 – glacial outwash gravel

#### 14.4.3 Concluding interpretative comments

Ditches [205] and [300] recorded in APSRD 2 and APSRD 3 respectively show similar profiles, shape, size and have consistent infill histories. These probably represent the same feature describing a single enclosure or monument.

The initial broader U-shaped ditches were cut and left open allowing natural infilling to occur comprising a stone-rich primary fill (3008 and 211 and 208) with less stony secondary fills (207/251, 208 and 3007). Asymmetrical or slightly asymmetrical secondary fills were recorded in all three drawn and recorded profiles. In ditch [205], both profiles indicate a stony secondary fill on the southern and exterior side of the ditch, while that of ditch [3003] suggests a stony fill on the western and interior side. These are clearly inconsistent with increased stoniness originating from a bank unless it is an exterior bank (ditch [205]) and that recorded in [3003] is so slight as to represent no significant variations and no bank spill in the ditch at this point.

A more V-shaped profile ditch [21 and 3011] was cut through this almost completely infilled ditch. The re-cut in all cases is predominantly stony, suggesting deliberate and selective infill, probably packing. No post-pipes or postholes are present to suggest the presence of a fence or palisade. If such a structure did exist, it was removed probably when the deposits were relatively loose (and therefore young) enabling collapse of the void, rather than infill with A horizon (topsoil) and overbank alluvium that may have occurred over the ditch. An alternative scenario is that this stony infill represents deliberate backfilling and purposeful decommissioning of the enclosure.

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## 14.6 Appendix

### 14.6.1 APSRD1

Context	Unit	Depth	Description
101	A	0-28	<u>Pasture/ploughsoil</u>
108	Alluvium 1	28-48	<u>Well-sorted Holocene overbank floodplain deposits</u>
121	R	48+	<u>Periglacially altered, and cryoturbated, glacial outwash gravel</u>

## 14.6.2 APSRD2

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
201	A	0-18	A horizon
202	B	18-38 / 42	Well developed pasture soil in overbank alluvium
209	Alluvium 1	42-83	Well-sorted Holocene overbank floodplain deposits
210	R	83-120 (320+)	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.3 AP3

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
301	A	0-32	Pasture/ploughsoil
302	Alluvium 1	32-80	Well-sorted Holocene overbank floodplain deposits
319	R	80+	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.4 AP4

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
401	A	0-34	Pasture/ploughsoil
402	Alluvium 1	34-38	Well-sorted Holocene overbank floodplain deposits
403	R	38	Grave surface rising to W Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.5 AP5

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
501	A	0-28	Pasture/ploughsoil
503	Alluvium 1	28-67/9	Well-sorted Holocene overbank floodplain deposits Contains a diffuse band of reddish brown colour
504	R	67/9+	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.6 AP6

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
601	A	0-32	Pasture/ploughsoil
602	Alluvium 1	32-48	Well-sorted Holocene overbank floodplain deposits
604	R	48+	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.7 AP7

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
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701	A	0-34	Pasture/ploughsoil
702	Alluvium 1	34-47	Well-sorted Holocene overbank floodplain deposits
704	R	47+	Clearly undulating cryoturbated gravel surface, with stone orientated hollows infilled with silty clays Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.8 AP9

Context	Unit	Depth	Description
901	A	0-31	Pasture/ploughsoil
903	Alluvium 1	31-52	Well-sorted Holocene overbank floodplain deposits
904	R	52+	In NE corner dark reddish brown clay present with fine mica, containing gravel bands with sandy loam – braided river deposits in gravel outwash deposits Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.9 AP10

Context	Unit	Depth	Description
1001	A	0-35	Pasture/ploughsoil
1002	Alluvium 1	35-68	Well-sorted Holocene overbank floodplain deposits
1004	R	68+	The gravel surface has cryoturbation features and possible shallow channel features. The gravels are banded with grey clay and gravel. Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.10 AP11

Context	Unit	Depth	Description
1101	A	0-31	Pasture/ploughsoil
1103	Alluvium 1	31-51	Well-sorted Holocene overbank floodplain deposits
1104	R	51+	Slightly mixed and locally cryoturbated gravel surface Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.11 AP12

Context	Unit	Depth	Description
1201	A	0-35	Pasture/ploughsoil
1203	Alluvium 1	35-73	Well-sorted Holocene overbank floodplain deposits
1204	Alluvium 2	73-102	Reddish brown and gleyed Well-sorted Holocene overbank floodplain deposits
1205	R		Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.12 AP13

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
1301	A	0-32	Pasture/ploughsoil
1305	Alluvium 1	32-58	Well-sorted Holocene overbank floodplain deposits
1304	R	58+	Reddish brown silty clay in one corner indicating possible glacial channel infill. Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.13 AP14

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
1401	A	0-25	Pasture/ploughsoil
1403	Alluvium 1	25-43	Well-sorted Holocene overbank floodplain deposits
1404	R	43+	surface undulating and slightly cryoturbated Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.14 AP15

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
1501	A	0-30	Pasture/ploughsoil
1503	Alluvium 1	30-46	Well-sorted Holocene overbank floodplain deposits
1505	Alluvium 2	46-62	Reddish brown mottled and gleyed Well-sorted Holocene overbank floodplain deposits
1504	R	62+	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.15 AP16

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
1601	A	0-32	Pasture/ploughsoil
1603	Alluvium 1	32-52	Well-sorted Holocene overbank floodplain deposits
1604	R	52+	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.16 AP17

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
1701	A	0-28/33	Clear plough pan art 28-33cm Pasture/ploughsoil
1703	Alluvium 1	33-38	Well-sorted Holocene overbank floodplain deposits
1704	R	33/8+	Periglacially altered, and cryoturbated, glacial outwash gravel

## 14.6.17 APSRD3

<b>Context</b>	<b>Unit</b>	<b>Depth</b>	<b>Description</b>
3001	A	0-28	<u>Pasture/ploughsoil</u>
3002	Alluvium 1	28-36	<u>Well-sorted Holocene overbank floodplain deposits</u>
3004	R	36+	<u>Periglacially altered, and cryoturbated, glacial outwash gravel</u>



## Summary

Report Name & Title	Archaeological Excavation of Engineering Access Pits at Leen Farm Pembridge Herefordshire	
Contractor's Name and Address	Border Archaeology Chapel Walk Burgess Street Leominster Herefordshire HR6 8DE	
Site Name	The Leen Farm Pembridge Herefordshire	
Grid Reference (8 fig)	NGR SO 3740 5964 – SO 3889 5919	
Planning Application Number	N/A	
SMR Number/s of Site	48670	
Date of Fieldwork	May-July 2008; October 2008	
Date of Report	November 2008	
NUMBER AND TYPE OF FINDS		
Type	Period:	Quantity
Pottery	Roman	276
CBM	Roman	23
Flint	Prehistoric (?)	6
Animal bone	N/A	35
Metal finds	N/A	22
Other	N/A	3 (daub fragments)
NUMBER AND TYPE OF SAMPLES COLLECTED		
Sieving for charred plant remains	No of features sampled	21
	No of buckets	31
C <sup>14</sup> /scientific dates	No and Type	N/A
	Result	N/A
Pollen	No of columns/spot samples	N/A
	Name of pollen specialist	N/A
Bone	Number of buckets sieved for bone	N/A
	Quantity Recovered	N/A
	Period	N/A
Other (type and specialist)	N/A	



### **Summary of the report:**

This series of excavations has indicated the potential archaeology that may be concealed beneath alluvium in this part of the Arrow Valley. In particular, the excavation of APSRD1 and APSRD2 has shown that archaeological activity is likely to concentrate on and around 'gravel islands' concealed beneath the relatively level alluviated landscape and not readily recordable by normal archaeological reconnaissance. These islands represent undulations in the gravel palaeo-surface, which occurs at variable depths of between 0.31 and 1.02m.

The excavation of APSRD1 revealed a series of ditches and pits containing evidence of settlement activity apparently linked to the Iron Age / Romano-British farmstead situated approximately 120m to the N. APSRD2 revealed part of a single ditch circuit relating to a sub-circular ditched enclosure previously identified from aerial reconnaissance as a Neolithic henge monument. The excavation exposed the ditch profile and evidence of eroded bank material was found within the ditch. Slight evidence of reuse was identified in the form of possible postholes within the ditch, which may be associated with the incorporation of the enclosure into the later farmstead complex.



## Document Control

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<b>Report written by</b>	<i>James Archer BA &amp; George Children MA</i>		
<b>Report edited by</b>	<i>Stephen Priestley MA</i>		
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