Plot 5000
Western Approaches Distribution Park
Avonmouth
South Gloucestershire

Archaeological Evaluation Report

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Plot 5000, Western Approaches Distribution Park, Avonmouth, South Gloucestershire

ARCHAEOLOGICAL EVALUATION REPORT

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SUMMARY

Oxford Archaeology (OA) was commissioned by John Samuels Archaeological Consultants, on behalf of Gazeley UK Ltd, to carry out a field evaluation at Plot 5000, Western Approaches Distribution Park, South Gloucestershire (NGR 5499 8348). The work was carried out as a condition on a planning application for warehouse development, associated offices and car parking facilities. The work was carried out in November / December 2006.

Eight geoarchaeological boreholes and three auger holes, thirty-one evaluation trenches and two small open area investigations, were excavated.

The borehole survey and assessment of geotechnical records have allowed the post-glacial sediment sequence in Plot 5000 to be modelled. Successive peat horizons have been identified, which have good potential for the preservation of biological remains. The cores are likely to be suitable for palaeoenvironmental reconstruction from the Mesolithic period onwards. Specialist assessment and radiocarbon dates would be required to establish the potential of the cores for detailed analysis.

The evaluation identified Roman activity on the northern edge of the site, focussed on trench 22. An area to the west of trench 22, and an extension to the east were excavated to define the extent of activity. This revealed ditches and gullies forming an enclosure and its sub-division. A significant quantity of finds was recovered from this trench, dated to the later Romano-British period (2nd to 4th century AD). Further Roman pits and ditches were identified in trenches 18, 26, 30, 31, 32 and 33. The area of Roman activity coincides with a high point in the underlying Pleistocene topography (as defined by the surface of the Mercia Mudstone). The present site topography is almost flat, but the underlying geology may have influenced surface drainage patterns, creating a slightly dryer area suitable for settlement.

Ridge and furrow is clearly visible in fields to the south, but does not extend into the evaluation area, possibly having been levelled by modern groundworks. Undated ditches were present throughout the site, many respecting the alignment of extant drainage ditches. Most are likely to be field boundaries and drains of post-medieval and modern date. They are not considered archaeologically significant.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 In November 2006 Oxford Archaeology (OA) carried out a field evaluation at Plot 5000, Avonmouth Western Approaches Distribution Park, on behalf of Gazeley UK Ltd, through the agency of CgMs/ John Samuels Archaeological Consultants. The evaluation is in respect of a planning application for warehouse development, associated offices and car parking facilities. The work was carried out in accordance with a specification prepared by the client's consultant, S.Mortimer (John Samuels Archaeological Consultants, 1296/06/02), as approved by the South Gloucestershire Archaeology and Conservation Officer (D.Haigh), and the English Heritage Regional Science Advisor (V.Straker). The development site is situated at 6 m OD. The development area is 6.37 ha in total extent. The combined footprint of the warehouse and offices covers 32,535 m^2. The remainder (31,164 m^2) being taken up by car parks.

1.1.2 The evaluation comprised a two stage investigation of the proposed site consisting of a trenched evaluation and a borehole survey. Thirty-one trenches were excavated to examine the potential for archaeological features close to the ground surface. Eleven cores were retrieved in order to collect information and samples suitable for interpreting the depositional environment of the sediment with the objective of reconstructing the past environment and its significance for human activity.

1.2 Site location and topography

1.2.1 The site lies on Henbury Level (part of the Avon levels) of estuarine alluvium, 0.75 km from the Severn Channel, at an average of 6m above OD (Fig. 1). The site is generally flat with just 0.35 m between the highest and lowest points.

1.2.2 The solid geology consists of Triassic marl - Mercia Mudstone (Geological Survey of Great Britain, Sheet 250, 1981) overlain by marine alluvium and gravel and a band of post glacial alluvial deposits known as the Wentlooge Formation.

1.2.3 Much of the south-east of the site is dominated by marshland under grass and reeds. The south of the site is extensively overgrown with brambles. The east of the site is scrub land with abandoned vehicles. The north has undergone extensive modern disturbance with dumped piles of rubble, embankments and made ground associated with the current road and flood management. These areas are defined by substantial, modern and well established ditches and hedge-lines.

1.3 Acknowledgements

1.3.1 Thanks to Simon Mortimer of CgMs/ John Samuels Archaeological Consultants for commissioning and managing the fieldwork. Also to David Haigh, South Gloucestershire Archaeology and Conservation Officer, who monitored the

evaluation. Vanessa Straker (English Heritage Regional Science Advisor), kindly commented on the specification and borehole method.

1.3.2 The project was managed by Stuart Foreman. The fieldwork was carried out by Paul Murray with the assistance of Kate Brady, Chris Richardson and Cybil Woydowski, who remained positive and produced excellent results under very wet and difficult conditions.

1.4 Geoarchaeological and environmental background

1.4.1 In order to understand fully the character and distribution of archaeological sites in the Severn estuary area and the reasons behind major changes in settlement patterns in the past, it is necessary to understand the changing nature of the estuary. The present day topography of the area has undergone significant modification and bears little resemblance to the landscape of the prehistoric past. Evidence of early prehistoric surfaces and sites can be deeply buried underneath later accumulations of alluvium and made-ground. The surface of the mudstone formed the earliest surface onto which alluvial and estuarine sedimentation occurred, during the Holocene.

1.4.2 The Holocene sediments in the area consist of complex sequences of estuarine alluvium and organic clay, and peats, deposited in a variety of environments representing, variously, alder carr, fen, reedswamp, intertidal saltmarsh and mudflats. The currently adopted stratigraphic sequence for the Severn is based on work undertaken by Allen (1987; 1990a) and Allen and Rae (1987). The deposits are macrotidal and well mixed sediments, receiving fine sediment from many sources. At least four discrete lithostratigraphic formations, predominantly of sandy to silty clay, have been identified along the shores of the estuary in the intertidal zone.

1.4.3 The sediment sequence identified within the area of the site is known as the Wentlooge formation and has been broadly divided up into three main lithological units. The lower Wentlooge formation consists of estuarine and marine sands that would have been deposited during the early Holocene. The middle formation is characterised by silty clay alluvium and peat that reflect periods of changing sea-level and river flooding. The upper formation consists of pale green estuarine silty clays that began to accumulate 2500-3000 years ago and ceased to form in the Roman and post-Roman period. Reclamation during the Roman period isolated the Wentlooge Surface on large areas of tidal wetland in the lower estuary. The soil that developed on this surface is recognised as the Wentlooge palaeosol in those places where post-Roman breaching of the Roman sea defences led to a resumption of tidal sedimentation helping to bury and protecting this surface. The overlying thick largely pink sandy to silty clays, termed the Rumney Formation, began to form at times ranging from the early mediaeval to the early modern periods. The present day landscape developed following the later reclamation of the Levels that began in the Medieval period.

Previous work

1.4.4 The Upper Wentlooge sequence has been assessed previously on plots 6010, 6020, 4000, 7000 and 8000. This sedimentary sequence consists of greyish brown to olive grey clays, a double peat band and greenish grey clays (Moore et al 2002). The peat has been radiocarbon dated to the later Neolithic to Middle Bronze Age and the palaeoenvironmental data suggests a potential sea level index point of Bronze Age date (3151 +/-45BP at 3.69m aOD). No features or finds of archaeological origin have been found within the distribution park.

1.4.5 "During later prehistory, progressively rising sea levels caused ponding of freshwater river systems on the low-lying land of the Severn Estuary, resulting in the progressive accumulation of fen peat in these localised wet conditions. This peat accumulation occurred at rates exceeding those of sea-level rise. However there is widespread evidence for a final phase of marine inundation during the Late Iron Age and Roman periods, resulting in widespread alluviation and the development of marine transgressive saltmarsh vegetation. Alluvial deposition was probably exacerbated during this phase by changes in agricultural practises and other land-use, resulting in greater wash-off into local river systems." (Moore et al 2002).

1.4.6 The Wentlooge sequence has also been assessed during archaeological works at the following local sites: Avlon Works (Wessex Archaeology 2001), Katherine Farm (Allen *et al*, 2002), Cabot Park (1998) and the Avon Levels in general (Allen and Scaife 2001; Gardiner *et al*, 2002).

Stratigraphic assessment of Plot 5000

1.4.7 A rapid assessment of existing geotechnical records for the site was carried out by OA prior to fieldwork in order to ascertain whether the location of the eleven proposed boreholes within the development would be sufficient to characterise the sediment sequence and provide suitable samples for mitigation. The assessment also aimed to identify the most appropriate method for sampling the sequence taking into account the depth and types of sediments present.

1.4.8 The lithological data was entered into geological modelling software (© Rockworks 2004) and was used to correlate and model the main stratigraphic units across the area, with specific emphasis on identifying variation in the character and thickness of organic or alluvial deposits and the surface of the Mercia Mudstone.

1.4.9 The stratigraphy was relatively consistent and comprised the following main units:

- Made ground: Sandy gravels to brick and concrete embankment deposits.
- Silt clay alluvium: Grey brown silty clay slightly organic with occasional black speckles.
- Peat/organic alluvial deposits: silt peat bands interbedded within the silty clay alluvium, dark brown, spongy, pseudofibrous with numerous organic layers.
- Silty sand: light bluish grey with occasional peat lenses and fine sand
- Bedrock: Mercia Mudstone.

1.4.10 The data revealed significant variation in the elevations of the surface of the mudstone across the site. Several peat and peaty clays were noted, although the actual depth in which they occurred had not been consistently recorded. The review of geotechnical investigations identified significant variations and localised features within the main stratigraphic sequences that justified changes to the borehole locations. These new locations were outlined within the WSI (OA, 2006) and agreed with the County Archaeology and Conservation Officer. The proposed borehole locations were therefore selected to take into account all of the main stratigraphic units within the sequence and provide a suitable sampling strategy for mitigation.

1.5 Archaeological background

1.5.1 The following is reproduced from the specification, which is in turn is based on a desk-based appraisal of plots 5000 and 8000 (JSAC 1296/05/01). The appraisal contains a summary of the conclusions of the desk-based assessment undertaken for ICI Severnside (Wessex Archaeology 1995) with additional information taken from reports on fieldwork in the immediate environments of the development area. Further information on medieval/ post-medieval land-use is taken from information provided by the South Gloucestershire HER and the Capita Symonds (2005 a and b) geotechnical reports.

Prehistoric

1.5.2 No features or finds of prehistoric origin have been found within the distribution park. Peat deposits in the area have been dated to the later Neolithic to Middle Bronze Age (see 1.4.4 - 1.4.6 above).

Iron Age

1.5.3 The earliest known human settlement of the Levels dates to the Iron Age and is best represented by the excavations at Hallen, some 2.5 km to the south (Gardiner *et al* 2002). "The settlement consisted of roundhouses within palisaded enclosures and seems to have been based on a pastoral economy in a relatively dry environment (Wessex Archaeology 2001). Evidence for Iron Age activity has also been recovered at Green Lane, Redwick, *c* 1.8 km to the north of Plot 8000, and at Brynleaze Farm, a similar distance to the east (Barnes *et al,* 1993; Russet, 1990/1).

Roman

1.5.4 Recent work (summer 2005) at plot 4000, immediately to the east of the present site, has exposed Roman enclosures, at least three roundhouses and possible evidence for metal-working at c 5.45 m aOD, immediately below the topsoil. The post-excavation assessment illustrates that activity on the site spans the 2nd to 4th century AD. No evidence was found for Iron Age activity on this site (Wessex Archaeology 2006a).

1.5.5 Prior to the excavations on plot 4000, the only other recorded evidence for Roman activity within the distribution park was the discovery of a 'V'-shaped Roman ditch

from SSC:EA trial pit GO12 (NGR ST 55289 84225) (Lawler *et al* 1992). Roman activity had been thought to be concentrated on the higher ground to the east of the levels, although sites were known at Rookery Farm (*c* 2 km to the north of plot 8000) and Elmington Manor Farm (*c* 1 km to the south-east of plot 5000) (GGAT 1993; Rippon 1993). Later activity is recorded at Ellinghurst Farm (*c* 0.8 km north-east of plot 8000) and Crook's Marsh Farm (*c* 1.5 km south-west of plot 5000) (4th century AD) (Everton and Everton 1981; Juggins 1982).

1.5.6 What is not clear at present is whether the archaeology exposed at plot 4000 is an island of Roman activity or if this is in fact part of a wider settled landscape. It is also surprising, given the amount of alluviation prior to the Roman period, that the archaeology at plot 4000 should be exposed so close to the present ground surface; suggesting that there has been little or no alluviation since. It is possible that the focus of archaeological fieldwork, prior to the work on plot 4000, was on the Wentlooge sequence and trying to find archaeological deposits at depths in excess of 1.5 m below the current ground surface. Trenches recently excavated within plot 8000 did not identify any anthropogenic evidnce predating the medieval period. Although the exact mechanism for determining the suitability of individual plots within the distribution park for settlement is not yet understood, it appears likely that it is related to hydrology. It appears clear at present that evidence for Romano-British activity is not preserved uniformly across the distribution park.

1.5.7 It is possible that in the middle of the Roman period that this land was drained and managed such that it was not as prone to alluviation as before. It is clear that on plots 4000, 5000 and 8000, where the maximum topsoil depth recorded is c 0.3 m (with the exception of slight undulations and mounds) that the Roman and medieval ground surfaces were virtually the same.

Medieval

1.5.8 Place name and documentary evidence suggest that the Levels were exploited as meadowland in the late Saxon period, with settlement again centred on the higher ground to the east. Rippon (1993) has described the landscape at this time as 'irregular', characterised by dispersed settlements connected by droveways. Natural watercourses were frequently incorporated into these landscapes, giving many fields sinuous boundaries.

1.5.9 Rippon identifies a change from small irregular fields of the earlier medieval period to regularly arranged blocks of strip fields, with straighter droveways and small scale settlements, which he terms the 'intermediate' landscape. There is little evidence for significant medieval settlement of this date.

1.5.10 The South Gloucestershire HER contains an entry for Edsleigh Farm c 150 m north of plot 5000. It notes that earthworks were thought to be the remains of a medieval farm, but excavation showed them to be of little substance. Record 5334, referring to the same farm complex, states: *"Medieval farmstead? (site of). Stands in classic position on the edge of Dyer's Common, surrounded by ridge and furrow. Not part of manor*

of Compton Greenfield C19th. Present farmhouse much modernised 1980's. Formerly c 18th/19th - showed signs of alternate development."

Post-medieval

1.5.11 Extensive areas of ridge and furrow were mapped by Wessex Archaeology in their desk-based assessment of ICI Severnside (Wessex Arcaheology 1995). The fact that the pattern consists of straight rows, with the furlongs corresponding to the regular and rectangular arrangement of fields, has been taken to suggest that it is late in date. Earlier ridge and furrow, typical of open-field arable farming, commonly results in the reversed 'S' - shape.

1.5.12 Dyer's Farmhouse (HER entry 6514) is located c 100 m north of plot 5000. This is a converted longhouse with medieval origins, remodelled in the 17th and 19th centuries.

Medieval

1.5.13 The late thirteenth century is characterised by extensive drainage and management of the Levels. They appear to have been largely unsettled during the early medieval period, but utilised for seasonal grazing (Lawler 1994; BaRAS 1998).

2 EVALUATION AIMS

2.1.1 The aims of the evaluation, as stated in the JSAC specification, were in accordance with IFA Standards and Guidance for archaeological field evaluation (2001):

2.1.2 In summary, they were to

- determine the presence or absence of archaeological features, structures, deposits artefacts and ecofacts.
- If present, to define their character, extent, quantity and preservation.
- To assess their worth in a local, regional or national context.

3 EVALUATION METHODOLOGY

3.1 Scope of fieldwork

Borehole survey, core locations and sampling methodology

3.1.1 Terrier rig boreholes were drilled to recover intact column samples from eleven key locations that had been identified by the brief assessment of the geotechnical data. (Fig. 5).

3.1.2 The reasons for the selection of each location were as follows.

3.1.3 OA1, OA2 and OA3: These boreholes were targeted on the north and northwest of the site to investigate the sediment sequence where a significant rise in the surface of the mudstone was identified. It is possible that this existed as a marginal wetland area during the earlier prehistoric period, becoming submerged only later in the Holocene as a result of rising sea-levels. Locations such as these are generally considered to have a higher archaeological potential. Early prehistoric activity was identified previously at the edge of the higher ground (Locock 1998, 1999).

3.1.4 OA4, OA5, OA6 and OA7: These locations were selected in order to investigate the sediments sequences leading off the area of high ground. The intention was to obtain a sample sequence that illustrated any change between higher and lower elevations.

3.1.5 OA8, OA9, OA10 and OA11: These boreholes were originally located to the south-east of the site in order to investigate and provide samples from the deepest part of the sequence. The geotechnical records indicated a sediment sequence that extended to a maximum depth of 15 metres, with peat deposits at much lower elevations. The locations outlined within the WSI (OA, 2006), however, needed to be modified in the field as flooding and bad weather prevented access to certain areas of the site. The boreholes located towards the south-east in particular (OA5, OA8, OA9, OA10) could not be reached with the drilling rig. In the case of three of the boreholes (OA5, OA8, and OA10), hand augering to a maximum depth of only 5 metres was possible. In addition, OA 9 needed to be moved from its original position due to site conditions and obstacles.

3.1.6 The drilling of each borehole were monitored by a Geoarchaeologist. A continuous sequences of cores were retrieved using a Terrier Rig (operated by a specialist sub-contractor) for eight out of the eleven locations. Each location was surveyed using a GPS unit, to ensure co-ordinates and levels relative to National Grid and Ordnance Datum were retrieved. The boreholes were drilled from ground level until bedrock was proven or until sufficient depth had been reached. The cores were taken within plastic casings in order that they can be cut open and logged without disturbance to the sediments. On return of cores to OA, individual cores were split lengthways and recorded using standard sediment terminology.

3.1.7 The stratigraphic data retrieved from the borehole survey was input into the deposit model database and used to refine the understanding of the geotechnical data. A plot of the mudstone surface and cross-section of the sediment sequence across the site was produce to aid in the selection of samples for palaeoenvironmental assessment (Figs 5, 6, and 7).

Evaluation trenching

3.1.8 The evaluation consisted of 31 trenches measuring between 50 m and 10 m long x 2 m wide, laid out to achieve a representative sample of the site area. The evaluation was carried out in two phases, the first phase consisting of 15 trenches and the second 16 trenches (one trench in phase 1 was excavated during an initial abortive deployment in September 2006). Each phase was intended to be *c* 2.5% of the site area. A number of trenches along the north-eastern edge of site required re-positioning to avoid working beneath overhead power cables. Trenches located on made ground or through banks were shortened or re-positioned. Small open area excavations were carried out to investigate concentrations of significant Roman features. The overburden was removed under close archaeological supervision. When no archaeological features were encountered the subsoil and first alluvial deposit was removed to ensure that no features were below these layers. The excavation was carried out with a 360° mechanical excavator fitted with a toothless bucket.

3.2 Fieldwork methods and recording

3.2.1 The trenches were cleaned by hand where practicable. This was not always possible, particularly in the southern parts of the site, where the trenches flooded rapidly. Nevertheless features were clearly visible where present. The revealed features were sampled to determine their extent and nature, and to retrieve finds and samples. All archaeological features were planned and where excavated their sections drawn at scales of 1:20. All features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (ed. D Wilkinson, 1992).

3.3 Finds

3.3.1 Finds were recovered by hand during the course of the excavation and bagged by context. Finds of special interest were given a unique small find number.

3.4 Presentation of results

3.4.1 A detailed description of the alluvial sequence is included in the geoarchaeological results section. The factual results of the trench evaluation are presented as a trench by trench description.

4 RESULTS: GEOARCHAEOLOGICAL INVESTIGATION RESULTS

4.1 Soils and ground conditions

4.1.1 The site is located on estuarine alluvium, covered with sandy silt subsoil and silty sand topsoil. The site is also overlain by intermittent dumps of gravel, resulting in an extremely uneven surface. The site is extremely wet, particularly in the southern part, where the evaluation trenches were filled by 0.5 m of water within approximately 1 hour of machining. Features rapidly filled with water as they were being excavated and a pump was used to keep the features relatively empty to enable examination and recording.

4.2 Preliminary deposit model

4.2.1 The evidence from the boreholes and auger holes revealed that a range of different sediment types are present throughout the site. A number of commonly occurring stratigraphic units have been identified as follows (in order of deposition):

- Pre-Holocene deposits and basement topography
- Bedrock

4.2.2 The underlying bedrock across the site is recorded as Mercia Mudstone (BGS Map Sheet 250). The bedrock was reached in OA1, OA2, OA 3, with the surface lying at +1.06m to -0.33m OD respectively, and is described as a very firm brownish red silt with fine grit inclusions and gypsum precipitate.

4.2.3 The surface of the mudstone essentially defines the topography of the early Holocene landscape (Fig. 5). Bates (1998) refers to this as the 'topographic template' and suggests that variations in the template largely dictated patterns of landscape evolution, as flooding and sedimentation ensued during the prehistoric period. On initial examination of the Plot 5000 data the elevations of the surface of the gravels exhibit significant localised variation.

4.2.4 The highest elevations were recorded within the north western sector of the site on the higher ground at levels at +1.06 m OD. The lowest levels occur in the south eastern sector down to -10.24 m OD in geotechnical borehole GIP BH4. There is a significant drop in the elevations of the mudstone surface from the north west to the south east of the site.

4.3 The Holocene sediment sequence

4.3.1 The sediment sequences recorded from the boreholes are generally consistent with those recorded during previous geotechnical investigations across the site. Superficially they are consistent with the sequence of mudstone overlain by sandy silt organic alluvium and clay-silt recorded previously within the area.

4.3.2 Lower Silt Sand: The extent of this unit is variable across the southern area of the site with deeper sequences associated with the lowest elevations in the surface of the Mudstone. It is generally described as a minerogenic bluish or greenish grey silty sand becoming sandier with depth. This unit may represent active in-channel sedimentation with some overbank flooding. Any archaeological material present within these deposits is likely to have undergone a high degree of reworking,

4.3.3 Silty Peat/Organic deposits:

4.3.4 Six organic units were identified across the southern part of the site:

- Peat I (-3.76m OD to -3.91m OD)
- Peat II (-3.10 and - 3.16)
- Peat III (-1.41m and -1.64m OD)
- Peat IV (+1.70m-+0.84m OD)
- Peat V (+3.04-+2.84m OD)
- Peat VI (+3.69-+3.25m OD)

4.3.5 The three lowest units were only identified within the deeper sequence towards the south-west (OA11), whereas the upper three units appeared to be continuous across most of the site (Figs 6 and 7).

4.3.6 Generally the deposits comprised dark blackish brown well humified silty peat with no visible identifiable plant remains. Some evidence of horizontal bedding structures or laminations were noted, and some of the deposits exhibited an upper erosional contact. The thickness of each unit was generally consistent across the site, between 0.15 m and 0.25 m. The lower units, however, were thinner, between 0.10 m to 0.06 m.

4.3.7 Where peat was recorded in the geotechnical logs the descriptions suggest infrequent homogenous deposits. However, detailed logging of cores from the archaeological boreholes suggest much more complexity, with variation in lithology and organic inclusions both down profile and laterally. Intermittent sediment input is represented by lenses of minerogenic silt clays, and more prolonged low level input is represented by the silt content within much of the peat. This is likely to represent periodic flooding deriving from active channels. The presence of the sand lenses in particular, deposited in higher energy conditions, suggests the proximity of an active channel.

4.3.8 Although no radiocarbon age estimates are at present available for these deposits, those lying at lower elevations are likely to be considerably older than the deposits at the margins of the higher mudstone. It is possible that these deposits correlate with peats of Neolithic and Bronze Age date. Caution, however, must be used in correlating deposits with regional models in the absence of corroborative radiocarbon dates. Any associated archaeological material is likely to have suffered very little modification in terms of lateral transport, particularly in the more organic parts of these deposits, however some level of reworking is to be expected where sediment input is in evident adjacent to channels

4.3.9 Silt-clays: Minerogenic bluish/greenish grey clay-silts extend across most of the southern area of site overlying and interbedded with the peat and organic deposits. The fine-grained nature of these deposits indicates moderately low energy deposition. Any archaeological material present within these deposits is likely to have suffered minimal lateral movement.

4.3.10 The upper sequence consisted of oxidized reddish grey silty clays with occasional root voids. The surface of these deposits was between +5.24 m and +5.54 m OD and represents the level at which archaeological features were identified in the evaluation trenches. This potentially represents the land surface of the Roman reclamation referred to as the Wentlooge surface.

4.3.11 Alluvial subsoil: The silt -clays and archaeological features were sealed by a further thin layer of alluvium. These deposits contained signs of root disturbance and pedogenesis.

4.3.12 Topsoil: A thin deposit of mid brown silty clay topsoil was present across the whole site. This deposit ranged in thickness from 0.35 m to 0.08 m.

4.3.13 Made-ground: Variable deposits of made-ground exist in localised areas across the northern and eastern areas of the site. Previous geotechnical work describes a clay or gravely clay deposit with brick and flint inclusions. Further deposits form the existing embankment that is present on the south-east and south-west limits of the site. The thickness varies between 1.6 m and 0.2 m. However, it should be noted that in the absence of modern inclusions such as brick fragments in many of the geotechnical logs it proved difficult in some instances to separate embankment material from the underlying *in situ* alluvium.

5 RESULTS: EVALUATION TRENCHES

5.1 Distribution of archaeological features and deposits

5.1.1 The evaluation identified Roman activity in the north central area of the site. The features identified were visible at depths of less than 0.5 m. There appears to be a concentration of Roman features to the east of, or within trench 22. The features are predominantly ditches and gullies, with the exception of three small pits and a large feature of uncertain type in trench 30. The vast majority of the pottery came from this area.

5.1.2 Most other trenches contained archaeological features of some description. However, these comprised linear field boundary ditches and drains, that were either undated or demonstrably of post-medieval date, and are not considered significant.

5.2 Trench descriptions

5.2.1 **Trench 1 (Fig.2):** An alluvial deposit (103) of grey clay was encountered at a depth of 0.4 m, (5.4 m OD). This trench identified four linear features (105, 107, 109, 111), aligned north-west to south-east. All were of similar depth, with U-shaped profiles, and filled with a tenacious blue-grey clay. Their average dimensions were 0.19 m in depth, and a width of 0.66 m. They were between 9 m and 11 m apart. Their character, alignment and the fact that they are perpendicular to a well-established ditch and hedgline strongly suggest these are the remains of ridge and furrow. all the features were sealed by 0.2 m of subsoil (102) which was overlain by 0.2 m of topsoil.

5.2.2 **Trench 2 (Fig.2):** An alluvial deposit (203) was encountered at a depth of 0.48 m, (5.56 m OD). One undated ditch (205) was revealed, aligned north-east/south-west. This had a distinct profile, with the western edge being a steep 70°, sharply breaking to a flat base; the east side was 45°. It was filled with tenacious blue grey clay; almost identical to the fills identified in trench 1. This feature was sealed by 0.3 m of subsoil (202), and 0.2 m of topsoil.

5.2.3 **Trench 3 (Fig.2):** An alluvial deposit (302) was encountered at a depth of 0.38 m (5.6 m OD). This trench contained two undated features (305 and 307) and a drainage ditch (309) back-filled with modern material. The most southerly ditch was 303, aligned north-west/ south-east. This was quite a substantial ditch with a rounded 'V'-shaped profile. It was 1.6 m wide, 0.44 m deep and filled with a stiff, light grey clay. A distinct lens of charcoal was noted at the base. Ditch 307 was also aligned north-west/ south-east. This was 0.9 m wide, 0.3 m deep with a shallow U shaped profile and filled with a blue grey clay. A wide feature 309, was revealed at the northern end of the trench. This was filled with a modern material and was not excavated, but probably represented a drainage ditch typical to the site. Apart from 309, all the features were sealed by 0.2 m of subsoil (301), which was overlain by 0.2 m of topsoil.

5.2.4 **Trench 4 (Fig.2):** An alluvial deposit (403) was encountered at a depth of 0.72 m (5.53 m OD). No archaeological features were encountered. The lowest deposit identified (403) consisted of firm, mid grey blue clay alluvium. A sondage excavated at the western end of the trench revealed this deposit to be more than 0.5 m thick. This was overlain by a similar alluvial deposit (402) of firm, mid brown clay, that was 0.32 m thick. The subsoil (401) was 0.2 m thick, consisting of a firm, mid blue brown clay, the topsoil was 0.16 m thick.

5.2.5 **Trench 5 (Fig.2):** An alluvial deposit (503) was encountered at a depth of 0.44 m (5.77 m OD). This was one of the more complex trenches, revealing seven ditches aligned east-west, and one north-south. Six of the ditches (505, 507, 511, 513, 519 and 523) on the east-west alignment were of a similar character: Apart from their alignment, their dimensions, profile and fills were almost identical. The average dimension of these features were: 0.75 m in width, and 0.29 m in depth, with a 'U'-shaped profile. They were all filled with a mid grey, or light grey brown clay, with distinctive patches of dark brown organic matter. A large feature of uncertain extent and shape (509) proved on excavation to be on an east-west alignment. This feature was recorded as being 1.6 m wide, 0.8 m deep, with a steep 50° side, and filled with a mid grey brown clay. The excavator noted that the edges were very unclear and suggested it may be a variation in the natural. The two ditches (517 and 521) on the north-south alignment, again were of a similar character to the other features. Both were 0.4 m wide, with an average depth of 0.18 m. They had a 'U'-shaped profile and were filled with a light brown clay. Ditch 521 appears to be the same as 523, forming a right angle. A relationship was established between 517 and 519, with 517 being the later feature; it must be noted that due to the nature of the fills the excavator could not be confident with this interpretation. All the features were sealed by 0.2 m of subsoil (502), consisting of 0.25 m of light brown clay. There was 0.25 m of topsoil.

5.2.6 **Trench 6 (Fig.2):** An alluvial deposit (603) was encountered at a depth of 0.5 m (5.39 m OD). This trench contained three linear features, all aligned north-west/ south-east. A ditch (609) was partially excavated at the centre of the trench. This was quite a substantial feature with a depth of 0.6 m, and seven metres wide, and filled with homogenous light grey clay. The feature appears to be a field boundary back-filled relatively recently. A shallow ditch (607) was identified roughly in the centre of the trench. This was 0.74 m wide, and just 0.16 m deep. The fill of this feature was distinct with a dark brown/black organic lens, 0.02 m thick.

5.2.7 **Trench 7 (Fig. 2):** An alluvial deposit (702) was encountered at a depth of 0.42 m (5.58m OD). This trench contained three ditches and a gully. The gully (715) was aligned north-west/ south-east and was clearly cut by a large ditch (711) to the north-west. It measured 0.6 m in width and was 0.26 m deep, with a shallow 'U'-shaped profile, and filled with a blue grey clay containing a distinct layer of charcoal, 0.02 m thick. The ditch (711) cutting the gully was partially excavated to establish the relationship. This was 1.75 m wide, 0.52 m deep and filled with mid grey and grey brown clays. A wide shallow feature (704), aligned east-west, was excavated to the

northern end of the trench. This was 2.7 m wide and just 0.35 m deep and filled with light blue grey clay. All the features were sealed by 0.22 m of stiff grey brown clay, 0.22 m thick.

5.2.8 **Trench 8 (Fig. 2):** An alluvial deposit (803) was encountered at a depth of 0.48m (5.43m OD). This trench revealed four ditches. The earliest ditch identified was (809), this was aligned north-east/ south-west. This ditch was cut by (806) to the south and truncated by a ditch containing modern back-fill to the north. It measured 2 m in width and was 0.4 m deep, and filled with light brown and blue grey clays. With the agreement of David Haigh, the remainder of this feature was machined in 0.1 m spits, with one person supervising the machine, as another monitored the spoil for finds. No finds were recovered. A ditch (811) roughly in the centre of the trench was investigated. This was aligned south-west / north-east, 1.9 m wide, 0.4 m deep and filled with a light blue grey clay. A shallow gully (813) to the north end of the trench was aligned east-west, and turning to the north. This was 0.75 m wide, 0.4 m deep and filled with a light grey brown clay. All the features were sealed by 0.26 m of a tenacious mid brown clay subsoil (802), which in turn was overlain by 0.3 m of topsoil.

5.2.9 **Trench 9 (Fig. 2):** An alluvial deposit (903) of mid grey brown silty clay was encountered at a depth of 0.78 m (5.36 m OD). No archaeological features were identified within this trench. The alluvial deposit (903) was overlain by 0.33 m of subsoil (902). The topsoil was 0.45 m thick.

5.2.10 **Trench 10 (Fig. 2):** An alluvial deposit (1003) was encountered at a depth of 0.44 m (5.67 m OD). Two ditches were identified within this trench, one north-south and one east-west. The north-south ditch (1005), although linear, was recorded as root disturbance by the excavator. It measured 0.74 m in width, and just 0.1 m in depth. The edges were very difficult to define, but appeared to have a shallow 'U'-shaped profile. The east-west ditch (1007) was a more convincing feature. It was 0.5 m wide, 0.3 m deep and filled with a mottled grey and brown clay. Both features were sealed by 0.3 m of subsoil (1002), consisting of a light brown clay, 0.35 m thick.

5.2.11 **Trench 11 (Fig. 2):** An alluvial deposit (1103) was encountered at a depth of 0.5 m (5.35 m OD). No archaeological features were identified within this trench. The alluvial deposit was overlain by 0.2 m of subsoil (1102), consisting of a mid brown clay.

5.2.12 **Trench 12 (Fig. 2):** An alluvial deposit (1203) was encountered at a depth of 0.68 m (5.17 m OD). No archaeological features were identified within this trench. The alluvium was overlain by 0.38 m of subsoil (1203), consisting of a light grey brown clay.

5.2.13 **Trench 13 (Fig.2):** An alluvial deposit (1316) was encountered at a depth of 0.35 m (5.56 m OD). Four ditches, all aligned east-west, were revealed within this trench. Although differing in width, there depth, profile and fills were very similar. All the

profiles were shallow with typical 25° side, sharply breaking to a steep side gully at the base of the feature. The widest was 2.4 m and the narrowest 1 m. The average depth was 0.5 m. They were typically filled with a mid grey clay, three also contained patches of dark brown organic silt, apparently rotted rootlets. All the features were sealed by a thin deposit (0.14m) of subsoil (1302), a light brown clay.

5.2.14 **Trench 14 (Fig.2):** An alluvial deposit (1403) was encountered at a depth of 0.68 m (5.08 m OD). No Archaeological features were identified within this trench. the alluvium was overlain by 0.38 m of subsoil, a mid grey brown clay.

5.2.15 **Trench 15 (Fig.2):** An alluvial deposit (1503) was revealed at a depth of 0.62 m (5.12 m OD). No significant archaeological features were identified within this trench. The alluvial deposit was overlain by 0.4 m of subsoil (1501), consisting of a light brown clay.

5.2.16 **Trench 16 (Fig.2):** An alluvial deposit (1603) was encountered at a depth of 0.46 m (5.58 m OD). Two gullies, a ditch and a modern hedgeline were identified in this trench. A relationship slot was placed at the intersection of the two gullies (1607 and 1609). No relationship could be defined, and it is assumed they were contemporary. Both gullies were 0.1 m deep, both filled with light blue clays. A ditch (1604) was identified at the southern end of the trench. It was a substantial ditch 1.4 m wide, 0.7 m deep. It was filled with a tenacious blue grey clay. This ditch appeared to cut the subsoil (1602), but the relationship was ambiguous; the gullies were sealed by 0.2 m of subsoil (1602), a light brown clay.

5.2.17 **Trench 17 (Fig.2):** An alluvial deposit (1703) was encountered at a depth of 0.5 m (5.38 m OD). No archaeological features were identified within this trench. The alluvial deposit was overlain by 0.15 m of subsoil, consisting of a light brown clay.

5.2.18 **Trench 18 (Fig.3):** An alluvial deposit was encountered at a depth of 0.4 m (5.75 m OD). This trench was re-positioned to the south of a dumped mound of gravel in an attempt to define the extent of the Roman activity identified in trench 22 a few metres to the north. Two features were identified within this trench, and, although not excavated, dating evidence was recovered from both features. A linear feature aligned north-west/ south-east was identified at the north end of the trench, and produced a single sherd of Roman grey ware. A gravel and stone track at the southern end of the trench produced a single sherd of post-medieval pottery; CBM was also noted but not retained. A sondage placed at the western end was recorded. This revealed four distinct layers: 1803, 1807, 1802 and topsoil 1801. The lower deposit (1803) is the typical alluvial deposit identified in all the trenches as representing the archaeological horizon. This was overlain by 0.16 m of blue grey clay (1807), this deposit extended (and thins out) in section for 5 m. It possibly represents the up-cast from the ditch revealed in trench 22, some two metres to the west. This deposit was overlain by the typical subsoil (1802) identified throughout the trenches.

5.2.19 **Trench 19 (Fig. 2):** An alluvial deposit (1903) was encountered at a depth of 0.36 m (5.48m OD). No archaeological features were identified within this trench. The alluvial deposit was overlain by 0.18 m of subsoil (1902), consisting of a light grey clay.

5.2.20 **Trench 20 (Fig. 2):** An alluvial deposit was encountered at a depth of 0.4 m (5.4 m OD). The alluvial deposit was overlain by 0.25 m of subsoil, consisting of a mid grey clay. One archaeological feature was identified cutting the subsoil. This was a wide ditch (2005) that clearly cut the subsoil, and is probably post-medieval or later in date.

5.2.21 **Trench 21 (Fig. 2):** An alluvial deposit was encountered at a depth of 0.5 m (5.46 m OD). No significant archaeological features were identified within this trench. The alluvial deposit was overlain by 0.25 m of subsoil (2102), consisting of a mid grey brown clay.

5.2.22 **Trenches 22 and 23 (Fig. 3):** Trenches 22 & 23 have been summarised together as the archaeology can be directly related. These trenches identified Roman features and produced a significant quantity of finds. To further understand the archaeology and establish its limits, an area 13 m x 15 m was extended to the west and a trench (11 m x 2 m) excavated through a gravel mound to the east. An alluvial deposit (2203) was encountered at a depth of 0.4 m (5.6 m OD). These trenches revealed four Roman ditches, three of which appear to form an enclosure and its sub-division. The most substantial ditch (2212) was aligned north-west/ south-east, and was also identified in trench 23, (2205).

5.2.23 **Trench 24 (Fig.4):** An alluvial deposit (2403) was encountered at a depth of 0.65 m (4.39 mOD). Two gullies were identified in this trench. The gullies crossed the southern half of the trench on a similar alignment (NE-SW). Gully 2405, the northernmost of the two, was 0.38 m wide and 0.12 m deep. Gully 2407 was 0.47 m wide and 0.2 m deep. Both gullies were filled by a light blue-grey tenacious clay (2404 and 2406). Neither contained any dateable material. Both gullies were sealed by 0.35 m of light grey brown clay subsoil (2402).

5.2.24 **Trench 26 (Fig. 4):** An alluvial deposit (2604) was encountered at a depth of 0.9 m (4.14 m OD). One ditch and a possible pit were identified in this trench. Ditch 2606 was situated at the far north-east end of the trench. It measured 0.6 m wide and 0.25 m deep. It was filled by a tenacious light blue-grey clay (2605) that contained one sherd of pottery which was too small and undiagnostic to be spot-dated. Sub-rectangular feature 2608 was situated in the south-western part of the trench. It measured 0.55 m wide and 0.16 m deep and continued beyond the south-eastern limit of the trench. A small amount of animal bone was recovered from the blue-grey clay fill. Both features were sealed by 0.35 m of light grey brown clay subsoil (2603).

5.2.25 **Trench 28 (Fig.4):** No archaeological features were found to cut into the alluvium, encountered at a depth of 0.6 m (4.44 m OD). The alluvium was overlain by 0.6 m of light brown clay subsoil (2803).

5.2.26 **Trench 29 (Fig.4):** An alluvial deposit (2904) was encountered at a depth of 0.28m (4.76mOD). This trench revealed two ditches (2906 and 2908). However, both remained un-excavated due to immediate flooding after machining. Both ditches were sealed by 0.16m of mid brown clay subsoil (2903).

5.2.27 **Trench 30 (Fig.4):** An alluvial deposit (3003) was encountered at a depth of 0.68 m (4.36 m OD). This trench revealed one very large feature (3005), only partly revealed within the trench, which was cut by a pit (3007). Feature 3005 had a concave profile and measured at least 7 m in diameter. It was excavated to a depth of 0.15 m, but is probably significantly deeper beyond the trench limits. Pit 3007 was circular, with steep straight sides and a concave base. It measured 1.8m in diameter and was 0.64 m deep. The pit contained two fills. The lower (3008) was a mid brown grey silty clay. The upper (3006), a mid blue grey silty clay. Neither fill contained any dateable evidence.

5.2.28 **Trench 31 (Fig. 4):** An alluvial deposit (3103) was encountered at a depth of 0.55 m (4.49 mOD). This trench revealed four linear features. All remained unexcavated due to severe flooding. Situated in order from north to south, the ditches were as follows: Ditch 3105 was aligned east-west and was 0.8 m wide and was filled by a blue-grey clay (3104). Ditch 3107 was aligned east-west, measured 1m wide and was filled by blue-grey clay (3106). Ditch 3109 was aligned north-east / south-west and was 2 m wide and filled by blue-grey clay. Ditch 3111 was aligned east-west, measured 2 m wide and was also filled by blue-grey clay. No finds were recovered from any of these ditches. All four were sealed by 0.3 m of mid-brown clay subsoil (3102).

5.2.29 **Trench 32 (Fig. 4):** An alluvial deposit (3203) was encountered at a depth of 0.51 m (4.53 m OD). This trench revealed one pit (3205) and one ditch (3207). Pit 3205 was sub-rectangular with near vertical sides and a flat base. It measured 1.15 m wide and 0.23 m deep. One small fragment of animal bone was recovered from the mid to dark brown clay fill. It was not clear whether this pit cut the subsoil (3202) or was sealed by it. Ditch 3207 was aligned E-W and had steep, straight sides and a slightly concave base. It measured 1.4 m wide and 0.5 m deep. It contained two mid blue-grey fills. The upper fill (3206) contained Romano-British pottery and a small amount of animal bone.

5.2.30 **Trench 33 (Fig. 4):** An alluvial deposit (3303) was encountered at a depth of 0.7 m (4.34 mOD). this trench revealed five ditches all crossing the trench on a north-east / south-west alignment. Ditch 3305 had steep sides and a flat base and was filled by a light grey clay. It was 1.4 m wide and 0.6 m deep. Ditch 3308 had steep sides and a flat base and was 0.5 m wide and 0.22 m deep. It contained two fills (3306 and 3307). The lower fill was a light grey clay (3307) which contained one sherd of Roman pottery. The upper fill was a very dark grey-black clay. Ditch 3310 was 0.9 m wide and 0.44 m deep with near vertical sides and a flat base. The ditch was filled by a light grey clay (3309). Ditch 3312 was 0.9 m wide and 0.22 m deep and filled by a light grey clay. Ditch 3314 was 0.7 m wide and 0.5 m deep with steep sides and a flat

base. It was filled by a light grey clay with reddish-brown mottled patches. All of the ditches were sealed by 0.45 m of light brown silty clay subsoil (3302).

5.3 Finds

The Roman pottery, by Kate Brady, OA

5.3.1 Some 64 sherds of Roman pottery, weighing 902 g, were recovered in the evaluation, together with two sherds of post-medieval date. The material from each context was quantified by sherd count and weight in terms of broad fabric groupings, using the codes set out in the OA Roman pottery recording system, and vessel types were also noted in terms of major classes. The Roman pottery was concentrated in trench 22, which produced all but two small sherds of the material. The pottery was generally in quite good condition - the surfaces of sherds were moderately abraded. The average sherd weight (14g) was not particularly high or low, but had been skewed by several particularly large sherds.

5.3.2 The Romano-British pottery assemblage was dominated by sand-tempered coarse wares, most of which were presumably of relatively local origin, including several sherds of Severn Valley ware. Central and South Gaulish samian ware and Black Burnished ware were the only fabrics certainly derived from outside the region.

5.3.3 Few individual context groups were large enough to contain a significant number of chronologically diagnostic vessel forms (only 1 group contained more than 10 sherds). The date of this context (2213) was 3rd to 4th century and this is certainly possible for all of the contexts. The only sherds of exclusively early date are Samian ware, and it is likely that as they appear in several instances with later fabrics, these finewares had probably been used over a long period and effectively curated.

5.3.4 The pottery sources drawn on by the settlement were for the most part either predictable (such as Central Gaulish samian ware) or largely local/regional (the various Greywares and Oxidised wares). The material does not suggest a particularly high status settlement, but again the small sample may not be particularly representative. The physical quality of the material, in particular the several very large sherds, certainly indicates the potential of the site to produce good groups of pottery for analysis.

Table 1: Quantification of pottery by context

Context	Spot date	Sherds	Weight	Comments
2213	EC2-LC4	15	265 g	R30. Greyware. Includes medium mouthed fine sandy fabric jar/bowl (9 sherds). Body sherds. 3 Vessels? 2 sherds R20 coarser fabric. Including whole base.
2213	EC2-LC4	9	55 g	O40. Severn Valley Ware. Includes 3 base sherds. Two sherds have limescale on interior.
2213	EC3-LC4	26	209 g	B10. (BB1) Black burnished Ware. May be two types. A few sherds of a slightly more micaceous fabric (Somerset?) Includes a handle and rim of a 'fish dish'. One small body sherd has obtuse burnished lattice decoration.
Cxt date/ total	**3rd-4th century**	**50**	**529 g**	
2216	EC2-LC4	1	10 g	010. Oxidised ware. Probably local. Body sherd.
2216	EC2-LC4	1	163 g	R30. Greyware. Large body sherd. Medium sandy fabric. Medium mouthed jar.
2216	EC2-LC4	2	20 g	R20. Coarse Greyware. Bodysherds. 2 vessels.
2216	MC1-LC2	1	5 g	S20. South-gaulish samian ware. Body sherd.
Cxt date/ total	**2nd-4th century**	**5**	**198 g**	
2217	MC1-LC2	1	6 g	S20. South-gaulish samian ware. Rim.
221722	EC3-LC4	3	39 g	B10. (BB1) Includes dish profile.
Cxt date/ total	**3-4th century**	**4**	**45 g**	
2214	EC2-LC4	1	9 g	O40 Severn Valley Ware. Slightly burnt.
2214	EC2-LC4	1	34 g	O10. Oxidised ware. Probably local. Body sherd.
2214	C2	1	66 g	S30. South gaulish samian ware.
Cxt date/ total	**2-4th century**	**3**	**109 g**	
1804	LC2-LC4	1	18 g	B10. (BB1) Undiagnostic body sherd.
3307	EC2-LC4	1	3 g	R30. Small body sherd. Greyware.
Total		**64**	**902 g**	

5.3.5 Two sherds of post-medieval date were recovered and rapidly spot dated by John Cotter (OA).

Table 2: The post-medieval pottery

Context	Spot-date	Sherds	Weight
1806	C17-EC19 - North Devon gravel tempered ware.	1	29 g

502	C16-C17 - Post-medieval red earthenware Chafing Dish.	1	35 g

The worked stone, by Ruth Shaffrey, OA

5.3.6 A total of four pieces of stone were retained and examined with the aid of a x10 magnification hand lens. These include two unworked pieces of locally available stone and two items of interest, comprising a large block of stone and a rotary quern. Both are made of Old Red Sandstone from the Forest of Dean; they are of very similar lithology (although one is more pebbly) and may be from the same outcrop. The rotary quern is of an unusual style for this lithology (projecting-hopper) and is Roman in date, possibly late (Shaffrey 2006, 42). The block is large enough to have been a raw material for quern manufacture - they are thought to have been made nearby on the Gatcombe Villa estate (Branigan 1977, 205) or may have been used in construction.

5.4 Palaeo-environmental evidence

5.4.1 No palaeoenvironmental samples were recovered from Roman features during the evaluation, as the rapid flooding of features precluded sampling without risk of contamination by modern materials. Previous environmental sampling carried out by Wessex Archaeology in the adjacent Plot 4000 indicated some potential for examining charred plant remains to examine the economic base of the site. Assessment work at Plot 4000 identified little potential for further work on wood charcoal.

5.4.2 Pollen and mollusc preservation in archaeological features is likely to be good, but deposits from archaeological features are not generally recommended for further work, as more likely to reflect post-abandonment environments or micro-environments around individual features than wider environmental or site conditions.

5.4.3 The main palaeoenvironmental potential of the site lies in deposit modelling and palaeoenvironmental work on boreholes through the Wentlooge sequence, which potentially reflects changes in environment and land-use from the end of the last Ice Age, through to the Roman period.

6 DISCUSSION AND INTERPRETATION

6.1 The Wentlooge sequence

6.1.1 At this stage in the assessment, the following conclusions may be drawn regarding the site history and palaeogeography.

6.1.2 The model has confirmed the presence of significant localised detail within the site area associated with different environments of deposition and local topographic features. An area of high ground towards the north-west may have existed as an island within a predominantly wetland environment for much of the early Holocene. Areas of higher ground adjacent to a floodplain environment would have provided attractive locations for early human communities to exploit the rich wetland environment. The lower elevation of the mudstone, towards the south-west, extends to a depth of 16 m below ground level and may represent either a palaeochannel running north-east / south-west or the edge of a large geological depression, perhaps associated with the Avonmouth basin (BGS, 250).

6.1.3 The character of the sediment sequences overlying the mudstone are consistent in terms of lithology and elevations previously identified in the area (Wessex Archaeology, 2006a). On a broader level they are comparable to many sequences investigated in the Severn estuary by numerous workers. With reference to the model proposed by Allen (1987; 1990a) it is likely that the lower peat units (Peats I-III) correlate with a phase of rapid sea-level change that occurred during the Neolithic period that resulted in the inundation and subsequent burial of former land surfaces by marine and intertidal deposits. Several of these buried wetland surfaces have been investigated (Druce 1998) but associated human activity has only been identified in the Somerset levels (Coles & Coles, 1986). The upper peat units (Peats IV-VI) relate to the development of wetland systems, possibly during the Bronze Age and Iron Age. This period saw the development of marshland systems and large expanses of alder carr and reedswamp, dissected by areas occupied by eroding channels. The height data for the peat unit, commonly occurring at elevations between +3.69 m and +3.25 m OD, is comparable to other radiocarbon dated sequences in the Severn Estuary of Bronze Age date.

6.1.4 However, closer examination of the individual profiles demonstrates variability in terms of altitude and lithology of the various peat units. This variability and at present limited dating evidence does not allow easy comparison with the regional model. Models of this kind, however, tend to look at the broader pictures of estuary development that may be recorded in a mid floodplain situation, but ignore the very complex situations at the margins of floodplains and around tributaries, where edge effects come into play. Bates *et al* (1995) suggests that in such situations small variations in sub-surface topography may result in peat formation in one area when much of the remaining area was subject to minerogenic deposition. This may have implications for detecting region-wide environmental events associated with

fluctuations in river levels, although an event of sufficient magnitude ought to be identifiable.

6.1.5 Overall the sediment sequences have good potential for the preservation of biological remains for palaeoenvironmental reconstruction covering a period from the Mesolithic period onwards. Since Allen's original work (1989, 1998), a considerable number of investigations have taken place within the region, many associated with developer-funded archaeological investigations that may provide a context for reconstruction.

6.1.6 The upper contact of the peats and overlying clay-silts potentially contain important data regarding environmental change in the late prehistoric and historic periods, particularly in light of the extensive archaeological remains of these periods identified in the north-western part of the site. The upper peat interface and minerogenic clay-silts have been extensively investigated both on the Welsh and English sides of the Severn, whereas less investigation has been focused on the character of the earlier organic deposits. More detailed examination of the lower peat/sediment contacts is relevant to our knowledge of the changing regional and local relative sea level, and resulting changes in palaeogeography.

6.2 The Roman archaeology

6.2.1 The features and finds recovered, including pottery and worked stone suggest a low status agricultural settlement of Romano-British date. The focus of this settlement is most likely to be in the north-central part of the mitigation area, in the area of trenches 18, 22, 26, 32 and 33. Ditches in trenches 23 and 31 produced no artefacts, but appear to be continuations of dated boundaries in trenches 33 and 22 respectively, and are also likely to be Romano-British in date. The features are dated solely on the basis of artefacts found within them, which were mostly of later Romano-British date (2nd to 4th century AD), and comprised pottery and two worked stone fragments.

6.2.2 The local landscape is scattered with small settlements of similar date and character, with other known examples within one or two kilometres from the site (see section 1.3 above). The date range of the pottery appears similar to that recovered by Wessex Archaeology in Plot 4000, immediately to the east. The sites are sufficiently close that the Plot 5000 features may be a continuation of the same dispersed settlement. The distribution and character of Roman features suggests the presence of a series of small enclosures, broadly comparable with the range of features recorded in Plot 4000. Pits were recorded in trenches 30 and 32. There was no evidence for buildings or other structures. However, roundhouse gullies such as those identified in plot 4000 would not necessarily be distinguishable as such in 2m wide evaluation trenches.

6.2.3 The geoarchaeological assessment has shown that the distribution of Roman features coincides with a high point in the Mercia Mudstone bedrock. The present topography of the site is almost flat, and is also likely to have been so in the Roman period.

Nevertheless, the underlying 'topographic template' may have influenced the drainage characteristics of the site, making the north-central area drier and more attractive for settlement in the Roman period than the rest of the plot.

6.2.4 Many ditches recorded in evaluation trenches remain undated. Many of them were aligned NW-SE and on the same alignment as the present drainage ditches. They probably represent in-filled post-medieval field boundaries and drainage ditches.

6.3 Reliability of field investigation

6.3.1 The combined ground investigation has successfully described the gross morphology of the sub-surface stratigraphy. Prehistoric deposits could potentially be buried at depth within the Wentlooge sequence, but the borehole survey has not, thus far, produced any anthropogenic indicators. Further palaeoenvironmental analysis would potentially provide information on the changing environment of the Levels from the Neolithic to at least the Roman period.

6.3.2 The results of the surface evaluation trenching provides reliable information on the date, density, preservation and general character of archaeological remains of Roman and later date. Due to flooded trenches, excavation and recording of features was somewhat difficult, but sufficient information was gathered to positively identify Romano-British occupation close to or within Plot 5000.

7 RECOMMENDATIONS FOR FURTHER WORK

7.1 Palaeoenvironmental assessment

7.1.1 Further work as part of the assessment stage should include examination of one sequence for the preservation of palaeoenvironmental remains as follows:

- Pollen analysis to obtain information on the environmental conditions, vegetation and indirect evidence for human activity at various periods during the deposition of the alluvial and peat sequences
- Diatom and ostracod/foraminifera analysis to ascertain water conditions during the deposition.
- Plant macro and insect remains to inform on the local vegetation patterns.
- Charred plant remains to identify deposits with higher archaeological potential.

7.1.2 In the absence of archaeological material directly associated with the sediment sequence, the deepest sequence within borehole OA11 may offer the best coverage of the sequence across the site. The deeper lower Wentlooge sequence has not been fully investigated during previous work in the area. It is also recommended that the organic sediments overlying the raised mudstone surface to the north-west be examined for signs of anthropogenic activity. This will also help to address the fact that the organic deposits occur at differing elevations and may well date to different periods.

7.1.3 A programme of radiocarbon dating is also recommended to establish the age and date range of organic deposits encountered and to provide a chronological framework for the stratigraphy. Samples will initially be taken from the top and bottom of selected major organic units. If no suitable organic material is available for dating than provisions will be made to date the humin and humic acid fractions.

7.1.4 A full assessment report is recommended, integrating the results of the palaeoenvironmental assessment, radiocarbon dating and deposit modelling. This will include surface plots of key stratigraphic horizons and cross sections as appropriate.

Environmental Assessments recommended
Pollen
Plant remains
Insects
Ostrocods and foraminfera
Diatoms
Radio-carbon dating
Reporting and illustrations

7.2 Further excavation

7.2.1 The Roman archaeology uncovered in the evaluation trenching is the subject of a separate specification prepared by S.Mortimer of CgMs/ JSAC. Consequently, no recommendations are presented here.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Ctxt No	Type	Width (m)	Thick. (m)	Comment	Finds	No./ wt	Date
Trench 1							
101	Layer		0.3	Topsoil			
102	Layer		0.15	Subsoil			
103	Layer			Alluvium			
104	Fill		0.3	Fill of 105			
105	Cut	0.8	0.3	NW-SE Ditch			
106	Fill		0.2	Fill of 107			
107	Cut	0.6	0.2	NW-SE Ditch			
108	Fill		0.2	Fill of 109			
109	Cut	0.6	0.2	NW-SE Ditch			
110	Fill		0.2	Fill of 111			
111	Cut	1.15 x 0.65	0.2	Tree Dist			
Trench 2							
201	Layer		0.2	Topsoil			
202	Layer		0.2	Subsoil			
203	Layer			Alluvium			
204	Fill		0.35	Fill of 205			
205	Cut	0.85	0.35	N-S ditch			
Trench 3							
300	Layer		0.2	Topsoil			
301	Layer		0.15 - 0.18	Subsoil			
302	Layer			Alluvium			
303	Fill		0.45	Fill of 305			
304	Fill		0.02	Fill of 305			
305	Cut	0.75	0.48	Ditch			
306	Fill		0.3	Fill of 307			
307	Cut	0.5	0.3	Ditch			
308	Fill			Fill of 309			
309	Cut	1.2		Ditch			
Trench 4							
400	Layer		0.31	Topsoil			
401	Layer		0.24	Alluvium	Pot		
402	Layer		0.18	Alluvium			
Trench 5							
501	Layer		0.25	Topsoil			
502	Layer		0.25	Subsoil	Pot	1 (35g)	C16-C17
503	Layer			Alluvium			
504	Fill		0.3	Fill of 505			
505	Cut	0.5	0.3	E-W Ditch			
506	Fill		0.3	Fill of 507			
507	Cut	0.5	0.3	E-W Ditch			
508	Fill		0.8	Fill of 509			
509	Cut	1.5	0.8	E-W ditch			
510	Fill		0.22	Fill of 511			
511	Cut	0.35	0.22	E-W gully/ditch			
512	Fill		0.2	Fill of 513			
513	Cut	0.4	0.2	E-W ditch			
514	Fill		0.2	Fill of 515			

Ctxt No	Type	Width (m)	Thick. (m)	Comment	Finds	No./ wt	Date
515	Tree	1.5 x 0.55	0.2	Tree			
516	Fill		0.15	Fill of 517			
517	Cut	0.4	0.15	N-S ditch			
518	Fill		0.3	Fill of 519			
519	Cut	0.45	0.3	E-W Ditch			
520	Fill		0.2	Fill of 521			
521	Cut	0.4	0.2	N-S Ditch			
522	Fill		0.2	Fill of 523			
523	Cut	0.45	0.2	E-W Ditch			
Trench 6							
601	Layer		0.35	Topsoil			
602	Layer		0.23	Subsoil			
603	Layer			Alluvium			
604	Fill	0.66	0.1	fill of 607			
605	Fill	0.4	0.02	Fill of 607			
606	Fill		0.06	Fill of 607			
607	Cut	0.66	0.18	NW-SE gully			
608	Fill		0.4	Fill of 609			
609	Cut	3.4	0.4	N-S Ditch			
610	Fill		0.36	Fill 611			
611	Cut	0.42	0.36	N-S gully			
Trench 7							
700	Layer			Topsoil			
701	Layer			Subsoil			
702	Layer			Alluvium			
703	Fill		0.35	Fill of 704			
704	Cut	2.7	0.35	Furrow			
705	Fill		0.16	Upper fill of 708			
706	Fill		0.01-0.02	Fill of 708			
707	Fill		0.08	Primary fill of 708			
708	Cut	0.6	0.26	Ditch			
709	Fill		0.3	Upper fill of 711			
710	Fill		0.22	Primary fill of 711			
711	Cut	1.75	0.52	Ditch			
712	Fill			Upper fill of 715			
713	Fill			Fill of 715			
714	Fill			Primary fill of 715			
715	Cut			Ditch			
716	Fill			Fill of 717			mod
717	Cut	3.5		Ditch			
Trench 8							
801	Layer		0.3	Topsoil			
802	Layer		0.3	Subsoil			
803	Layer			Alluvium			
804	Fill		0.24	Upper fill of 806			
805	Fill		0.35	Primary fill of 806			
806	Cut	2	0.6	NE-SW Ditch			
807	Fill		0.17	Upper fill of 809	bone		
808	Fill		0.2	Lower fill of 809			
809	Cut	2	0.4	NW-SE Ditch			
810	Fill		0.4	Fill of 811			
811	Cut	1.9	0.4	N-S Ditch			

Ctxt No	Type	Width (m)	Thick. (m)	Comment	Finds	No./ wt	Date
812	Fill		0.4	Fill of 813			
813	Cut	0.75	0.4	E-W Ditch			
Trench 9							
901	Layer		0.45	Topsoil			
902	Layer		0.33	Subsoil			
903	Layer			Alluvium			
Trench 10							
1001	Layer		0.25	Topsoil			
1002	Layer		0.35	Subsoil			
1003	Layer			Alluvium			
1004	Fill		0.15	Fill of 1005			
1005	Cut	0.4	0.15				
1006	Fill		0.3	Fill of 1007			
1007	Cut	0.5	0.3	E-W Ditch			
Trench 11							
1101	Layer		0.25	Topsoil			
1102	Layer		0.2	Subsoil			
1103	Layer			Alluvium			
1104				E-W Ditch			
Trench 12							
1201	Layer		0.3	Topsoil			
1202	Layer		0.38	Subsoil			
1203	Layer			Alluvium			
Trench 13							
1301	Layer		0.25	Topsoil			
1302	Layer		0.12	Subsoil			
1303	Layer			Alluvium			
1304	Fill		0.35	Fill of 1306			
1305	Fill		0.25	Fill of 1306			
1306	Cut	3	0.8	NW-SE Ditch			
1307	Fill		0.25	Upper fill of 1309			
1308	Fill		0.3	Fill of 1309			
1309	Cut	1.6	0.5	NW-SE Ditch.			
1310	Cut	0.7	0.45	NW-SE Ditch.			
1311	Fill		0.1	Fill of Ditch.			
1312	Fill		0.45	Upper fill of 1310			
1313	Cut	0.8	0.36	NW-SE Ditch.			
1314	Fill		0.1	Fill of 1313			
1315	Fill		0.2	Fill 1313			
1316	Layer		0.12	Alluvium			
Trench 14							
1401	Layer		0.3	Topsoil.			
1402	Layer		0.38	Subsoil			
1403	Layer			Alluvium			
Trench 15							
1500	Layer		0.3	Topsoil			
1501	Layer		0.4	Subsoil			
1503	Layer			Alluvium			
1504	Fill		0.6	Fill of 1505			
1505	Cut	1.45	0.6	Ditch			
1506	Fill		0.7	Fill of 1508			

Ctxt No	Type	Width (m)	Thick. (m)	Comment	Finds	No./ wt	Date
1507	Fill		0.1	Fill of 1508			
1508	Drain	0.6	0.8				
Trench 16							
1601	Layer		0.25	Topsoil			
1602	Layer		0.3	Subsoil			
1603	Layer			Alluvium			
1604	Fill		0.6	Fill 1605			
1605	Cut	1.2	0.6	NW-SE Ditch.			
1606	Fill		0.15	Fill of 1607			
1607	Cut	0.6	0.15	N-S Ditch			
1608	Fill		0.15	Fill of 1609			
1609	Cut	0.5	0.15	E-W Gully			
Trench 17							
1701	Layer		0.35	Topsoil			
1702	Layer		0.15	Subsoil			
1703	Layer			Alluvium			
Trench 18							
1801	Layer		0.25	Topsoil			
1802	Layer		0.2	Subsoil			
1803	Layer			Alluvium			
1804	Fill			Fill of 1805	Pot	1 (18g)	Roman
1805	Cut	2.2		NE-SW Ditch			
1806	Road	3	0.25	NE-SW Track	Pot	1 (29g)	C17-EC19
Trench 19							
1901	Layer		0.21	Topsoil			
1902	Layer		0.2	Subsoil			
1903	Layer			Alluvium			
Trench 20							
2001	Layer		0.25	Topsoil			
2002	Layer		0.65	Subsoil			
2003	Layer			Alluvium			
2004	Fill		0.65	Fill of 2005			
2005	Cut	2.6	0.65	E-W Ditch			
Trench 21							
2101	Layer			Topsoil			
2102	Layer			Subsoil			
2103	Layer			Alluvium.			
Trench 22							
2201	Layer			Topsoil			
2202	Layer			Subsoil			
2203	Layer			Alluvium			
2204	Fill		0.4	Fill of 2205			
2205	Cut	1.2	0.4	E-W Ditch.			
2206	Fill		0.2	Fill of 2207			
2207	Cut of gully	0.6	0.2	NW-SE Gully			
2208	Fill		0.36	Fill of 2209			
2209	Cut	1.1	0.36	NW-SE Ditch.			
2210	Fill		0.12	Fill of 2211			
2211	Cut	0.4	0.12	NE-SW Ditch			

Ctxt No	Type	Width (m)	Thick. (m)	Comment	Finds	No./ wt	Date
2212	Cut	0.9	0.3	NW-SE Ditch			
2213	Fill		0.3	Fill of 2212	Pot	50 (529g)	Mid-late Roman
2214	Fill		0.4	Fill of 2215	Pot	3 (109g)	Roman
2215	Cut	2		NE-SW Ditch			
2216	Finds Reference				Pot	5 (198g)	Roman
2217	Finds Reference				Pot	4 (45g)	Mid-late Roman
Trench 23							
2301	Layer			Topsoil			
2302	Layer			Subsoil			
2303	Layer			Alluvium			
2304	Fill		0.55	Fill of 2305			
2305	Cut	1.5	0.55	NW-SE Ditch			
2306	Fill		0.55	Fill of 2307			
2307	Cut	2	0.55	NW-SE Ditch			
Trench 24							
2401	Layer		0.3	Topsoil			
2402	Layer		0.35	Subsoil			
2403	Layer			Alluvium			
2404	Fill			Fill of 2405			
2405	Cut of gully	0.38	0.12	Gully			
2406	Fill		0.2	Fill of 2407			
2407	Cut	0.45	0.2	NE-SW Gully			
Trench 26							
2601	Layer		0.4	Topsoil			
2602	Layer		0.22	Buried topsoil			
2603	Layer		0.35	Subsoil			
2604	Layer			Alluvium			
2605	Fill		0.25	Fill of 2606	pot		Roman ?
2606	Cut	0.6	0.25	E-W Ditch.	pot		
2607	Fill		0.15	Fill of 2608	bone		
Trench 27							
2801	Layer		0.45	Made ground			
2802	Layer		0.2	Topsoil.			
2803	Layer		0.26	Subsoil			
2804	Layer			Alluvium			
Trench 28							
2901	Layer		0.44	Made ground			
2902	Layer		0.12	Topsoil.			
2903	Layer		0.16	Subsoil			
2904	Layer			Alluvium			
2905	Fill			Fill of 2906			
2906	Cut			E-W Ditch			
2907	Fill		0.6	Fill of 2908			
2908	Cut	0.8	0.6	N-S Ditch			
Trench 30							
3001	Layer		0.24	Topsoil.			
3002	Layer		0.44	Subsoil.			
3003	Layer			Alluvium.			

Ctxt No	Type	Width (m)	Thick. (m)	Comment	Finds	No./ wt	Date
3004	Fill		0.15	Fill of 3005			
3005	Cut	7m x 2m	0.15	Cut of feature			
3006	Fill		0.25	Fill of feature			
3007	Cut	1.1m x 1.8	0.64	Pit			
3008	Fill		0.4	Fill of 3007			
Trench 31							
3101	Layer		0.25	Topsoil.			
3102	Layer		0.3	Subsoil			
3103	Layer			Alluvium			
3104	Fill			Fill of 3105			
3105	Cut	0.8		E-W Ditch			
3106	Fill			Fill of 3107			
3107	Cut	1		E-W Ditch			
3108	Fill			Fill of 3109			
3109	Cut	2		NE-SW Ditch			
3110	Fill			Fill of 3111			
3112	Cut			E-W Ditch			
Trench 32							
3201	Layer		0.25	Topsoil			
3202	Layer		0.26	Subsoil			
3203	Layer			Alluvium			
3204	Fill		0.23	Fill of 3205			
3205	Cut	1.15	0.23	Pit	Bone		
3206	Fill		0.3	Upper fill of pit	Bone		Roman.
3207	Cut	1.4	0.5	E-W Ditch.			Roman.
3208	Fill		0.2	Fill of ditch			
Trench 33							
3301	Layer		0.3	Topsoil.			
3302	Layer		0.45	Subsoil.			
3303	Layer			Alluvium.			
3304	Fill		0.6	Fill of 3305			
3305	Cut	1.4	0.6	NE-SW Ditch			
3306	Fill		0.06	Upper fill of 3308			
3307	Fill		0.16	Fill of 3308	pot	1 (3g)	Roman
3308	Cut	0.5	0.22	NE-SW Ditch	pot		Roman
3309	Fill		0.44	Fill of 3310			
3310	Cut	0.9	0.44	NE-SW Ditch			
3311	Fill		0.23	Fill of 3312			
3312	Cut	0.9	0.22	NE-SW Ditch			
3313	Fill		0.5	Fill of 3314			
3314	Cut	0.7	0.5	NE-SW Ditch			

APPENDIX 2 BIBLIOGRAPHY AND REFERENCES

Allen, J.R.L.1987 Late Flandrian shoreline oscillations in the Severn Estuary: the Rumney Formation and its type site (Cardiff area) Philosophical Transactions of the Royal Society of London B315, 157-184

Allen, J.R.L.1990a The Severn Estuary in south-west Britain: its retreat under marine transgression and fine sediment regime. Sedimentary Geology 66, 13-28

Allen, J.R.L and Rae, J.E, 1987 Late Flandrian shoreline oscillations in the Severn Estuary: a geomorphological and stratigraphical reconnaissance

Allen, M J, and Scaife, R G, 2001 The physical evolution of the North Avon Levels: A review and summary of the archaeological implications. Wessex Archaeology Ref 35743/1

Allen, M J, Godden, D, Matthews, C, and Powell, A B, 2002 'Mesolithic, Late Bronze Age and Medieval activity at Katherine Farm, Avonmouth, 1998' Archaeology in the Severn Estuary 13, 89-105

BaRAS 1998, Archaeological watching brief on the laying of an effluent pipeline between Avonmouth Sewage Works and Seabank Power Station, Bristol, for Wessex Water plc, Bristol and Region Archaeological Service 1998 Report 265/1998

Barnes, I, with Adam, N J, Bellamy, P, Biutterworth, C, Coe, D, Graham, A H and Powell, A, 1993 'Second Severn Crossing, English Approaches: An interim statement' *Archaeology in the Severn Estuary*

Branigan, K. (Ed.), 1977: *Gatcombe Roman Villa, Excavation and study of a Romano-British villa 1967-76. 99-102.* BAR British Series 44.

Bates, M.R., Barnham, A.J.1995 Holocene alluvial stratigraphic architecture and archaeology in the Lower Thames area, 85-98, in Bridgland, D.R., Allen, P. and Haggart, B.A. (eds.) The Quaternary of the Lower Reaches of the Thames. Field Guide. Quaternary Research Association: Cambridge

Coles, J. and Coles B, 1986 Sweet track to Glastonbury. Thames and Hudson

Druce, D1998 Late Mesolithic to early Neolithic environmental change in the central Somerset Levels. recent work on Burham -on-sea. Archaeology in the Severn Estuary. 9, 17-30

Everton, A, and Everton, B, 1981 'Romano-British occupation at Crook's Marsh Farm, Avonmouth', *Bristol and Avon Archaeological Research Group Review* 2

Gardiner, J, Allen, M J, Hamilton-Dyer, S, Laidlaw, M, and Scaife, R G, 2002, 'Making the most of it: Late prehistoric pastoralism in the Avon Levels, Severn Estuary', *Proceedings of the Prehistoric Society* 68, 1-39

IFA 2001, 'Standards and guidance for archaeological field evaluation' Institute of Field Archaeologists

Juggins, S J, 1982 The geoarchaeology of Hallen Marsh, Unpublished undergraduate dissertation, University of Bristol

Lawler, M, 1999 The Second Severn Crossing, English Approaches: The documentary evidence, unpubl. client report

Locock, M, 1998 'Rockingham Farm, Avonmouth: Moated enclosures on the Avon Levels' *Archaeology on the Severn Estuary* 8, 83-88

Locock, M.1999 Buried soil of the Wentlooge Formation. Archaeology of the Severn Estuary

JSAC 2006, Specification for an archaeological evaluation at Plot 5000, Western Approaches Distribution Park, Avonmouth, South Gloucestershire, July 2006, JSAC 1296/06/02

Moore, C., Allen M.J., and Scaife, R.2002. An archaeological evaluation at Western Approach Business Park, Severnside, South Gloucestershire, *Archaeology in the Severn Estuary* 13, 159-162

Shaffrey, R. 2006: *Grinding and Milling. A study of Romano-British rotary querns and millstones made from Old Red Sandstone.* BAR British Series 409

Russet, V, 1990, The Archaeology of the Second Severn Crossing (observations and geotechnical trial pits) Unpubl. report, Avon County Planning Dept.

Russet, V, 1990/1 'Avon Archaeology 1990/1' Bristol and Avon Archaeology 9, 54-68

Wessex Archaeology 1998 Avonmouth Sewage Treatment Works: Desk-based assessment and evaluation. Unpublished client report, Ref: 45328

Wessex Archaeology 2001 Avlon Works, Severnside: Archaeological desk-based assessment. Unpublished client report, Ref.50101.1a

Wessex Archaeology 2006a, Plot 4000, Western Approach distribution park, Avonmouth, South Gloucestershire. Assessment report on archaeological excavation and proposal for post-excavation analysis and publication, client report

Wessex Archaeology 2006b Plot 8000, Western Approach distribution park, Avonmouth, South Gloustershire, archaeological evaluation report

Wilkinson, D (ed) 1992 Oxford Archaeology Fieldwork Manual

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Avonmouth Plot 5000, Western Approaches Distribution Park, South Gloucestershire.
Site code: BRSM:2006.63
Grid reference: NGR 5499 8348
Type of evaluation: 31 trenches, 2 small area excavations, 8 boreholes, 3 auger holes.
Date and duration of project: 13th November to 11th December 2006.
Area of site: 3.25 *ha*
Summary of results: Modelling and sampling of the Wentlooge sequence was carried out using boreholes and geotechnical records. 2nd to 4th century Roman activity was found in the north-central area of Plot 5000.
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Bristol City Museum in due course.

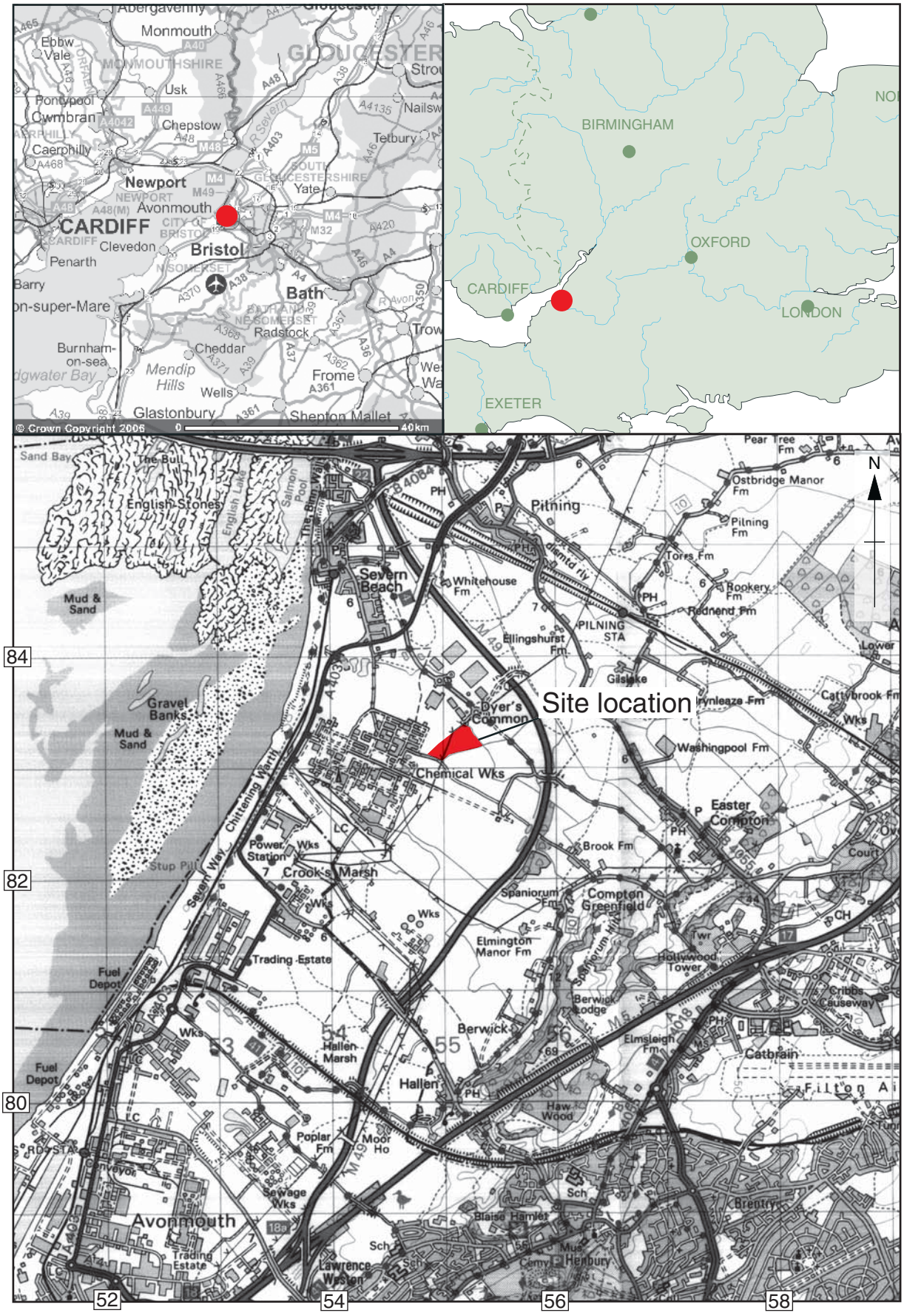


Figure 1: Site location

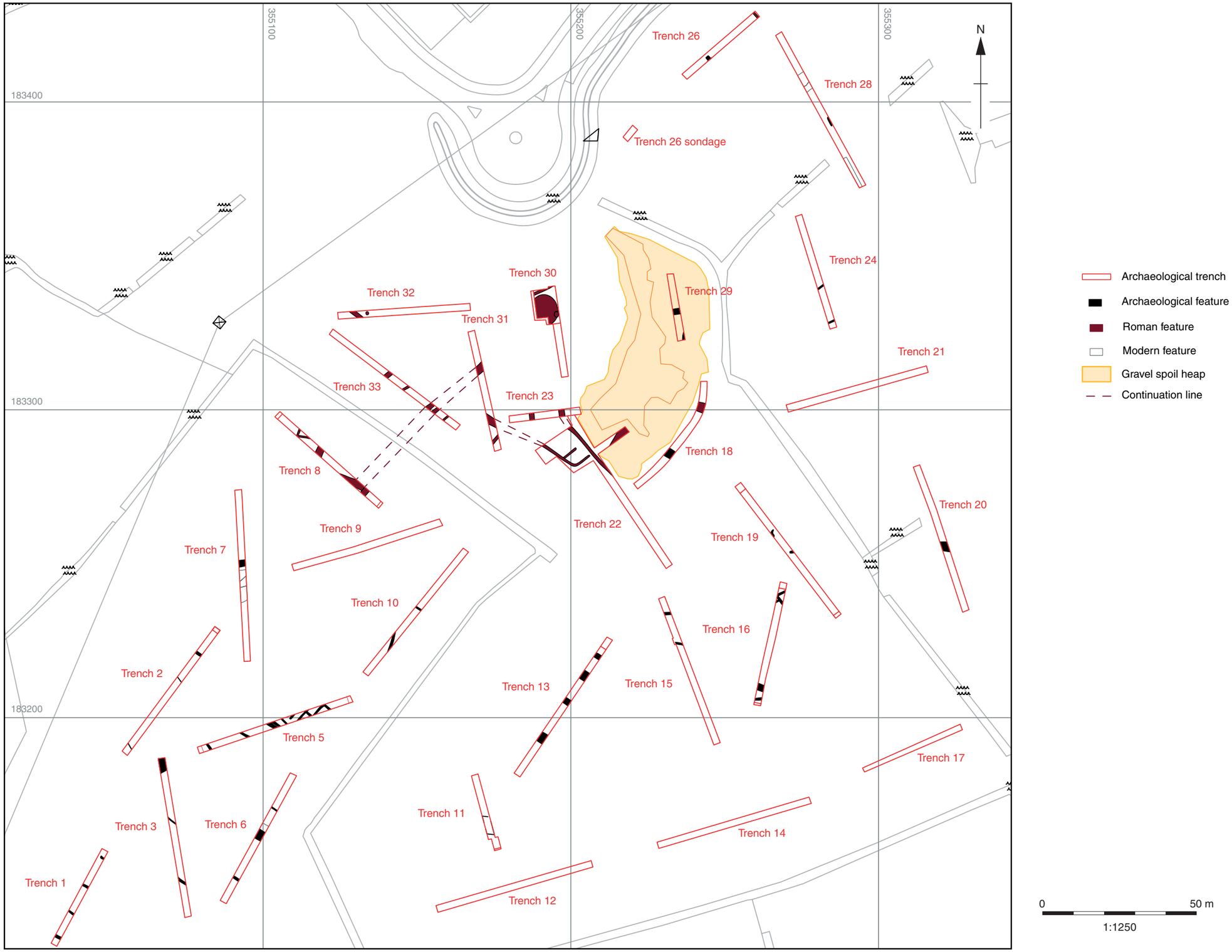


Figure 2: Trench location

355100

355200

183300

N

Trench 32

Section 3202

3205

Section 3201

3207

Trench 30

3005

3004

3007

3006

Section 3001

Trench 29

2906

Section 2901

2905

2908

2907

Trench 33

3305

3308

3312

3310

3314

Trench 31

Section 3102

3111

3109

3107

Section 3101

3105

Trench 23

Section 2301

2306

2307

2304

2305

2212

2215

Section 2201

2207

Section 2204

2314

2209

2211

2205

Section 2202

Section 2203

1806

Trench 18

Trench 8

Section 803

813

Section 802

811

809

Section 801

Section 804

806

Trench 7

704

717

711

Trench 9

Trench 10

1007

Trench 22

Trench 16

1605

Archaeological trench

Undated archaeological feature

Roman feature

Modern feature

Gravel spoil heap

Continuation line

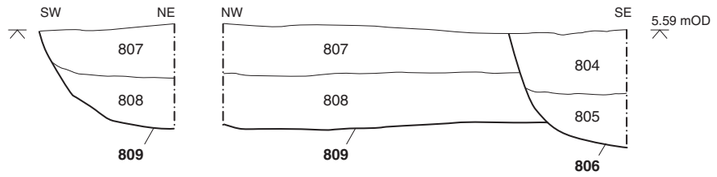
0

20 m

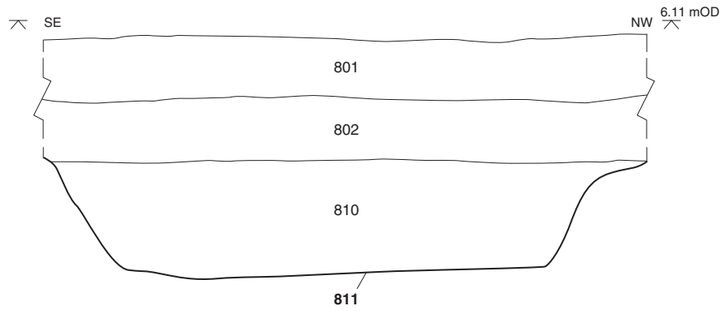
1:500

Figure 3: Detail of trenches 8, 22, 23 and 29-33

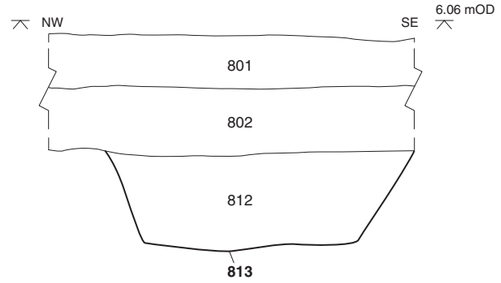
Trench 8
Section 801



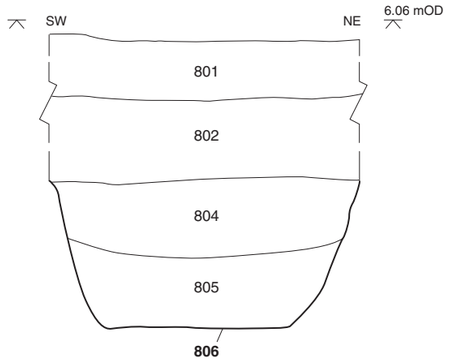
Trench 8
Section 802



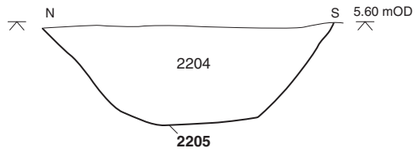
Trench 8
Section 803



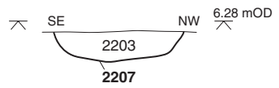
Trench 8
Section 804



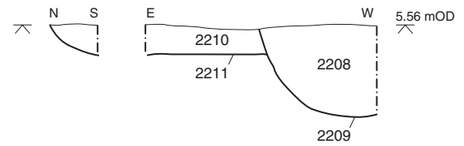
Trench 22
Section 2201



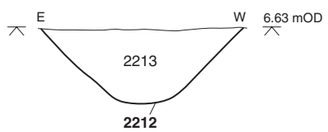
Trench 22
Section 2202



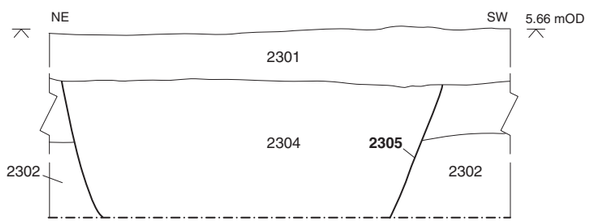
Trench 22
Section 2203



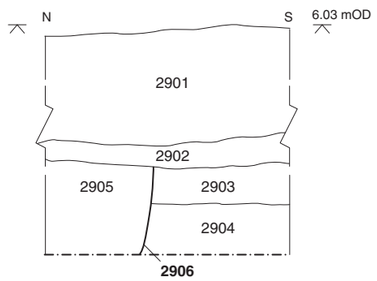
Trench 22
Section 2204



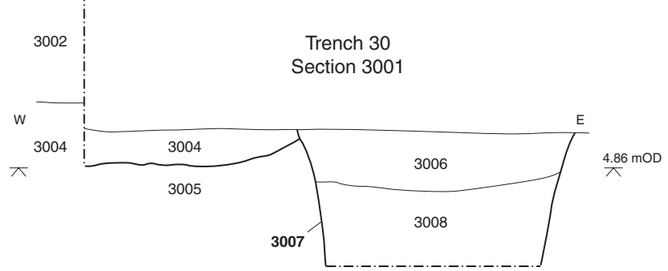
Trench 23
Section 2301



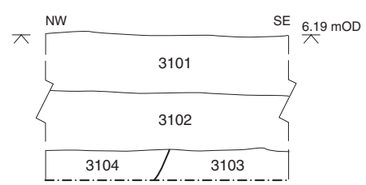
Trench 29
Section 2901



Trench 30
Section 3001



Trench 31
Section 3101



Trench 31
Section 3102

Trench 32
Section 3201

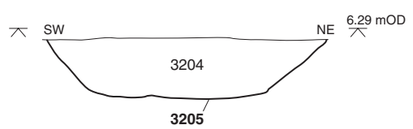
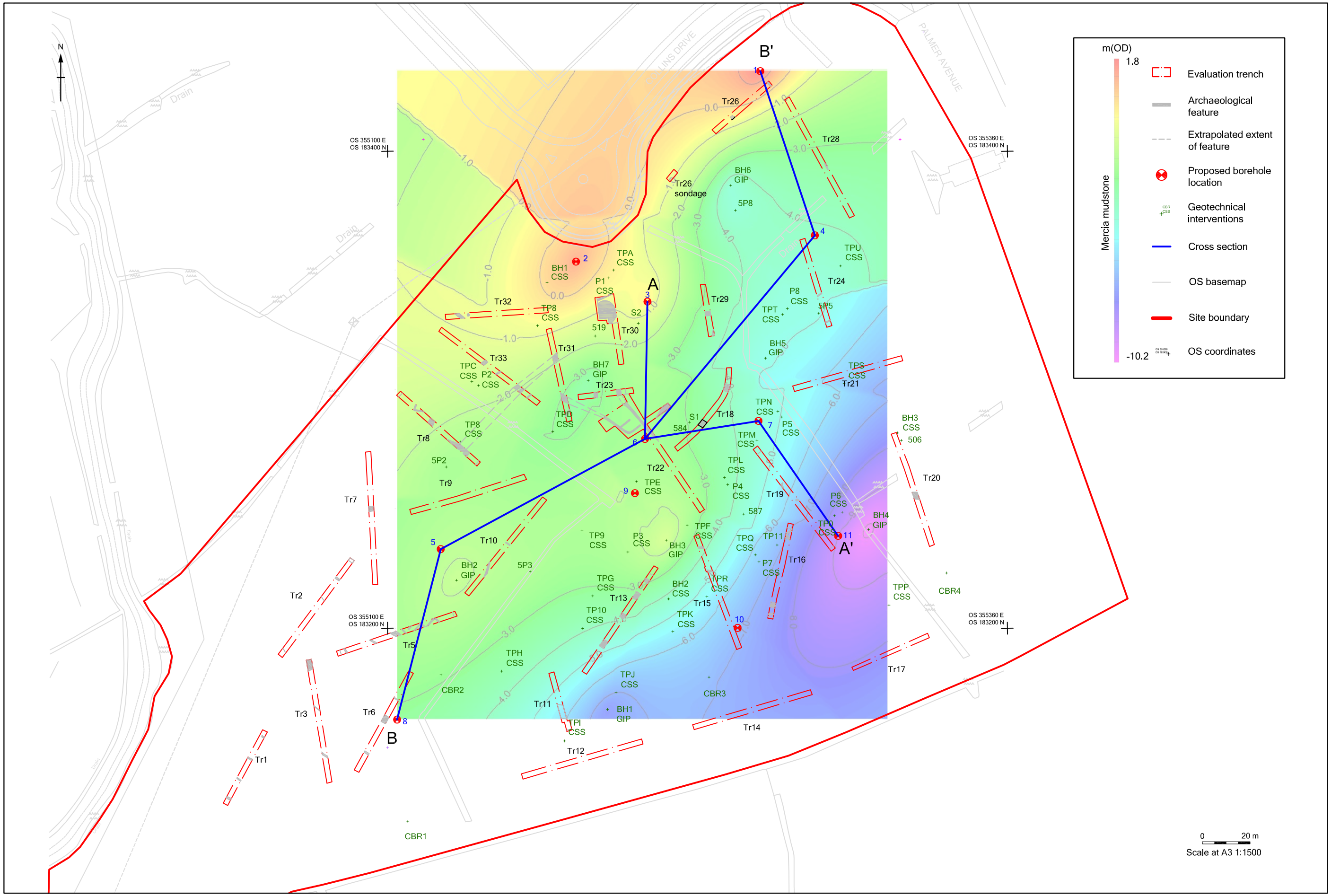


Figure 4: selected sections



X:\Avonmouth Western Approaches Plot 5000\010Geomatics\CAD\001current\PASBWAEV_PLOT5000_BOREHOLES_150107*BRSMG06/63*MKS

Figure 5: A plot of Mercia Mudstone elevations across site with trench and borehole locations

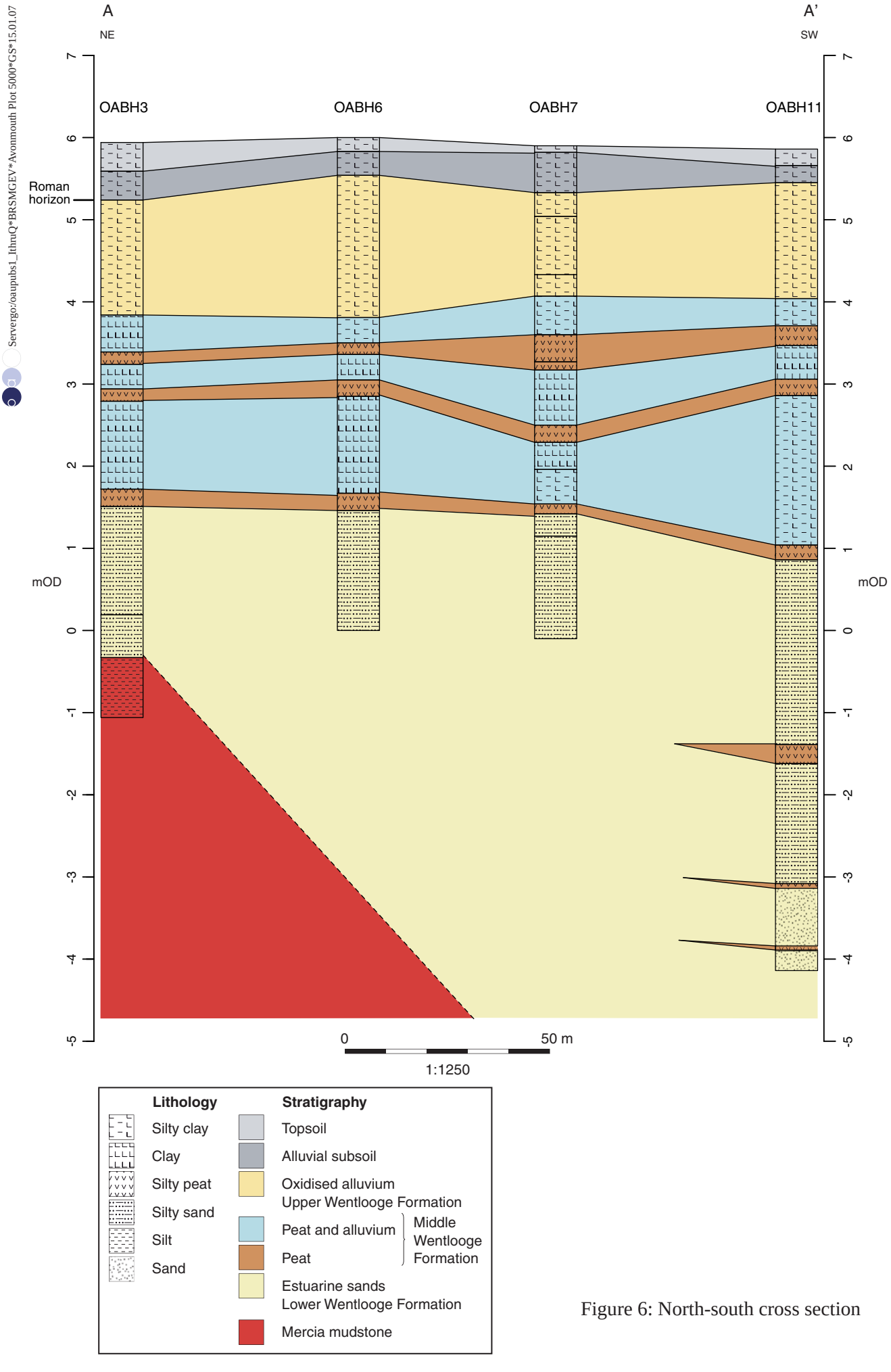


Figure 6: North-south cross section

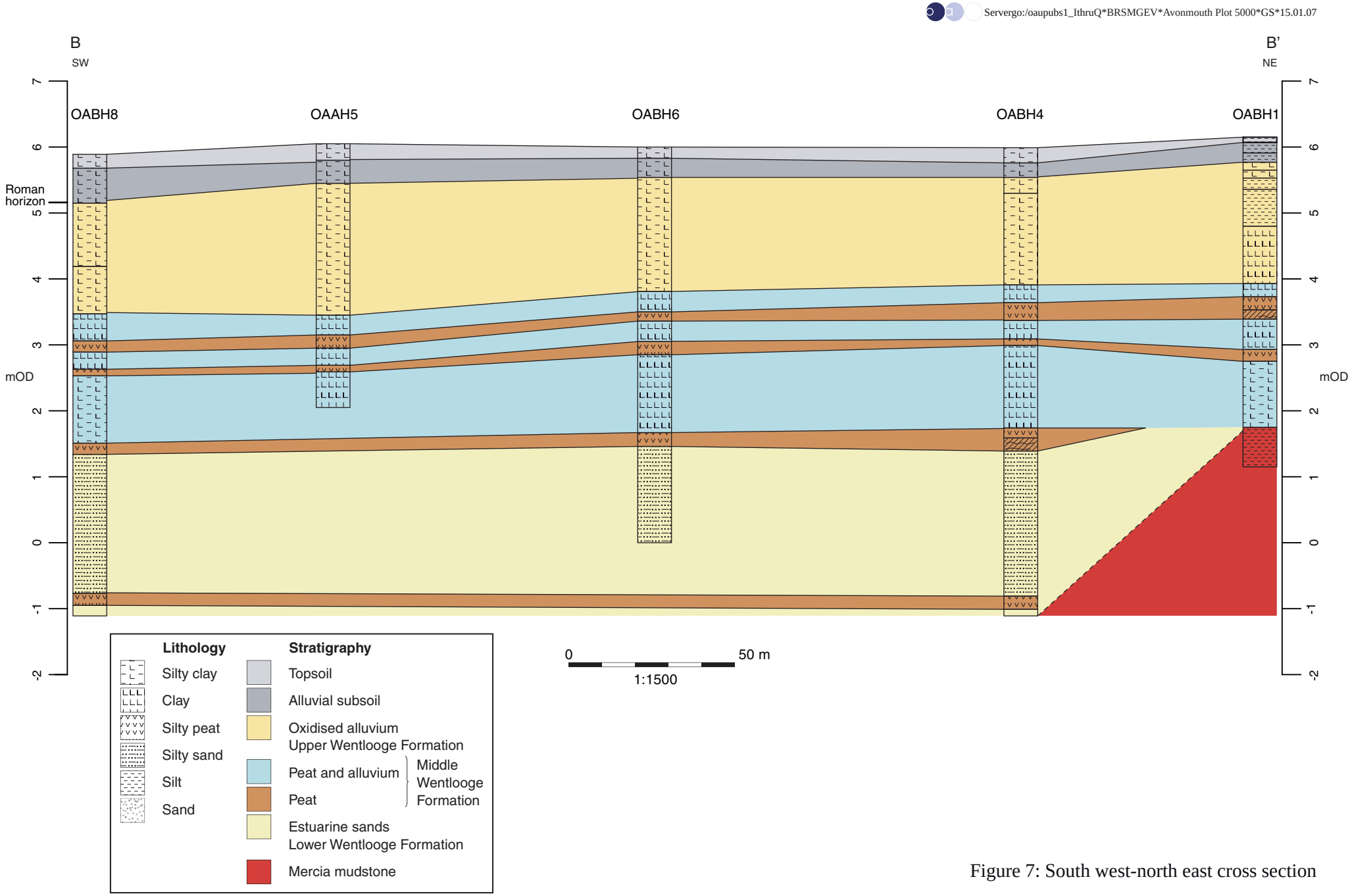


Figure 7: South west-north east cross section

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