WITBYEV

Witney Cogges Link Road
Witney
Oxfordshire

Archaeological Evaluation Report

Oxford Archaeology

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OXFORDSHIRE COUNTY COUNCIL

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Witney Cogges Link Road

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on behalf of Oxfordshire County Council and Jacobs Babtie

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SUMMARY

In December 2004 Oxford Archaeology (OA) was appointed to carry out the evaluation works along the line of the proposed Witney Cogges Link Road, west of Stanton Harcourt Road, Witney, Oxfordshire, by Oxfordshire County Council. The archaeological aspect of the project was under the management of Jacob Babtie and comprised the excavation of 16 trenches and 6 boreholes, distributed to give a representative sample of the route corridor.

The route was divided into two zones. Zone 2 was situated on the higher ground of the gravel terrace and Zone 3 on the alluviated floodplain of the River Windrush. Poor ground conditions however due to high water tables on the floodplain necessitated the abandonment of a number of trenches in Zone 3.

The trenches identified limited evidence of activity comprising a series of linear features concentrated at the edge of the gravel terrace and floodplain. Occasional pottery sherds recovered from these features suggest the activity is of Iron Age date although an earlier date cannot be ruled out for some of the undated features. Two furrows were also identified from which 13th century AD pottery was retrieved. The distribution of features and paucity of finds in general suggests a low-level of occupation indicative of activity associated with floodplain management and agricultural practices rather than settlement.

An additional component of the assessment was the production of a deposit model for the route. The model demonstratives substantial depths of undisturbed waterlogged Holocene alluvial and peat deposits were preserved within zone 3. Significant local variation in the sediment sequences and underlying gravel topography indicates the presence of a number of buried palaeochannels and topographic highs. The sediment sequences in zone 3 are largely undated, although the latest phase of alluviation appeared to seal features of possible Iron Age date at the edge of the gravel terrace. Available models for the development of the Upper Thames floodplain suggest the onset of major alluviation occurred some time in the late Iron Age – Roman period. This suggests the underlying deposits within Zone 3 may relate to earlier periods. Initially within the earlier periods, the Neolithic and perhaps the Bronze Age, the floodplain surface away from channel locations may have been relatively dry although localised flooding may have occurred. It is likely the area became increasingly wet as water tables rose, possibly during the middle Iron Age, resulting in seasonal flooding and alluviation. The presence of organic remains associated with the palaeochannels provides some potential for radiocarbon dating

The range of the depositional environments represented at the site have varying potential for the preservation organic remains. The waterlogged conditions in zone 3 suggest the potential for preservation of palaeoenvironmental materials is high. Samples have been submitted for assessment, the results of which will form an addendum to this report.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 In December 2004 Oxford Archaeology (OA) was appointed to carry out the evaluation works along the line of the proposed Witney Cogges Link Road, west of Stanton Harcourt Road, Witney, Oxfordshire (NGR SP366 092, Figs. 1and 2), by Oxfordshire County Council. The archaeological aspect of the project was under the management of Jacob Babtie.

1.1.2 The proposed scheme comprises a link road connecting Witan Way to Oxford Hill around the south of Cogges Estate. It also includes a route onto Wadard's Meadow towards the northern part of the scheme. The Link Road starting from Witan Way is to be built up on an embankment over the floodplain to a proposed new bridge over the western branch of the River Windrush. The road continues on embankment, until it reaches a second proposed new bridge over the eastern branch of the river, where it then gradually descends. From here the route passes underneath a new bridge on Stanton Harcourt Road immediately to the north of the existing bridge over the A40. It continues to run parallel to the A40 in an easterly direction before heading northwards around the southeast of Cogges, where the carriageway climbs towards the junction at Oxford Hill.

1.1.3 In response to a Brief prepared by Jacob Babtie for pre-determination archaeological investigation, OA produced a Written Scheme of Investigation (WSI) detailing the aims and scope of work (OA 2004). This phase of archaeological investigation covers the area to the west of Stanton Harcourt Road. This area has been divided in to two zones as outlined in the WSI. Zone 2 runs from chainage 630 to chainage 900 and is located on the higher ground of the terrace. Zone 3 runs from chainage 40 to chainage 630 across the floodplain of the River Windrush.

1.1.4 The proposed strategy for the evaluation involved the excavation of 18 trenches placed to give a 2% sample along the route corridor. Unfortunately due to flooding and safety restriction trenches 15 and 16, located on the floodplain were not excavated to their full depth due to flooding and consequently the proposed locations for trenches 17 and 18 were also abandoned. As part of a contingency strategy however, a borehole survey was conducted in the more deeply alluviated areas of Zone 3 in order to retrieve stratigraphic data and adequate samples for palaeoenvironmental analysis.

1.1.5 The results of the borehole survey and the trial trenching have been combined with data from a limited number of historical boreholes to create a preliminary deposit model for Zones 2 and 3 of the route corridor. The purpose of the deposit model was to provide base-line data regarding the nature of the sub-surface stratigraphy in order to clarify the context of the archaeological remains discovered and ultimately define areas of potential archaeological significance. Subsurface deposit modelling has the ability to reconstruct past geographies (palaeogeographies) for areas where the surface expression bears little or no relationship to those buried at depth. This type of approach is particularly valuable in floodplain environments where the archaeological potential is difficult to assess by traditional methods. This is often due to thick deposits of alluvium effectively masking earlier deposits that frequently lie at great depth in waterlogged conditions

1.1.6 This document reports on the results of this work, sets it within the context of earlier investigations and discusses the options available for further mitigation of development impacts. The report includes the results of a geophysical survey conducted in Zone 2 prior to trenching. The survey was commissioned by Jacob Babtie and carried out by Pre-Construct Geophysics on the 29th of November 2004.

1.1.7 Given the time scales involved for the production of this report the results of the assessment for palaeoenvironmental materials will follow as an addendum.

1.2 Topography and Geology

1.2.1 The proposed route crosses the gravel terrace and floodplain of the River Windrush, approximately 8km upstream from its confluence with the River Thames. In the area just to the north of the site, at Witney, the river divides into two separate channels: the respective channels are referred to as the East and West Windrush Rivers. The proposed development would cross both rivers on roughly an east/west alignment.

1.2.2 The solid geology along the route corridor comprises Oxford Clay, Kellaway beds and Cornbrash (BGS sheet 236). On the higher ground of Zone 2 at the eastern extent of the route corridor (chainage 780 to 900) it is capped by loessic clayey drift directly overlain by topsoil. In Zone 3 the route corridor crosses the floodplain of the Windrush where Pleistocene river gravels are overlain by deposits of Holocene alluvium. The alluvium thins eastwards into Zone 2 against the rise of the gravel terrace.

1.3 Geoarchaeological and environmental background

1.3.1 In order to fully understand the nature of the stratigraphic sequences it is important to consider the changing nature of the sedimentary environment and the context of the site within the valley of the River Windrush, the Upper Thames, and British lowland river systems in general. Both the Pleistocene and Holocene sequences of the Upper Thames have been subjected to numerous detailed investigations that provide a good comparable body of data (Bridgeland 1994, Macklin 1999, Robinson 1992, Robinson and Lambrick 1984, Brown 1997)

1.3.2 During the Pleistocene, Britain was effected by sequence of very cold glacial periods, when polar ice-caps expanded, sea levels fell, and much of the North and Midlands was covered in glaciers. The River Thames and its tributaries adopted their current drainage pattern, between the Anglian glaciation and Devensian Stage (450 ka –10 ka B.P). Deposits relating to this period presently exist as of wedges of sand and gravel sequences on the valley sides, eroded by subsequent fluvial incision during periods of lowered sea level to create terraces. The most recent episodes of gravel deposition formed the gravels in the valley bottoms. These gravels were deposited under cold climate conditions in braided stream systems during the Late Pleistocene, between 10-15 ka B.P., when sea level may have been between 25m and 150m lower than present day (Bates 1999: 40). These systems consisted of unstable channels separated by shifting sandbars, probably loaded with silt and eroding wind-blown loess soils (Brown, 1997; Macklin, 1999).

1.3.3 The surface of the valley bottom gravels formed the template onto which alluvial sedimentation occurred later, during the Holocene. Current understanding of the sedimentation that has occurred throughout the Holocene has been summarised in Brown and Keough (1992), Brown (1997), and Robinson (1992). The Holocene regime of lowland river systems seems to have been one of channel stability. The transition from braided river systems, through an anastomising process where fewer, more stable channels were formed and separated by gravel islands, towards a more stable, channelled flow regime occurred towards the end of the late Devensian. During the early and Mid Holocene little alluviation appears to have taken place on the floodplain with water tables seasonally low, although small scale flooding may have taken place (Robinson 1992:200). Prior to alluviation the soils on the floodplain probably consisted of thin non-calcareous ungleyed brown earth or sandy loam to silty clay overlying gravel (Allen and Robinson 1993). The environment of the area for much of the middle Holocene probably consisted of quite dense alder woodland. Although the precise timing of woodland clearance may have varied from significantly site-to-site, pollen evidence for the region suggests parts of the floodplain of Upper Thames may have been cleared in the Early and Middle Bronze Age for pastureland. At the site of Mingies Ditch, further down stream, clearance was dated to the Late Bronze (ibid).

1.3.4 The onset of sedimentation has been modelled for three major lowland river systems, the Upper Thames, the Ouse and the Nene (Robinson 1992, Appendix 2; Fig.3). According to the model in the Thames basin the water table begins to rise in the middle Iron Age resulting in flooding in the late Iron Age and major alluviation in Roman period. There appears to have been a cessation in alluvial accretion during the Saxon period, although flooding continued, with a further phase of deposition during the late Saxon and throughout most of the medieval period. The factors responsible for the hydrological changes and alluviation are subject to some debate. Although climatic change has been widely cited, Robinson and Lambrick (1984) correlated changes within the Upper Thames valley with agricultural activity in the catchment. They suggested the rise in water table and subsequent flooding may have been the result of woodland clearance in the Cotswolds from the Late Bronze Age primarily for pastoralism and in the late Iron Age and Roman periods intensive arable activity. The data for the model derives from sites at Claydon Pike, Thornhill Farm, Buscot, Burroway, Farmoor Lechlade, Clanfield,, Ducklington, Stanton Harcourt, Northmoor, Cassington and Yarnton, Oxford, Drayton Wallingford and Goring. Specific to the Windrush valley, and down stream of Witney, it includes the sites at Gill Mill (Wallis and Lambrick 1989), Mingies ditch (Allen and Robinson 1993) and Gravelly Guy (Lambrick 1985). There is some evidence to suggest some local alluviation occurred in the late Bronze Age/ early Iron Age (Hazelden and Jarvis 1979). At the middle Iron Age site at Mingies ditch however little if any flooding occurred during this period. Neolithic and Bronze Age organic deposits where confined to channel deposits at this site and *Alnus* charcoal from a non-waterlogged layer in a tree throw pit produced a date of 2800±90 BP. An Iron Age ditch at a similar level contained waterlogged twigs dated to 2170±90 BP (Robinson 1992). On the pre-alluvial ground surface at Gravelly Guy two successive shallow gullies contained pollen and organic remains radiocarbon dated to 2274 and 844-803 cal BC (Lambrick 1992).

1.3.5 Until substantial silting had taken place in the channels however hydrological changes would not have been reflected in terms of the sediment sequence across the floodplain. This model implies that for a large part of the Holocene, the floodplain would have been relatively dry at least seasonally. With little sedimentation, the landsurface would have been subject to pedological and bioturbation processes over a considerable period. The topography of the gravel surface created by the braided streams in the late Pleistocene and early Holocene was uneven and undulating with topographic highs or 'islands' of sands and gravel. These islands may have remained areas of drier ground within the floodplain during seasonal flooding. And would have been the last areas to be buried by alluvium.

1.3.6 There is much evidence to suggest extensive utilization of floodplain resources and water management in the later periods. The Upper Thames Valley sees the development of seasonally inundated floodplain grassland and pastureland from the Iron Age onwards (Lambrick and Robinson 1988). At Mingies ditch woodland clearance was followed by the development of damp mesotrophic pastureland with mixed scrub prior to flooding, and in general there appears to have been an increase in grazing pressure at a time when water tables were rising and flooding occurring (Robinson 1992). This is evidenced at the middle Iron Age sites at Farmoor and Port Meadow (Lambrick and Robinson 1988), and the late Iron Age sites of Claydon Pike and Thornhill Farm (Miles and Palmer 1990). In the later Iron Age cultivation was also extending onto the edge of the floodplain as evidenced at Drayton (Lambrick and Moore 1987). The earliest evidence of hay meadow was identified at Claydon Pike dated to the 2nd century AD, although the main expansion of hay meadow appears to have been in the late Saxon or Early medieval period (Lambrick and Robinson 1988).

1.4 Archaeological and Historical Background

1.4.1 Previous work in the area includes the following (extracted from the Babtie 2004):

- A Desk Based Assessment undertaken for the western arm of the route (OAU 1993)
- Archaeological monitoring of geotechnical test pits undertaken for the eastern arm of the route (OAU 1994)
- An archaeological Desk Based Assessment and walkover survey undertaken over several areas within the eastern part (Zone 1a) of the current assessment area (Archaeological Services & Consultancy Ltd 2000).

- A trenched evaluation undertaken on the land east of Cogges Hill (John Moore Heritage Services (JMHS) 2000)

- A trenched evaluation undertaken to the south east of the Cogges Housing Development (JMHS 2001).

1.4.2 In 2004 the Babtie Group produced the desk based assessment "Witney Cogges Link Road, Cultural Heritage Desktop Study" (Babtie 2004). The background to the known archaeology of the area included in the assessment has been summarised below, with additional detail added where appropriate.

1.4.3 *Early prehistoric*: In brief evidence of early prehistoric activity is represented in the region by lithic artefacts. The distribution suggests a concentration of Palaeolithic activity on the Chilterns and on the ground terraces on both sides of the Thames. There is a more scattered distribution of Mesolithic flint artefacts suggesting widespread activity beyond the river valleys. Few early prehistoric finds have been recovered from the study area. A number of isolated Palaeolithic artefacts have been located to the south of the study area towards the confluence of the rivers Windrush and Thames A Mesolithic site has been located at Gravelly Guy, c.3 km south of the study area (Lambrick 1985).

1.4.4 The upper Thames valley has produced evidence of denser occupation during the Neolithic period. Evidence for Neolithic activity within the study area is poor consisting of a hollow based point discovered in the southwestern part of the study area and a flint core to the south east of Cogges. There are, however, a number of known sites of Neolithic and Bronze Age date in the surrounding area including a site discovered at Gill Mill Ducklington (Wallis and Lambrick 1984), which revealed traces of Neolithic settlement. A henge monument known as Devil's Quoits is situated 6 km to the south east of Witney at Stanton Harcourt. In the vicinity of the study area there are possible round barrows located to the east of the River Windrush within the floodplain and the first terrace.

1.4.5 It is possible however further evidence of activity lies deeply buried beneath thick deposits of alluvium on the floodplain. As discussed in section 1.3 the floodplain during the Neolithic and Bronze Age was likely to have been quite dry and there was probably little distinction with the gravel terraces. Islands of higher ground within the floodplain were also a particular focus for monuments for example the long barrows at South Stanwick and the Neolithic complexes at West Cotton and Irthlingborough (Robinson 1992)

1.4.6 *Later Prehistoric*: The upper Thames and Windrush valleys were a focus of considerable settlement during the Iron Age. There are two known Iron Age sites within the vicinity including a pottery scatter and a ditch. A significant number of Iron Age sites have been identified and a number recorded in the vicinity of Witney. Approximately 500 m to the south of Cogges a site has been interpreted as a promontory fort, while 3 km south of the study area, at Mingies Ditch (Allen and Robinson 1993), and at Gravelly Guy, Stanton Harcourt (Lambrick 1985), Iron Age occupation has been identified. To the west an Iron Age settlement has been discovered at Deer Park Road, Witney; while to the east an undated defensive site is likely to belong to the Iron Age. Within the study area there is evidence for Iron Age activity south east of Cogges and to the north east of Witney.

1.4.7 Prior to the onset of major alluviation later prehistoric settlements were present on the floodplain but not as extensively as on the terraces. The rise in water table influenced the type of settlement (Robinson 1992). At Mingies ditch a small enclosed pastoral site utilized the stream system of the floodplain for corralling and watering of animals whereas cereal cultivation was occurring on the drier higher ground (Allen and Robinson 1993). Some settlements were occupied seasonally, as at Farmoor (Lambrick and Robinson 1979), and others were exploited for specialized pastoral settlements on islands of higher ground as at Port Meadow (Lambrick and McDonald 1985) and Claydon Pike (Miles and Palmer 1990).

1.4.8 *Roman:* In the surrounding area there are a number of sites belonging to the Roman period, which are concentrated in the Windrush Valley and the Cotswold hills to the north and west. The excavations at Gill Mill Farm revealed a large area of settlement of some importance as suggested by the finds of tesserae, coins and a fragment of an altar. Further down the valley, 7 km to the southeast of the study area (Wallis and Lambrick 1989), at Watkins Farm, Northmoor (Allen 1991), there is evidence for an agricultural settlement. There are a cluster of Roman villa sites situated in the foothills of the Cotswolds to the north and west of Witney; most notably at Shakenoak c. 3 km north, North Leigh 5 km to the northeast and Ditchley 7 km to the northeast. A major Roman road known as Akeman Street which linked Asthall with Alcester is situated approximately 5 km north of Witney.

1.4.9 From the Roman period the floodplain appears to have been managed as part of larger agricultural units, which included tracts of the valley side. Activity included bridge building and water management. At Mingies ditch the stream adjacent to the Iron Age site was diverted in the Roman period. Evidence of Roman drainage ditches have also been identified at Claydon Pike possibly for the development of hay meadow. A Roman road on the floodplain at Gill Mill supported by a double row of oak posts probably supporting a wooden walkway (Robinson 1992).

1.4.10 *Saxon:* The name Witney is derived from Witta's island, which is first recorded in 969 AD. The name suggests that there was a settlement of Late Saxon date situated on an island between the various channels of the River Windrush. From the 10th century Witney developed as the centre of a large estate of the bishops of Winchester. Evidence for Early Saxon occupation has been recovered from the Roman villa at Shakenoak and an assemblage of 6th to 7th century pottery sherds have been found at Manor Farm, Cogges. Excavations at Gill Mill Farm, Ducklington revealed two 7th century cemeteries suggesting a settlement in close proximity (Wallis and Lambrick 1989). Within the vicinity of the study area several cropmaks to the west of Cogges have been identified as areas of possible Saxon buildings.

1.4.11 *Medieval:* The study area has a wide distribution of medieval sites with a focus along the east and west banks of the River Windrush. The settlement of Cogges lies to the east of the priory moated site within the Cogges scheduled area. It has its origins in the Anglo-Saxon period and continued until its abandonment in the 13th century. Evidence for water management can be found in the north eastern part of the monument in the form of a rectangular fishpond enclosed by a substantial bank formed by using the line of the Madley Brook which was diverted to the north to form a bypass leat. The fishpond was likely to have been used both for production and as a millpond providing a head of water for the mill to the west. A mill site is known in the northwestern part of the monument in a bend in the Windrush. The medieval town of Witney largely replaced the settlement at Cogges in the 13th century. The urban pattern of 13th century Witney included a market place, burgage plots and a bridge over the river. The economy of the area was based on the wool trade. In 1086 Witney had two mills and Cogges had one. Witney Mills was the site of the earliest known mills in the area and was one of three fulling mills recorded in 1277. In 1301-2, the Bishop of Winchester's Pipe Rolls record both fulling and corn mills at Woodfordmill, as well as a corn mill called Waleys Mill and one other fulling mill. Gill Mill was the mill of the manor of Cogges and the priory had a mill possibly located to the east of Langel Common. The Domesday Book also demonstrates the importance of meadowland in the economy in the medieval period. Witney had 100 acres and Cogges possibly had as much as 220 acres. The majority of the land in the river valley was meadowland. Many of the field names recorded in historic documents end in –ham or –mead, meaning meadow.

1.4.12 The study area during the post-medieval period sees the development of the town of Witney to the north with 18th and 19th century buildings and re-buildings. The wool trade continued to be an important part of the economy of the area with production characterised by a number of establishments. These include the blanket factories, steam works and the numbers of mills in operation including New Mills, Witney Mills and Farm Mill, which are all labelled 'Manufactories' (1st edition Ordnance Survey). Beyond the town there were areas of both enclosed and unenclosed land as well as arable and grassland.

1.4.13 Historic features of the modern period relate to the defence of Britain during World War II. Originally there were two in the Langel Common area and two further to the south. Three of these survive and are examples of a rare prototype.

2 AIMS

2.1.1 The aims of the evaluation as set out in the WSI were as follows:

- To establish the presence/absence of archaeological remains within the area designated for archaeological evaluation.
- To determine the extent, condition, nature, character, quality and date of any archaeological remains present.
- To establish the ecofactual and environmental potential of archaeological deposits and features.
- To make available the results of the investigation

2.1.2 In order to provide base-line data regarding the subsurface stratigraphy, one of the overall objectives of the subsequent assessment was to develop a deposit model for the study area. Specifically the model aimed to:

- Characterise the sequence of sediments and patterns of accumulation across site, including the depth and lateral extent of major stratigraphic units, and the character of any basal land surface pre-dating these sediments.
- Identify significant variations in the deposit sequence indicative of localised features such as topographic highs or palaeochannels.
- Identify the location and extent of any waterlogged organic deposits and address the potential and likely location for the preservation of palaeoenvironmental remains.
- Relate the site sequences to any current regional models.

3 METHODOLOGY

3.1 Geophysical Survey

By David Bunn of Pre-Construct Geophysics

3.1.1 The geophysical survey methods and techniques adhered to the baseline national standards and guidelines established by English Heritage in *Geophysical survey in archaeological field evaluation* (David, 1995).

3.1.2 Gradiometry is a non-intrusive scientific prospecting technique that is used to determine the presence/absence of some classes of sub-surface archaeological features (e.g. pits, ditches, kilns, and occasionally stone walls). By scanning the soil surface, geophysicists identify areas of varying magnetic susceptibility and can interpret such variation by presenting data in various graphical formats and identifying images that share morphological affinities with diagnostic archaeological remains.

3.1.3 The area survey was conducted using a Bartington Grad – 01 – 1000 dual fluxgate gradiometer with DL601 data logger set to take 4 readings per metre (a sample interval of 0.25 m). The zigzag traverse method of survey was used, with 1m wide traverses across 30m x 16m grids. The sensitivity of the machine was set to detect magnetic variation in the order of 0.1 nanoTesla.

3.2 Trial Trenching

3.2.1 Standard OA methodologies were used throughout the trenching and are detailed in the Written Scheme of Investigation (OA 2004).

3.2.2 The trenches were excavated to the top of the 'natural' (i.e. undisturbed geology) or to the top of significant archaeological levels, whichever was the higher.

3.2.3 The exposed archaeological horizon was cleaned to clarify the remains. Archaeological features were sampled to sufficiently characterise and date them.

3.2.4 Care was taken to ensure that archaeological deposits were not damaged through excessive use of machine excavation.

3.2.5 All machining of deposits took place under the supervision of the site Project Supervisor. The topsoil and subsoil were stored separately either side of each trench. Each trench was only back filled after approval was given by the County Archaeological Officer for Oxfordshire County Council and using a 360° excavator to ensure the ploughsoil was properly reinstated.

3.2.6 The recording of the alluvial sediment sequences in each trench was supervised by an OA geoarchaeologist. A dual approach to recording was employed whereby a standard archaeological context recording system was used in addition to detailed geoarchaeological recording of selected site areas. This is an appropriate response to complex stratigraphic sequences containing both anthropogenic signatures and natural processes. This strategy was co-ordinated through the use of a summary proforma completed for each trench. The methodology involved the description of sedimentary units using standard geological terminology. These descriptions were used to correlate stratigraphy between trenches and boreholes and define sediment types.

3.2.7 The work was completed over a period of two weeks by a team comprising a Project Supervisor, two field archaeologists and a geoarchaeologist, under a Project Manager, and in turn, under the general direction of Oxford Archaeology's Head of Fieldwork.

3.3 Borehole Survey

3.3.1 The boreholes were drilled in six locations using a standard percussion Terrier rig (Fig. 4a). The choice of location was determined by the data retrieved from the trenching and with the aim of providing as broad a distribution as practicable along the proposed route. Certain problems relating to the encroachment of groundwater were encountered regarding site access, particularly in the conservation area in the western part of Zone 3. For this reason the data for this area is quite limited.

3.3.2 The use of the Terrier rig allowed the retrieval cores measuring 10cm diameter recovered in 1.0m lengths providing adequate sediment for both stratigraphic description and assessment for palaeoenvironmental materials. The cores were returned to OA premises, extruded, and logged by a qualified geoarchaeologist using standard geological terminology. Sampling for palaeoenvironmental material was carried out as appropriate.

3.4 Deposit model

3.4.1 In order to create the deposit model all relevant sedimentary data retrieved from both the trenches (annotated TT) and boreholes (annotated BH) was examined and inputted into geological modelling software (© Rockworks 2004) for analysis and correlation of into key stratigraphic units. In addition the records from 13 historic boreholes (annotated HBH) located within the western sector of the study area were made available by Babtie, to be incorporated into the model. The problems associated with the use of historical boreholes have been reviewed by Bates (1998). Although there are limitations to these records do provide basic data , not only on the current evaluation area, but of the area to the west of this, that will be subject to future archaeological investigation.

3.4.2 The key stratigraphic units identified have been used to demonstrate the nature and the extent of the sediment accumulation patterns across site. Various cross sections and elevation plots have been produced in order to illustrate the main points for discussion. It should be noted the data from the historical boreholes derives entirely from paper records, no associated core or sample data were available. Although providing limited stratigraphic data the records were still considered useful in determining key stratigraphic boundaries such as the surface of the Pleistocene gravels and thickness of overlying alluvial deposits.

4 RESULTS

4.1 Geophysical survey

4.1.1 The following section contains parts of the geophysical survey report that are most pertinent to the archaeology that was uncovered in the evaluation. Moreover the 'grey scale' image at Figure 2 is only part of the results of the geophysical component. For the complete results and geophysical diagrams see "Fluxgate Gradiometer Survey: Land Along the Proposed Route of the Witney to Cogges Link Road, Oxfordshire" by David Bunn of Pre-Construct Geophysics.

4.1.2 The survey detected a series of vague northeast to southwest-aligned linear anomalies (Fig.2). Parallel and regularly spaced at c. 7-10 m, these appear reflect residual traces of ridge and furrow ploughing. Where sampled, this has been confirmed by excavation (see section 4.3).

4.1.3 The ridge and furrow cuts, or is cut by, an ill-defined east to west-aligned linear anomaly (red line). It is not clear, from the results, whether or not this ditch-like feature predates the ridge and furrow, and excavation across it has not revealed any significant corresponding remains (*ibid*). It may therefore exist solely within the ploughsoil as a modern cultivation score (this interpretation is offered tentatively, given an absence of any spatial relationship with current field boundaries).

4.1.4 A number of possible pits were detected by the survey. For the most part, these occur close to the south-western edge of the field, where sample excavation has confirmed this hypothesis, as well as revealing ditches that contain Iron Age materials (*ibid*). The survey has not produced definitive evidence of such ditches, possibly due to the masking effects of overlying ridge and furrow.

4.1.5 A random spread of magnetically strong discrete anomalies suggests the presence of ferrous-rich materials, such as ploughshares, horseshoes or clay brick/tile fragments. The latter are thermo-magnetically enhanced as a result of firing and typically produce a strong response when in close proximity to the gradiometer.

4.2 Sedimentary sequence and deposit model

4.2.1 The evidence from the boreholes and evaluation trenches revealed that a range of different sediment types are present along the route. These have been grouped into 6 main stratigraphic units (Table 1).

4.2.2 The pre-Holocene deposits comprise bedrock (Unit 1) overlain by drift deposits (Unit 2) and fluvial gravels (Unit 3) of Late Pleistocene age. Overlying this, in Zone 3 on the floodplain are Holocene deposits, consisting of intercalated minerogenic silt-clays and organic deposits, which appear to be associated with several possible palaeochannels (Unit 4). Unit 5 represents an upper, more extensive deposit of minerogenic silt-clay that represents a substantial phase of overbank flooding and alluviation across the floodplain extending onto the higher ground of the terrace. The sequence is capped by modern topsoil (6).

4.2.3 Additional sub-units have also been allocated to distinctive localised deposits that reflect a variety of depositional environments associated with main stratigraphic units, for example deposits of organic silt-clays, peats and sand associated with group 4.

Table 1

Unit	Description	Inferred environment of deposition	Age
6	Ploughsoil	Arable cultivation	Modern
5e	Re-deposited gravel	Gravel dumps (Human agency)	Later Prehistoric-post iron Age
5d	Clayey silty loam, alluvial derived subsoil	Low energy overbank flooding with minor sediment accretion subject to some disturbance as a result of ploughing.	Later Prehistoric-post iron Age
5c	Fine grained brownish grey minerogenic silty clay	Low energy overbank flooding and major sediment accretion at higher elevations	Later Prehistoric-post iron Age
5b	Clayey sand-gravel	Moderate to high energy sediment accretion at the edge of palaeochannel A. Some erosion and redeposition of earlier sands and gravel.	Prehistoric?
5a	Fine grained bluish grey minerogenic silt clay and sandy silts	Initial low energy sediment accretion within channels	Prehistoric?
4c	Peaty clay / organic silty clay	Low energy sediment accretion at the edge of Palaeochannel A. semi-terrestrial (landsurface?)	Prehistoric?
4b	Organic silty clay	Low energy sediment accretion at the base of Palaeochannel A	Prehistoric?
4a	Peat clay	Low energy sediment accretion at the base of Palaeochannel A	Prehistoric?

Unit	Description	Inferred environment of deposition	Age
3	Coarse poorly sorted sandy- gravel	High energy fluvial environment. Probably braided channel systems with low sand and gravel ridges. Low scrub vegetation on more stable eyots.	Pleistocene
2	Fine grained silt	Loess derived deposits probably reworked by fluvial processes.	Pleistocene
1	Cornbrash /Kellaway beds		

4.2.4 Firm assignment of individual lithologies to particular stratigraphic units has proved difficult at some locations, particular in the western parts of the sequence that are only covered by data from the historical boreholes. This is due to the fact that these records rarely distinguish between different units of alluvium. Correlation is usually aided where significant intercalated peat or organic deposits occur that can act as stratigraphic markers within the sequences. Unfortunately suitable marker horizons at Witney Cogges were limited.

Basement topography and pre-Holocene landsurface

4.2.5 Unit 1 Basal geology. The basal geology of the site is variable comprising Cornbrash, Kellaway beds and Oxford Clay (BGS sheet 236). The majority of boreholes and trenches did not expose these deposits. Those that did however provided elevation of between 75.5 m and 76.6 m OD (HBH 1-10).

4.2.6 Unit 2 Fluvial gravels. A large number of boreholes and trenches exposed Pleistocene fluvial gravel overlying the bedrock (HBH 1-10, BH 1- 6 and TT 1-5, 13-16). However only the historical boreholes were deep enough to expose the full depth of this unit. Where bedrock was proven the gravels varied substantially in thickness from 0.70m and 5m. The coarse grained character of the deposits suggests accumulation under cold climate periglacial conditions within high energy braided streams. Thin layers of soft clay were some times noted in the logs and may represent infilling of eroded palaeochannels. Variation in the deposits can be expected where channel shifting occurred. Occasionally the upper parts of these deposits are logged as clayey which may represent the transition to anastomising and more stable conditions during the Late Glacial and Early Holocene. On the basis of previous work (Bridgeland 1994) these deposits can be equated with the Northmoor Terrace Gravels dated to the latter part of the mid Devensian (40 ka BP). Any archaeological remains identified within these deposits are likely to have been reworked by fluvial processes.

4.2.7 Unit 3 Silty drift. Drift consisting of silty loessic deposits that appeared to overlie the gravel in places were identified within trenches towards the east of site (TT 6, 7, 8, 9, 10, 11, 12). This homogenous deposit showed no sign of bedding and probably represents wind blown accretion during a cold climate conditions possibly subject to later reworking and erosion through fluvial processes.

4.2.8 The elevation data from the surface of the fluvial gravel and drift deposits has been used to create a topographic map of the possible Holocene landsurface that may have existed prior to major alluviation occurring (Fig. 4b). Bates (1998) refers to this as the 'topographical template' and suggests that variation in the template largely dictated the patterns of subsequent sedimentation as flooding ensued during the later prehistoric period. It should be noted that the plot is essentially only relevant to the route corridor, which is rather narrow. Any apparent topographic features outside of this area have been interpolated by the modelling software on the basis of limited data and are therefore an inaccurate representation.

4.2.9 The surface within the route corridor varies greatly from 75.6m to 80.1m OD. The highest elevations are between 78.5m and 79.6m OD exist in the eastern sector of route. The edge of the terrace and floodplain may be located in Trench 13, with everything to the west representing the development of the modern floodplain. The general elevations on the floodplain varied between 76.2m and 78.5m OD.

4.2.10 Significant undulations identified within the floodplain gravels might indicate the location of complex sequence of palaeochannels. At least two deeply incised depressions between 75.6m and 76.9m OD and a shallower depression between 76.8m and 77.9 m OD have been identified (Fig. 4b and 5). Palaeochannel A is located just to the east of the East Windrush River. These are two adjacent incised channels that are cut into the Pleistocene gravel,. The second (Palaeochannel B), is a similar series of less well defined incised channels located under and adjacent to the present West Windrush Channel. A third, shallower depression (Palaeochannel C) is located adjacent at the edge of the higher ground in the vicinity of Trench 13.

4.2.11 For majority of the floodplain the surface of the gravels averages between 77.35m OD. Topographical highs have been identified within two areas of Zone 3 (Fig. 4b and 5). The morphology of these areas varies substantially indicating complex local variation that cannot be wholly defined within the current dataset. A slightly raised area is noted just at the edge of the higher ground recorded within trench 14 and an additional one on west edge of the modern eastern channel of the Windrush located within Borehole 6. The most eastern high point reaches elevations of approximately 78.0m OD, the western most point is slightly lower at between 77.4m and 77.8m OD. These highs have been interpolated on the basis of only one borehole for each and are therefore poorly defined.

The Holocene floodplain

4.2.12 Fine-grained minerogenic silt-clays were encountered the majority of the interventions overlying the Pleistocene gravel in Zone 3. Organic deposits were however noted associated with palaeochannel A. The deposits are quite variable suggestive of a variety of environments of deposition.

4.2.13 Unit 4. Organic silt clay and peat deposits. In the base of Palaeochannel A, a localised deposit a clayey peat was identified (subgroup 4a, HBH 10). 0.35cm in thickness lying between 75.7m and 76.2m OD. This is overlain by an organic silty clay (sub-unit 4b) Organic silty clay and clayey peats were also identified at the edge of palaeochannel A (subgroup 4c), within boreholes BH1, BH 2 and BH 4. These may represent the infilling of minor channels/backwaters or a semi terrestrial landsurface associated with the edges of palaeochannel A. The more organic parts of the sequence may be representative of wetland environments such as reedswamp or alder carr. Any archaeological material associated with these deposits is likely to have minimal modification in terms of lateral transportation, though a higher degree of reworking may be expected within channels.

4.2.14 Unit 5 Minerogenic sily-clay sands and gravels Infilling the upper profiles of the palaeochannels and extending across the site at higher elevations were extensive deposits of minerogenic silty clay.

4.2.15 The deposits within the palaeochannels comprised dark bluish grey clay silts and sandy silts (sub-unit 5a) and represent the initial infilling of low lying areas created by the channels by alluvial sediments.

4.2.16 High energy partially laminated sands and gravels (sub-unit 5b) ranging in thickness between 0.17m and 0.45m, lay at elevations between 76.3m and 77.3m OD were identified in BH 1, 4, 5, TT16 . The deposits are confined to the banks of Palaeochannel A and indicate high energy overbank deposition. The sediment are likely to comprise material from earlier gravel deposits and any artefacts are likely to be moderately reworked, although *insitu* material may be present in adjacent areas.

4.2.17 The upper levels of unit 6 comprised light brown/greyish brown silty clays with evidence of root action and weathering in the upper part of the profile (sub-unit 5c). In Zone 3 these deposits average 1.05m. in thickness. Although they thin substantially eastwards they were present in trenches 13 and 14 sealing archaeological features. The fine- grained nature of these deposits indicates low energy deposition. Any archaeological material present within these deposits may have be relatively *insitu* though some low level lateral movement may have occurred

4.2.18 Within Trenches 1-12 sub-unit 5d represents an alluvial derived subsoil. This sub-unit lies directly beneath the modern ploughsoil and overlies gravel and drift deposits. Thickness ranged from 0.15m and 0.20m. These deposits, at least in trenches 1-6 may represent later sedimentation extending to higher elevations beyond the areas of the palaeochannels. Any archaeological material present within these deposits may have be moderately reworked by ploughing.

4.2.19 A very thin layer of localised gravel (sub-unit 5e) was identified within Boreholes 3 and 4 located below a thin layer of silty clay on the west bank of the East Windrush River. These deposits range in thickness between 0.05m and 0.32m, at an elevation of 78.0m OD. The gravels are a little anomalous with the rest of the sequence and may represent deliberate deposition.

4.2.20 Unit 6 Modern Topsoil/ Ploughsoil Modern plough soil was recording capping all the sequences east of the Windrush channels. Localised variations in thickness (0.10 - 0.55m) may be related to furrowing. The deposits consist of mid/dark greyish brown silts/silty clays loams with occasional clast inclusions. This unit is at its thickest (0.55m). The west in HBH 3 associated with an undulation in the underlying alluvium. This undulation may represent the location of a minor channel.

4.3 Archaeological deposits

General

4.3.1 In the following section the results of the evaluation trenching are described. The general stratigraphic sequence has already been described above and will not be repeated here in detail. The deposits recorded in each trench will however be related to the general sediment sequence. All deposits, both natural and archaeological, recorded in each trench are detailed in the Appendix 1.

Distribution of archaeological remains

4.3.2 In Zone 2, (Fig. 2, trenches 1-12) pre-Holocene deposits were overlain by an alluvial based subsoil (Unit 5d) of variable thickness, above which was approximately 0.30m of modern ploughsoil (Unit 6).In trenches 1-6 the pre-Holocene deposits comprised fluvial sands and gravels (Unit 2), in trenches 7-12 silty drift deposits (Unit 3) were directly below the subsoil. Archaeological features were identified in only 5 of the 12 trenches (1, 2, 3, 4 and 5) in the form of intercutting linear ditches and gullies and occasional pits of possible Iron Age date. The greatest density of features was identified in Trench 1 in the north-western sector. In addition to this trench 4 identified two furrows containing 13th century pottery. No features were identified in trenches 6-12.

4.3.3 In Zone 3, trenches 12 and 14, at the interface between the higher ground and the floodplain, an alluvial deposit correlated with the upper levels of Unit 5c appeared to seal a series of undated linear features that were cut into the underlying terrace gravels. These features were located at the edge of a possible minor palaeochannel (Palaeochannel C). No archaeological features were identified in trenches 15 and 16.

Zone 2: Trenches 1-12

4.3.4 Trench 1, (Figs. 6 - 8) located in the north-western corner of Zone 2, contained the highest number of features of any trench excavated during the evaluation. It contained nine linear features (147, 143, 141, 139, 103\111, 122, 125 and 113\134) all aligned north northwest-south southeast, apart from 125 which was aligned northwest-southeast. Six small pits or posts (131, 127, 118, 120, 109 and 145) were also identified.

4.3.5 Ditch 147 was found in the westernmost area of trench 1. It measured 0.45 m across and 0.20 m in depth and was filled by a brown silty clay (148). Ditch 147 truncated pit 145 which measured 0.65 m in diameter, 0.20 m in depth and was filled by a light brown sandy clay (146). Pit 145 is truncated on its northern side by a small linear gully (143), measuring 0.50 m across and 0.25 m in depth and filled by a mid-brown silty clay (Fig. 8, Section 108).

4.3.6 To the north Ditch 139 measured 1.55 m in width and 0.20 m in depth and was filled by a brown clay silt (140) (Fig.8, Section 107). Ditch 139 was truncated by ditch 141 measuring 1.20 m in width and 0.25 m deep and filled by a brown silty clay (142). Ditch 103\111 measured 1.70 m wide and 0.64 m in depth and was filled by two primary slumping fills (104 and 105), and three brownish grey silted deposits (106, 107 and 108). Fill 108 contained bone and pottery of Iron Age date. Ditch 103\111 was truncated by a small pit (109) which measured 0.10 m in depth and 0.45 m in diameter and was filled by a brown clay silt (110) (Fig.8, Sections 101 and 102).

4.3.7 Ditch 122 measured 0.52 m wide and 0.21 m deep and was filled by two reddish brown silty clay fills (123 and 124) (Fig.8 , Section 105). Ditch 125, a very shallow ditch measuring only 0.08 m deep and 0.60 m wide which was filled by a brown clayey silt (126) (Fig.8 , Section 106).

4.3.8 The last group of features was located at approximately 5.0 m from the northernmost end of the trench. The earliest feature was 131, a steep sided pit 0.72 m deep and of unknown diameter due to it being heavily truncated by later features. It was filled by 132, a grey clay silt and 133 a brownish grey clay silt. Fill 132 contained bone and pottery of possible Iron Age date. Pit 131 was truncated by a V-shaped, flat-based ditch 134, measuring 1.00 m in width and 0.60 m in depth and filled by brown silty deposits (135, 136, 137 and 138). Fill 138 contained pottery of possible Iron Age date. Ditch 14 was truncated by a bowl-shaped pit 127, 0.70 m in diameter and 0.32 m deep which was filled by a brown silty clay fill (128) (Fig.8, Section 103). Ditch 134 is the same as ditch 113 which was filled by brown silty clays (114, 115, 116 and 117) of which only 117 contained bone pottery of possible Iron Age date (Fig. 8, Section 104). This fill was truncated by 118, a steep-sided, bowl-shaped post cut 0.21 m in diameter and 0.20 m deep. Post 118 truncates 120, another post similar to 118. Post 120 was 0.18 m in diameter, 0.15 m deep. Both were filled by yellow brown sandy gravel fills (119 and 120) (Fig.8, Section 104).

4.3.9 Trench 2 was located in the south west corner of Zone 2, just to the east of the pumping station culvert and north of the A 40 (Figs. 6 and 9), and was oriented west south west-east north east. It contained four small pits (208, 210, 212 and 214), one small gully (206) and one ditch (204).

4.3.10 Ditch 204 was filled by a mid-brown silty clay (202) which contained pottery and a grey brown silty clay (203). The ditch itself measured 0.60 m in depth and 2 m wide and was oriented north east-south west (Fig.9,Section 201). Only two meters to the south west and on the same alignment was gully 206. It measured 0.10 m in depth and was 0.35 m wide. It was filled by a mid-brown silty clay (205) (Fig.9 , Section 202). A little further southwest were the four small pits (208, 210, 212 and 214). Feature 208 measured 0.07 m deep and 0.20 m in diameter while 210 measured 0.09 m in depth and 0.50 m in diameter. Both were filled by mid-brown silty clay fills which yielded no finds. To the south west of these, feature 212 measured 0.20 m in depth and 0.50 m in diameter while 214 measured 0.05 m in depth and 0.20 m in diameter. Mid-brown silty clay fills filled both.

4.3.11 Trench 3 was located to the north of trench 4 and east of trench 1 and was aligned northwest-southeast (Figs. 6 and 10). It contained four small pits, 304, 306, 308 and 310, which were grouped more or less in the centre of the trench (Fig. 10). All were bowl-shaped, contained similar mid-yellowish grey silty clay fills (303, 305, 307 and 309), none of which contained any finds.

4.3.12 Pit 304 measured 0.56 m in diameter and 0.24 m in depth (Fig.10 , Section 301). Pit 306 measured 0.44 m in diameter and 0.22 m in depth (Fig.10 , Section 302) and pit 308 measured 0.60 m in diameter and 0.20 m in depth (Fig.10 ,Section 303). Pit 310 was only partially revealed by the trench. It was 0.20 m deep and 0.60 m wide (Fig. 10, Section 304).

4.3.13 Trench 4 was located to the south of trench 3 and in between trenches 6 and 2. This trench followed a north east-south west alignment (Fig. 6 and 11). This trench contained two furrow lines running east-west which match the findings of the geophysical survey undertaken before the excavation (Bunn, 2004, see section 4.1 above). These parallel furrows (403 and 410) both measured up to 1.80 m in width and 0.20 m in depth and both were filled by similar mid-reddish brown clay loam fills 404 and 411. 404 produced a single sherd of possible Iron Age pottery and 411 a sherd of possible 13th century pottery (Fig.11, Sections 401, 402).

4.3.14 The southern furrow (410) sealed two other features (407, 405). Feature 405 measured 0.20 m in depth and 0.35 m across and was filled by a mid-reddish brown silty clay (406). This was truncated on its south side by feature 407 which was 0.25 m deep and 0.90 m across. Feature 407 was filled by 409, which was the lower fill with more gravel and 408, the upper fill with no gravel and occasional flecks of charcoal. Both of the fills were mid-reddish brown silty clays.

4.3.15 Trench 5 (Fig. 2 and 12) was located north of trenches 6 and 7 on the boundary between the drift geology of trenches 7 to 12 and the gravel outcrop of trenches 1 to 6. It contained four features, one linear (509), a possible linear or pit (507), a pit or possible ditch terminus (503), and a possible embankment or build up of re-deposited gravel (511).

4.3.16 Feature 509 was aligned east-west, measured 1.00 m across and 0.40 m in depth and was filled by a mid-reddish brown clay loam (510). This feature truncates feature 507 on its eastern side. It is difficult to discern whether this feature was a pit or a ditch as it does not impact on the natural and so cannot be seen in plan. Feature 507 was 0.40 m deep and while its visible width was only 0.35 m it can be estimated that it may have measured was much as 0.80 m across. It was filled by a mid-reddish brown clay loam (508) which contained no finds. Both of these features truncate layer 511 which was found overlying the natural gravel and being overlain by the subsoil (501) and the topsoil (500). It consisted of a light brown sandy clay with mid-sized gravel (5 mm - 20 mm) making up 40% of the deposit and was understood to have been a variation in the natural. Feature 503 was located approximately 20 m in from the southwestern end of the trench and measured 1.00 m across and 0.60 m in depth. It was unclear whether this feature represents a ditch terminus or pit. It appeared to have been subject to considerable root disturbance. The basal fill comprised a reddish brown gravelly clay loam, 506, overlain by a cleaner reddish brown clay loam, 505. Fill 505 was overlain by fill 504. (Fig. 12 , Section 502). This fill comprised a mid-reddish brown clay loam and contained one sherd of pottery of probable 13th century date.

Zone 3: Trenches 13 -16

4.3.17 Trench 13 was the easternmost trench excavated in Zone 3, located just to the west of the pumping station culvert and was aligned west north west-east south east (Figs. 6 and 13). The archaeology identified was concentrated in the easternmost third of the trench.

4.3.18 The topsoil in this trench overlay a silty clay deposit correlated with Unit 5c (Section 4.2.17). In the eastern part of the trench, sealed beneath this deposit and truncating the underlying terrace gravels a series of features were identified running roughly north-south.(1317, 1323, 1318, 1319 and 1320). At about this point the gravel terrace drops away fairly steeply and marks the edge of a low-lying area identified as a possible palaeochannel (Palaeochannel C) (see Fig.13 , Section 1302).

4.3.19 The easternmost features, 1323 and 1317 may be a single linear. Both of these features were filled by a similar grey brown silty clay (1306 and 1312). Both were 0.30 m deep and between 1.20 m and 1.30 m wide but becoming shallower at their nearest exposed extents (Fig.13 , Sections 1302 and 1304). Feature 1318 was 0.40 m wide and 0.50 m deep and was filled by a greyish blue silty clay with grey brown and orange mottling throughout (1314 and 1308). It was truncated on its western side by 1319\1321, another linear with two numbers assigned in two different sections (Fig.13 , Sections 1302 and 1304). This feature was 1.00 m wide and between 0.50 m and 0.60 m deep. It was filled by a greyish blue silty clay with orange brown mottling which yielded no finds (1307 and 1313). The final feature found in trench 13 is 1320, a linear seen only in section as it was cut into alluvial deposits and not the river gravels (Section 1302). It measured 0.30 m deep and 0.80 m in width, and was filled by a yellow brown sandy clayey gravel deposit with no finds (1324). This is an earlier feature in the sequence and is not visible in Section 1304, having been truncated.

4.3.20 Trench 14 was located to the west of trench 13 along the same alignment. The topsoil in this trench overlain a silty clay deposit correlated with Unit 5c (Section 4.2.17) The only feature identified was a shallow ditch (1404) which ran north east-south west and was filled by a blue grey silty clay which yielded no finds (1403). The ditch was 0.15 m deep and 0.50 m wide (Fig.14 , Section 1402).

4.3.21 Trench 15 was located to the west of trench 14 and east of trench 16 (Fig. 2). This trench contained no archaeological features but did contain the edge of the floodplain deposits (Fig. 15, Section 1500). The lower deposits of this trench revealed considerable amounts of drift wood. Flooding, however, precluded further investigation.

4.3.22 Trench 16 (Figs.2 and 16) was the westernmost excavated evaluation trench located just to the east of the eastern branch of the River Windrush along the same alignment as the road scheme. Like trench 15 this trench had a high flood risk and so was only partially dug to a safe depth to retrieve an environmental sample. However, during excavation a very large piece of driftwood was found at the westernmost edge of the trench. It did not appear to be worked but it was of a uniform thickness and could conceivably from part of a very rudimentary bridge or structure. Due to conditions and the scope of work nothing further could be discovered of its' significance. While the chance that it indeed is part of a significant water management structure is remote, its location was recorded archaeologically so this could be more easily assessed during any later works and left in place.

4.4 Finds

By Paul Blinkhorn

4.4.1 The pottery assemblage comprised 15 sherds weighing 29 g. They were all either Iron Age (IA) or Medieval in date. The Medieval pottery was recorded utilizing the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), with the following noted:

4.4.2 OXAM: Brill/Boarstall ware, AD1200 – 1600. 2 sherds, 10g.

4.4.3 The Iron Age pottery (13 sherds, 19g) was all in a fairly fine sandy fabric, with sparse fine shell and rare fragments of flint noted. All the sherds were very small, abraded and friable.

4.4.4 The pottery occurrence by number and weight of sherds per context by fabric type is shown below in Table 2. Each date should be regarded as a *terminus post quem*.

Table 2: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

	IA		OXAM		
Context	No	Wt	No	Wt	Date
108	9	9			IA?
132	1	3			IA?
138	2	4			IA?
404	1	3			IA?
411			1	5	13thC?
504			1	5	13thC?
Total	13	19	2	10	

4.5 Environmental evidence

4.5.1 Bulk disturbed and intact monolith samples were retrieved from both the trenches and borehole cores. Due to the time scale however for the production of this report the assessment for palaeoenvironmental materials will follow as an addendum.

5 DISCUSSION

5.1 Reliability of Field Investigation

5.1.1 Conditions were dry and visibility was good throughout the works. The evaluation between chainage 900 and 650 is considered to have achieved a representative sample of the proposed area of impact. Trenches were sited above geophysical anomalies, but many of these possible archaeological features proved to be natural in formation. There was no archaeology revealed between chainage 900 and 780, the trenching revealing clean drift geology. The area between chainage 650 and 780 contained a small cluster of archaeological features. Subsequent examination of the geophysical survey indicates that there may be a ditch or linear feature running to the northwest-southeast which adjacent to trench 5 (see Fig. 2).

5.1.2 In the more deeply alluviated areas on the edge of the terrace and floodplain, between chainages 650 and 40, difficult conditions were encountered due to a high water table and which resulted in flooding. Trenches 15 and 16 were not fully excavated and the proposed location of trenches 17 and 18 were subsequently abandoned. The subsequent borehole survey allowed the retrieval of cores for adequate assessment of the stratigraphy and samples for palaeoenvironmental materials.

5.1.3 With reference to the deposit model the scale of the assessment was appropriate to the task of identifying the gross morphology of the subsurface stratigraphy. The distribution however of the trench data was somewhat uneven and the number of boreholes limited due to problems of access in the conservation area in the western part of Zone 3 The western area of site relied heavily on the information taken from the historical borehole records and some of the topographical features within the sequence are poorly represented and would benefit from further investigation.

5.2 Conclusions

5.2.1 With reference to the original evaluation aims the following points are noteworthy

General

To establish the presence/absence of archaeological remains within the area designated for archaeological evaluation.

5.2.2 In Zone 2, (trenches 1-12) archaeological features were identified in 5 of the 12 trenches (1, 2, 3, 4 and 5) in the form of intercutting linear ditches and gullies and occasional pits. The greatest density of features was identified in Trench 1 in the north-western sector. In addition to this trench 4 identified two furrows. No features were identified in trenches 6-12. In Zone 3, trenches 13 and 14, at interface between the higher ground and the floodplain, an alluvial deposit correlated with the upper levels of Unit 5c appeared to seal a series of linear features that were cut into the underlying terrace gravels. These features were located at the edge of a possible minor palaeochannel (Palaeochannel C). No archaeological features were identified in trenches 15 and 16.

To determine the extent, condition, nature, character, quality and date of any archaeological remains present.

5.2.3 The earliest archaeological remains identified in during the evaluation comprise the linear features identified in trenches 1-5. The low concentration of features and artefactual material recovered is indicative of agricultural practices or water management possibly associated activity occurring on the floodplain rather than extensive settlement. The series of linear features found near the pumping station may have functioned solely as either field boundaries or drainage ditches located at the interface between the floodplain and the higher ground to the east. The alignment of these features perhaps suggests a drainage system much in the way as the culvert functions today. This grouping of features have been tentatively dated to the Iron Age based upon artefactual material though an earlier date for the undated features in trenches 13 and 14 cannot be ruled out. It may be that this activity is peripheral and associated with a nearby settlement. There are two known Iron Age sites within the vicinity including a pottery scatter and a ditch. A significant number of Iron Age sites have been identified in the wider area (section 1.4.7). The type of activity typically taking place within the flooplain during this period comprised pastoral farming, corralling and watering of animals with associated settlements occupied either seasonally or on a more permanent basis on the higher ground of gravel islands (section 1.4.8). Activity on the higher ground may have comprised cereal cultivation.

5.2.4 The two furrows identified in trench 4 produced artefactual dating indicative of a 13th century of later date but no other archaeological activity was definitely dated to this period. The gravel deposits identified within the boreholes on the edge of the modern East Windrush River are a little anomalous and do not conform with the local sediment sequence. It is possible thee deposits represent deliberate deposition. The position within the sediment stack, beneath a thin layer of alluvium, suggests they are not entirely modern and may indicate additional, perhaps medieval activity in this area

To establish the ecofactual and environmental potential of archaeological deposits and features.

5.2.5 Bulk disturbed and intact monolith samples were retrieved from both the trenches and borehole cores. Due to the time scale however for the production of this report the assessment for palaeoenvironmental materials will follow as an addendum.

Deposit model

Characterise the sequence of sediments and patterns of accumulation across site, including the depth and lateral extent of major stratigraphic units, and the character of any basal land surface pre-dating these sediments.

5.2.6 The deposit model has served well to characterise the nature of the subsurface stratigraphy underlying the present ground surface at Witney Cogges. Sufficient detail was present to draw the following conclusions.

5.2.7 A range of different sediment types are present along the route. These have been grouped into 6 main stratigraphic units. The pre-Holocene deposits comprise bedrock overlain by drift deposits and fluvial gravels of Late Pleistocene age. Overlying this, in zone 3 on the floodplain are substantial thicknesses of undisturbed Holocene alluvial deposits.

5.2.8 Deposits associated with the alluvial floodplain vary considerably in nature from clay-silts to sands. Additionally a varying organic content may also be present including rooting, organic material and peaty layers. These observations indicate that a wide variety of environments of deposition are represented by these sediments. Coarse elements including sands suggest deposition associated with active channels with medium to high energy depositional environments. Clay-silts suggest lower energy floodplain surface environments. Variation in organic content indicate the possibility that conditions fluctuated in certain locations to include periods of peat formation. The organic deposits identified should not be considered true peats as they include a minerogenic component indicative of deposition in marginal situations where periodic flooding from active channels occurred From an archaeological perspective the range of different environments of deposition and energy levels associated with these deposits indicates that the potential exists for areas of in situ archaeology as well as areas in which the archaeology may well have been modified and mixed with material derived from elsewhere

5.2.9 The undulating surface of the Pleistocene gravel represents the early Holocene topographic template, which dictated the later patterns of sedimentation and landscape evolution. The lowermost deposits comprise both organic and minerogenic silt-clays associated with several possible palaeochannels. Initial sedimentation on the flooplain would have been restricted to channels. The uneven surface of the floodplain would have meant subsequent overflow would have occurred in the lowest part of the floodplain and the first overbank alluvium would have been deposited in the hollows created by abandoned channels. Once these hollows had been filled accretion is likely to have extended across the floodplain. An upper, more extensive deposit of minerogenic silt-clay represents a substantial phase of overbank flooding and alluviation extending onto the higher ground. This is evidenced by alluvial deposits sealing features in trenches 13, 14 and the clayey alluvial derived deposits infilling features in the western part of Zone 2. A thin alluvial based subsoil present overlying gravel and drift deposits, particularly in the western part of Zone 2 may represent the remnants of minor sediment accretion later modified by ploughing. The sequence is capped by modern ploughsoil.

5.2.10 Extensive buried soils were not positively identified at the interface between the alluvium and Pleistocene gravels. There may be various reasons for this. Firstly, the quality of the data from the historical boreholes did not allow confident identification of such horizons since this was not the intention of the original ground investigations. The organic horizons that were identified appear to have accumulated in the base of Palaeochannel A, although organic silt clays and clay peats associated with the edge of Palaeochannel A may represent some form of landsurface. This general absence of pre-alluvial soils is not unusual and is a common feature of the floodplains and gravel terraces of the Thames (Lambrick 1992:218). Brown (1992:193) suggests it may be a result of floodplain erosion, or perhaps later bioturbation and soil processes occurring concurrently with sediment accretion.

Identify significant variations in the deposit sequence indicative of localised features such as topographic highs or palaeochannels

5.2.11 Significant local variation in the sediment sequences and underlying gravel topography indicates the presence of a number of buried channels and topographic highs. The model has confirmed the presence of at least three palaeochannels, two deeply incised sequences (Paleochannels A and B) and one perhaps associated with the liner features identified in trench 14 (Paleochannel C). Two areas of high ground located to the west of Palaeochannel C and just to the west of the East Windrush River may have previously existed as elevated islands within a wetland environment before being buried by alluvium.

5.2.12 Previous investigations have shown that evidence of human activity may be found in association with the margins of channels, at the wetland/dryland interface and on islands of higher drier ground within the floodplain. In these areas access to abundant resources would have been greater and may have been exploited seasonally, or perhaps in drier periods on a more semi-permanent basis. As such these locations are considered to represent significant areas of archaeological potential

Identify the location and extent of any waterlogged organic deposits and address the potential and likely location for the preservation of palaeoenvironmental remains

5.2.13 Due to the high water table the sequence of deposits identified on the floodplain are preserved in waterlogged anaerobic conditions. The majority of the alluvial deposits comprised minerogenic silts and clays. The apparent low humic content suggests these have limited potential for the preservation of plant macro and insect remains though pollen is likely to be moderately preserved. The upper parts of the alluvial sequence exhibited evidence of oxiation and bioturbation indicating preservation in these deposits may be poorer. Although no timber structures were identified within the minerogenic silt clays, the retrieval of occasional, but substantially large, pieces of unworked wood in the evaluation trenches indicates the potential for survival. Organic silt-clays and clayey peats were only identified as localised deposits at the base and the edges of Palaeochannel A. These deposits are likely to have a higher potential for the preservation of plant, insect and pollen remains. A representative selection of samples from all major sediments units have been submitted to the relevant specialists for assessment, the results of which will form an addendum to this report. It must be noted however that some of the localized organic units were identified from the historical borehole records for which no samples were available.

Relate the site sequences to any current regional models

5.2.14 The sedimentation sequences in Zone 3 are largely undated, although the latest phase of alluviation appeared to seal features of possible Iron Age date in trenches 1-5. Available models for the development of the Upper Thames floodplain suggest a rise in water table during the middle Iron Age with flooding in the later Iron Age and the onset of major alluviation occurring until the Roman period (Robinson 1992, Robinson and Lambrick 1984). This suggests sediments infilling low lying areas and possible palaeochannels at Witney Cogges may date to earlier prehistoric periods. Caution, however, must be stressed when applying regional models to a particular locality and one must not rule out local factors of hydrology, topography and land management which may have effected sedimentation patterns. The presence of organic deposits within the sequence does provide the potential for radiocarbon dating.

5.2.15 If major flooding and alluviation did not occur until the later prehistoric period this has implications for patterns of settlement/activity and archaeological preservation. Firstly the area may have been more accessible and attractive to local communities prior to a rise in water table. In areas peripheral to channels waterlogged organic deposits have been proven. However, a lack of sedimentation and low water table in areas away from channels in the earlier periods may mean that any extant land surfaces would have been exposed for a considerable period to oxidation and soil forming processes up until the moment of burial by alluvial deposits. This may have implications for the preservation of organic remains, perhaps within features in these areas.

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

WITBY04 : Table of Contexts

Trench/Context	Type	Description	Depth (m)	Finds	Date
Trench 1					
100	Layer	Topsoil	0.32		Modern
101	Layer	Subsoil	0.12		
102	Layer	Natural gravel			
103	Cut	Ditch	0.64		
104	Fill	Fill of 103	0.08		
105	Fill	Fill of 103	0.04		
106	Fill	Fill of 103	0.26		
107	Fill	Fill of 103	0.20		
108	Fill	Fill of 103	0.24	Pottery, Bone	IA?
109	Cut	Shallow Pit	0.10		
110	Fill	Fill of 109	0.10		
111	Cut	Ditch (same as 103)	0.64		
112	Fill	Fill of 111	0.12 (exposed)		
113	Cut	Ditch	0.42		
114	Fill	Fill of 113	0.04		
115	Fill	Fill of 113	0.03		
116	Fill	Fill of 113	0.20		
117	Fill	Fill of 113	0.32	Pottery, Bone	
118	Cut	Post hole	0.20		
119	Fill	Fill of 118	0.20		
120	Cut	Post Hole	0.18		
121	Fill	Fill of 120	0.18		
122	Cut	Gully	0.21		
123	Fill	Fill of 122	0.04		
124	Fill	Fill of 122	0.20		
125	Cut	Gully, heavily truncated	0.08		
126	Fill	Fill of 125	0.08		
127	Cut	Pit	0.32		
128	Fill	Fill of 127	0.32		
129		VOID			
130		VOID			
131	Cut	Pit	0.72		

WITBY04 : Table of Contexts

Trench/Context	Type	Description	Depth (m)	Finds	Date
132	Fill	Fill of 131	0.36	Pottery, Bone	IA?
133	Fill	Fill of 131	0.10		
134	Cut	Ditch	0.60		
135	Fill	Fill of 134	0.10		
136	Fill	Fill of 134	0.12		
137	Fill	Fill of 134	0.18		
138	Fill	Fill of 134	0.24	Pottery	IA?
139	Cut	Shallow Ditch	0.20		
140	Fill	Fill of 139	0.20		
141	Cut	Shallow Ditch	0.25		
142	Fill	Fill of 141	0.25		
143	Cut	Irregular Pit	0.25		
144	Fill	Fill of 143	0.25		
145	Cut	Pit	0.20		
146	Fill	Fill of 145	0.20		
147	Cut	Shallow Ditch	0.20		
148	Fill	Fill of 147	0.20		
Trench 2					
200	Layer	Topsoil	0.30		Modern
201	Layer	Subsoil	0.20		
202	Fill	Fill of 204	0.35		
203	Fill	Fill of 204	0.25		
204	Cut	Ditch	0.60		
205	Fill	Fill of 206	0.10		
206	Cut	Gully	0.10		
207	Fill	Fill of 208	0.07		
208	Cut	Post Hole	0.07		
209	Fill	Fill of 210	0.09		
210	Cut	Post Hole	0.09		
211	Fill	Fill of 212	0.20		
212	Cut	Post Hole	0.20		
213	Fill	Fill of 214	0.05		
214	Cut	Post Hole	0.05		
215	Layer	Natural gravel			
Trench 3					
300	Layer	Topsoil	0.30		Modern
301	Layer	Subsoil	0.12		
302	Layer	Natural gravel			
303	Fill	Fill of 304	0.24		
304	Cut	Post \ Pit	0.24		
305	Fill	Fill of 306	0.22		

WITBY04 : Table of Contexts

Trench/Context	Type	Description	Depth (m)	Finds	Date
306	Cut	Post \ Pit	0.22		
307	Fill	Fill of 308	0.20		
308	Cut	Post \ Pit	0.20		
309	Fill	Fill of 310	0.10		
310	Cut	Post \ Pit	0.10		
Trench 4					
400	Layer	Topsoil	0.34		Modern
401	Layer	Subsoil	0.15		
402	Layer	Natural gravel			
403	Cut	Furrow	0.20		
404	Fill	Fill of 403	0.20	Pottery	IA?
405	Cut	Ditch \ Pit	0.20		
406	Fill	Fill of 405	0.20		
407	Cut	Ditch \ Pit	0.25		
408	Fill	Fill of 407	0.20		
409	Fill	Fill of 407	0.02		
410	Cut	Furrow	0.07		
411	Fill	Fill of 410	0.07	Pottery	13th C
Trench 5					
500	Layer	Topsoil	0.50		Modern
501	Layer	Subsoil	0.20		
502	Layer	Natural gravel			
503	Cut	Ditch \ Pit	0.60		
504	Fill	Fill of 503	0.40	Pottery	13th C
505	Fill	Fill of 503	0.20		
506	Fill	Fill of 503	0.25		
507	Cut	Poss. ditch	0.40		
508	Fill	Fill of 507	0.40		
509	Cut	Ditch	0.40		
510	Fill	Fill of 509	0.40		
511	Fill	Possibly an embankment	0.40		
Trench 6					
601	Layer	Topsoil	0.30		Modern
602	Layer	Subsoil	0.30		
603	Layer	Natural			
Trench 7					
701	Layer	Topsoil	0.28		Modern
702	Layer	Subsoil	0.20		
703	Layer	Natural			
Trench 8					

WITBY04 : Table of Contexts

Trench/Context	Type	Description	Depth (m)	Finds	Date
801	Layer	Topsoil	0.25		Modern
802	Layer	Subsoil	0.21		
803	Layer	Natural			
Trench 9					
901	Layer	Topsoil	0.27		Modern
902	Layer	Subsoil	0.17		
903	Layer	Natural			
Trench 10					
1001	Layer	Topsoil	0.28		Modern
1002	Layer	Subsoil	0.10		
1003	Layer	Natural			
Trench 11					
1101	Layer	Topsoil	0.26		Modern
1102	Layer	Subsoil	0.22		
1103	Layer	Natural			
Trench 12					
1201	Layer	Topsoil	0.26		Modern
1202	Layer	Subsoil	0.18		
1203	Layer	Natural			
Trench 13					
1301	Layer	Topsoil	0.20		Modern
1302	Layer	Alluvium	0.25		
1303	Layer	Natural gravel			
1304	Layer	Alluvium	0.40		
1305	Layer	Alluvium	0.15		
1306	Fill	Fill of 1317	0.25		
1307	Fill	Fill of 1319	0.40		
1308	Fill	Fill of 1318	0.50		
1309	Layer	Subsoil	0.30		
1310	Layer	Subsoil	0.15		
1311	Layer	Subsoil	0.40		
1312	Layer	Alluvium	0.15		
1313	Fill	Fill of 1321	0.60		
1314	Fill	Fill of 1322	0.45		
1315	Layer	Subsoil	0.25		
1316	Layer	Subsoil	0.40		
1317	Cut	Poss. Ditch	0.30		
1318	Cut	Ditch	0.40		
1319	Cut	Ditch	0.50		
1320	Cut	Ditch	0.30		
1321	Cut	Ditch	0.60		

WITBY04 : Table of Contexts

Trench/Context	Type	Description	Depth (m)	Finds	Date
1322	Cut	Ditch	0.50		
1323	Cut	Ditch	0.30		
1324	Fill	Fill of 1320	0.30		
Trench 14					
1400	Layer	Topsoil	0.25		Modern
1401	Layer	Alluvium	0.45		
1402	Layer	Natural gravel			
1403	Fill	Fill of 1404	0.15		
1404	Cut	Shallow ditch	0.15		
1405	Layer	Alluvium	0.18		
Trench 15					
1500	Layer	Natural gravel			Modern
1501	Layer	Topsoil	0.40		
1502	Layer	Subsoil	0.40		
1503	Layer	Alluvium	0.70		
1504	Layer	Alluvium	0.30		
1505	Layer	Alluvium	0.25		
1506	Cut	Plaeochannel?			
1507	Fill	Alluvium			
Trench 16					
1600	Layer	Topsoil	0.25		Modern
1601	Layer	Subsoil	0.50		
1602	Layer	Alluvium	0.40		
1603	Layer	Gravel lens (redeposited)	0.25		
1604	Layer	Peat	0.06		
1605	Layer	Natural gravel			

APPENDIX 2 DEPOSIT MODEL INVENTORY

BH/TT	Easting	Northing	Elevation	Ploughsoil	Sand gravel	Silt - clay	Sand gravel	Silt-clay	Organic clay-silt	Organic silt-clay	Clayey peat	Gravel/drift
				6	5e	5c/5d	5b	5a	4c	4b	4a	2/3
BH1	6206.67	8930.859	78.02	0.31	-	0.23	0.18	0.28	0.17	-	-	0.29
BH2	6148.362	8964.377	78.25	0.24	-	0.62	0.36	-	0.08	-	-	0.2
BH3	6116.429	8976.736	78.56	0.13	0.32	0.7	-	-	-	-	-	0.27
BH4	6123.274	8988.627	78.52	0.12	0.05	0.09	0.45	0.76	0.06	-	-	0.08
BH5	6193.622	8938.586	78.11	0.27	-	0.24	-	0.51	-	-	-	0.28
BH6	6104.136	8991.337	78.21	0.24	-	0.23	-	-	-	-	-	0.89
HBH1	6006.577	9113.335	78.02	0.9	-	0.9	-	-	-	-	-	0.2
HBH10	6201.711	8968.636	77.95	0.45	-	1.05	-	-	-	0.3	0.35	0.15
HBH2	5994.143	9099.497	78	0.3	-	0.95	-	-	-	-	-	0.15
HBH2A	6005.873	9103.015	78	0.25	-	0.9	-	-	-	-	-	0.18
HBH3	6040.835	9054.629	78.01	1	-	0.5	-	-	-	-	-	0.1
HBH4	6019.011	9081.438	77.91	0.1	-	1.9	-	-	-	-	-	0.1
HBH4A	6013.68	9071.275	77.92	0.55	-	0.55	-	-	-	-	-	0.1
HBH5	6117.587	9003.427	78.25	0.12	-	1.78	-	-	-	-	-	0.1
HBH6	6107.238	8988.942	78.2	0.1	-	1.4	-	-	-	-	-	0.1
HBH7	6164.421	8989.324	78.06	0.55	-	2	-	-	-	-	-	0.1
HBH8	6164.835	8967.182	77.95	0.4	-	0.9	0.1	0.9	-	-	-	0.1
HBH9	6202.539	8993.261	77.96	0.6	-	1.05	-	-	-	-	-	0.15
HBH9A	6197.985	8981.259	77.94	0.3	-	1.2	-	-	-	-	-	0.1

BH/TT	Easting	Northing	Elevation	Ploughsoil	Sand gravel	Silt - clay	Sand gravel	Silt-clay	Organic clay-silt	Organic silt-clay	Clayey peat	Gravel/drift
				6	5e	5c/5d	5b	5a	4c	4b	4a	2/3
TT1	6463.764	8850.711	78.361	0.3	-	0.2	-	-	-	-	-	0.1
TT10	6659.242	8893.946	80.16	0.3	-	0.15	-	-	-	-	-	0.15
TT11	6631.692	8926.242	79.67	0.3	-	0.2	-	-	-	-	-	0.2
TT12	6631.692	8926.242	79.67	0.3	-	0.2	-	-	-	-	-	0.1
TT13A	6395.412	8850.121	78.422	0.3	-	0.3	-	-	-	-	-	0.1
TT13B	6374.349	8853.469	78.397	0.3	-	0.3	-	0.4	-	-	-	0.1
TT14	6283.927	8884.566	78.306	0.3	-	0.3	-	-	-	-	-	0.1
TT15	6243.575	8910.36	78.298	0.3	-	0.2	-	0.75	-	-	-	0.25
TT16	6154.57	8958.634	78.41	0.3	-	0.5	0.25	0.35	0.06	-	-	0.24
TT2	6480.003	8824.814	78.415	0.3	-	0.2	-	-	-	-	-	0.1
TT3	6477.453	8867.313	78.44	0.3	-	0.1	-	-	-	-	-	0.1
TT4	6503.516	8828.875	78.318	0.3	-	0.2	-	-	-	-	-	0.1
TT5	6555.264	8875.073	78.762	0.4	-	0.15	-	-	-	-	-	0.1
TT6	6520.913	8831.685	78.516	0.3	-	0.2	-	-	-	-	-	0.1
TT7	6567.794	8850.102	78.861	0.3	-	0.2	-	-	-	-	-	0.1
TT8	6604.409	8880.609	79.245	0.3	-	0.2	-	-	-	-	-	0.1
TT9	6659.307	8882.157	80.091	0.3	-	0.2	-	-	-	-	-	0.1

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APPENDIX 4 SUMMARY OF SITE DETAILS

Site name: Witney Cogges Link Road

Site code: WITBYEV

Grid reference: Centred NGR SP 366 092
Type of evaluation: 16 trial trenches and geo-archaeological boreholes

Date and duration of project: December 2004

Area of site: Approximately 4 ha

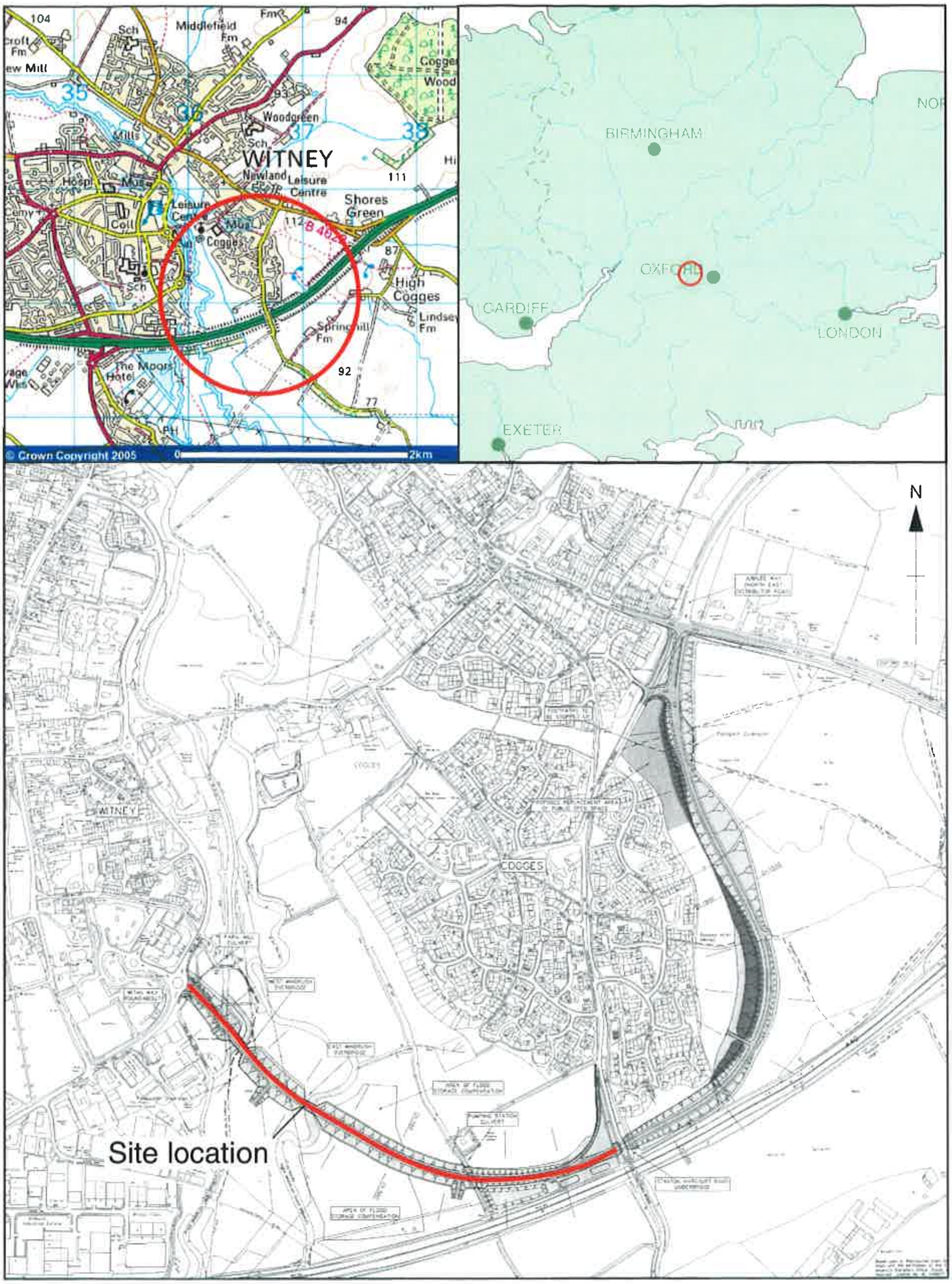
Summary of results: In December 2005, Oxford Archaeology carried out a trenched evaluation and geo-archaeological investigation along the course of the Witney Cogges Link Road on behalf of Oxfordshire County Council. This work followed a programme of geophysical survey undertaken by PCA.

A small group of linear features, many of which were undated, but some of which are believed to have dated from the Iron Age and medieval periods were located on a gravel terrace to the west of the proposed development.

An additional component of the assessment was the production of a deposit model for the route. The model demonstrated substantial depths of undisturbed waterlogged Holocene alluvial and peat deposits. Significant local variation in the sediment sequences and underlying gravel topography indicated the presence of a number of buried palaeochannels and topographic highs. The sediment sequences were largely undated, although the latest phase of alluviation appeared to seal features of possible Iron Age date at the edge of the gravel terrace.

The extreme western part of the proposed development could not be evaluated for reasons of possible inundation.

Witney Cogges Link Road
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will remain there until such time as an appropriate museum is able to accept new archives.



Scale 1:5000

Figure 1: Site location

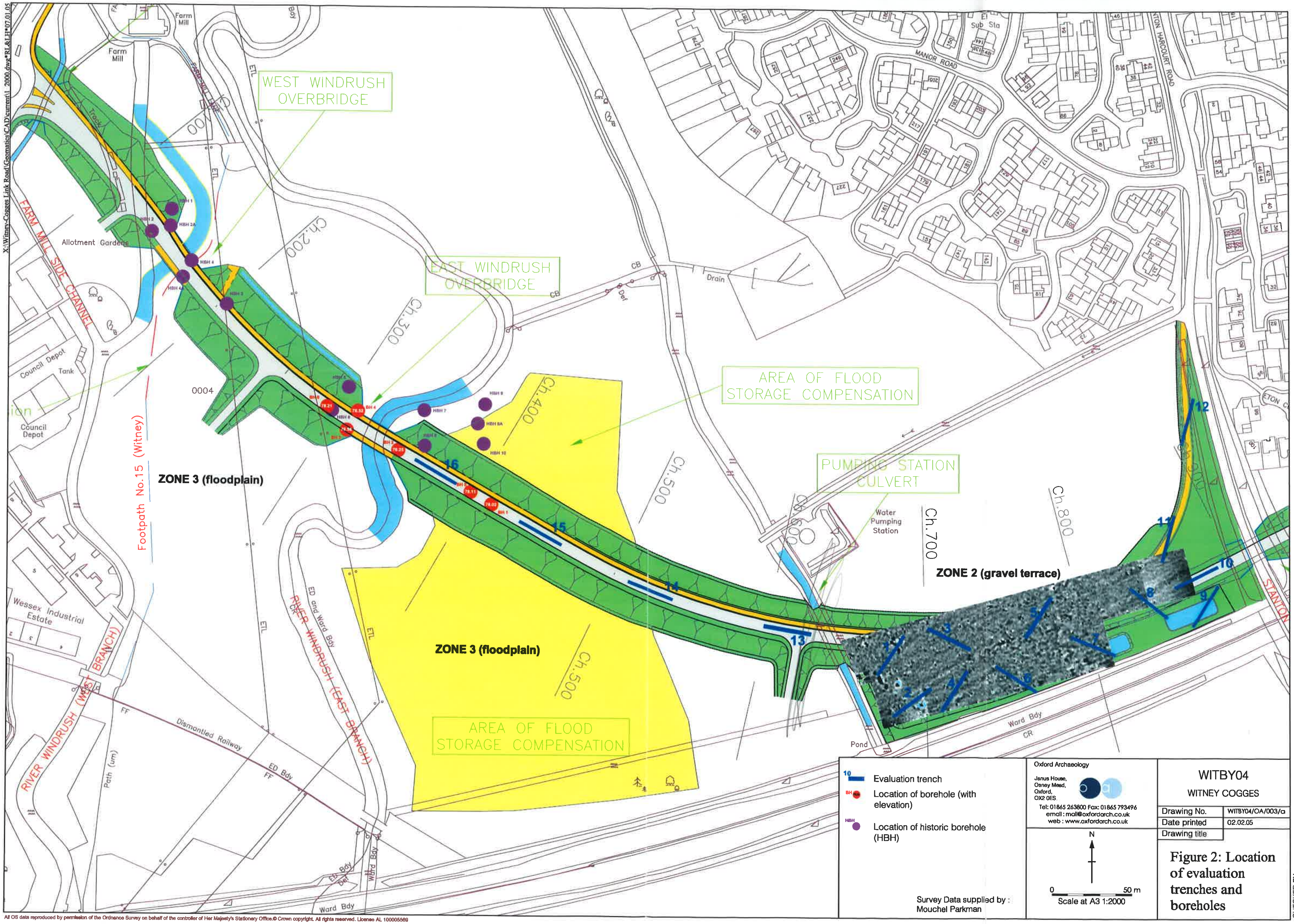


Figure 2: Location of evaluation trenches and boreholes

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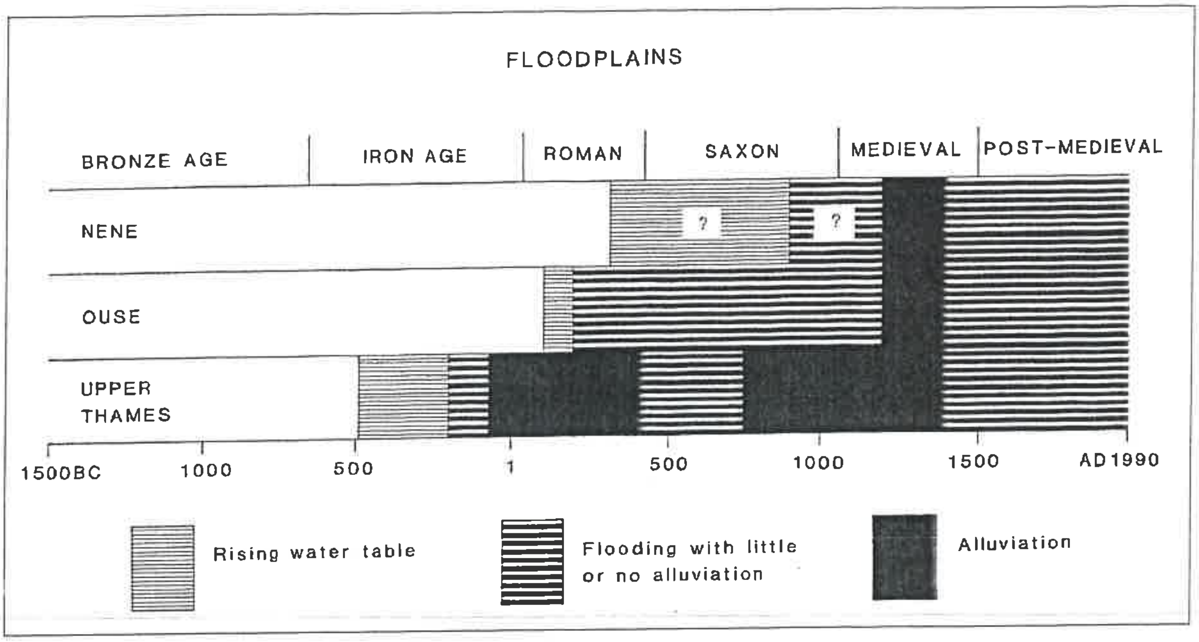
Fig 3 Generalised alluviation model for the Upper Thames, Ouse and Nene basins (after Robinson 1992)



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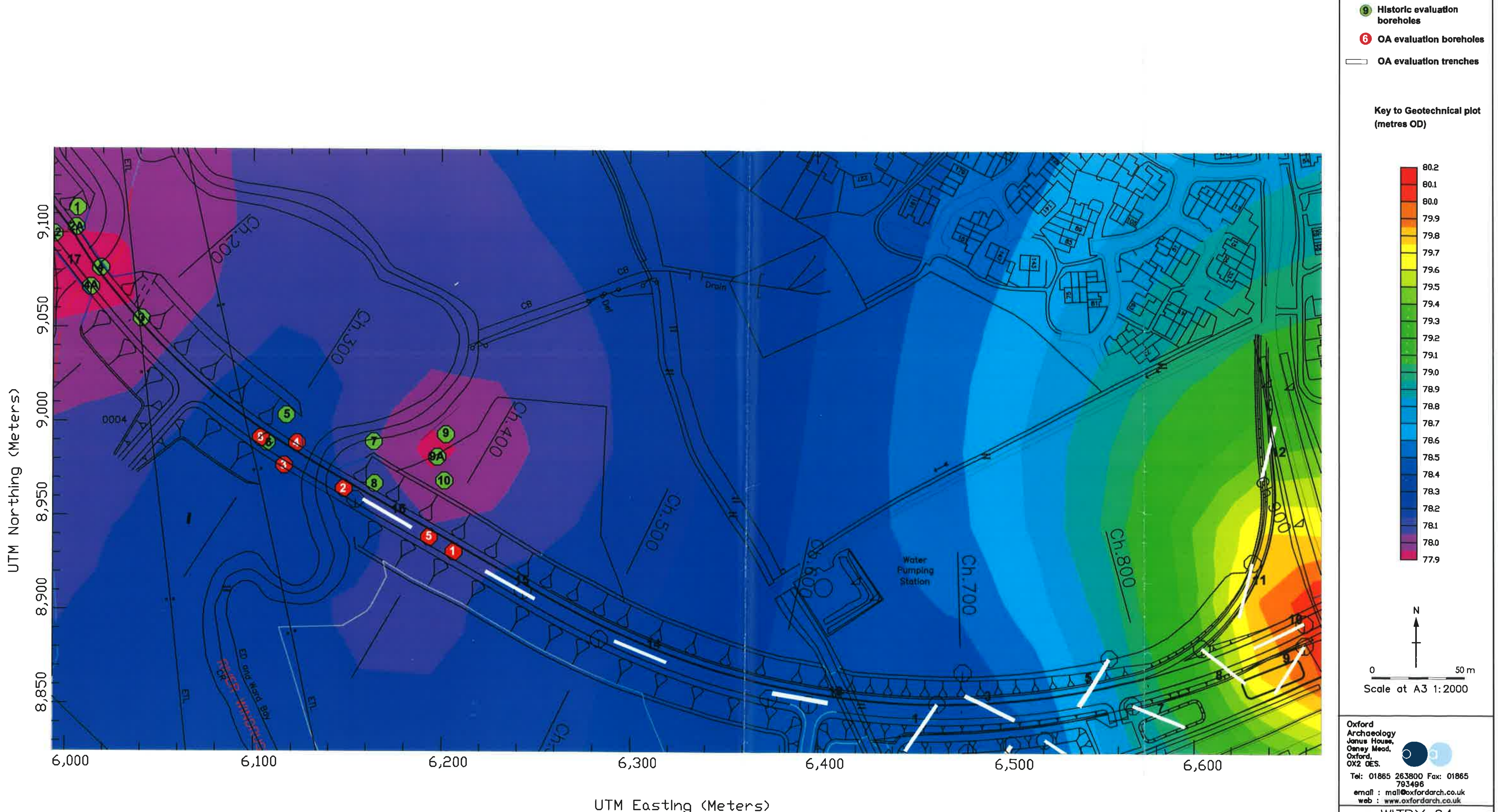

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WITBY 04

Witney Cogges Link Road

Drawing No.	OA/GeoT/01
Date printed	02.02.05
Drawing title	

Fig 4a: Borehole locations and plot of the modern ground surface in metres OD

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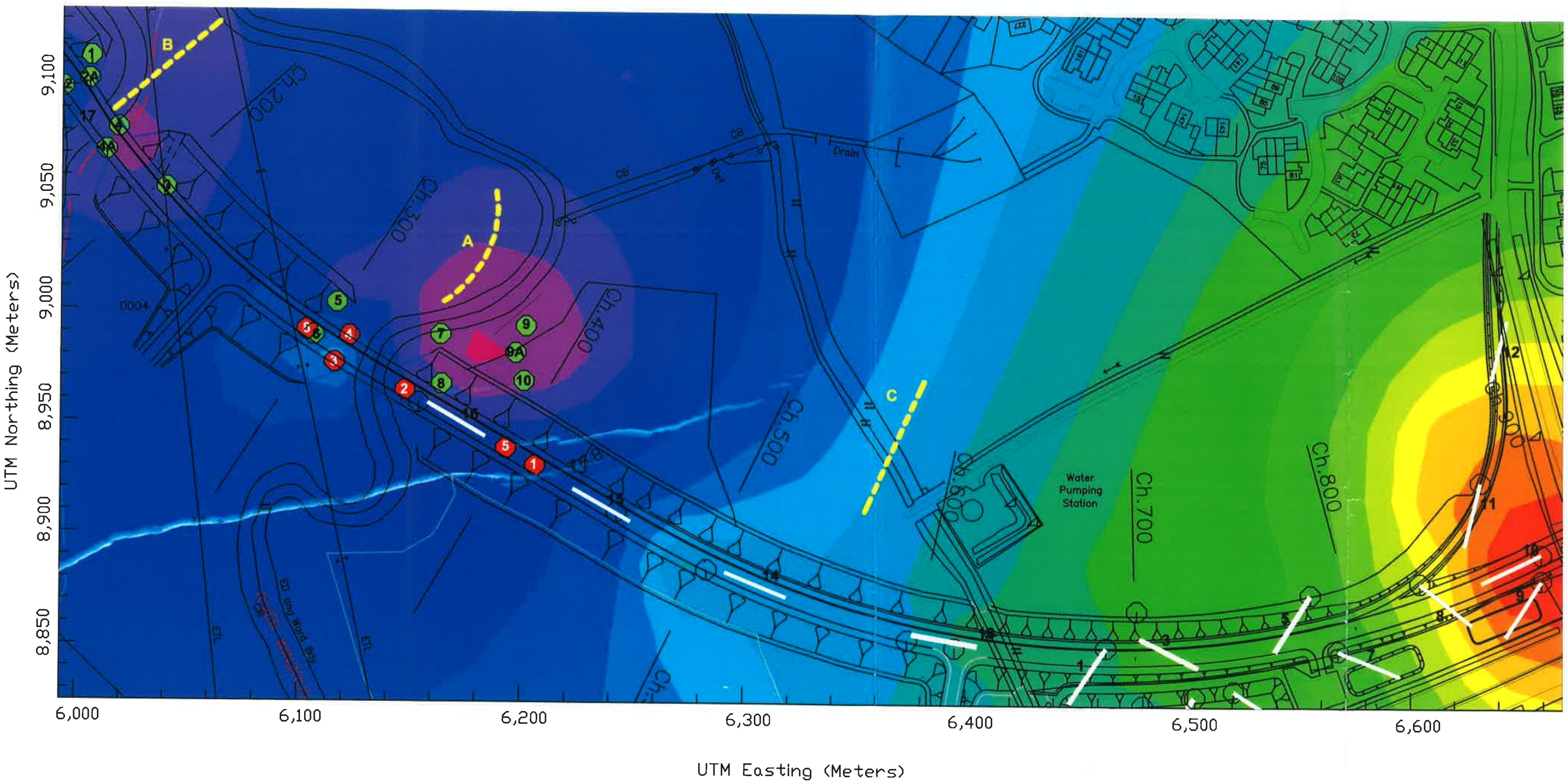

Paleochannels

Historic evaluation boreholes

OA evaluation boreholes

OA evaluation trenches

Key to Geotechnical plot (metres OD)

79.4
79.2
79.0
78.8
78.6
78.4
78.2
78.0
77.8
77.6
77.4
77.2
77.0
76.8
76.6
76.4
76.2

N

0 50 m

Scale at A3 1:2000

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WITBY 04

Witney Cogges Link Road

Drawing No.	OA/GeoT/01
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Drawing title	

Fig 4b: Gravel Surface topography in metres OD showing location of palaeochannels.

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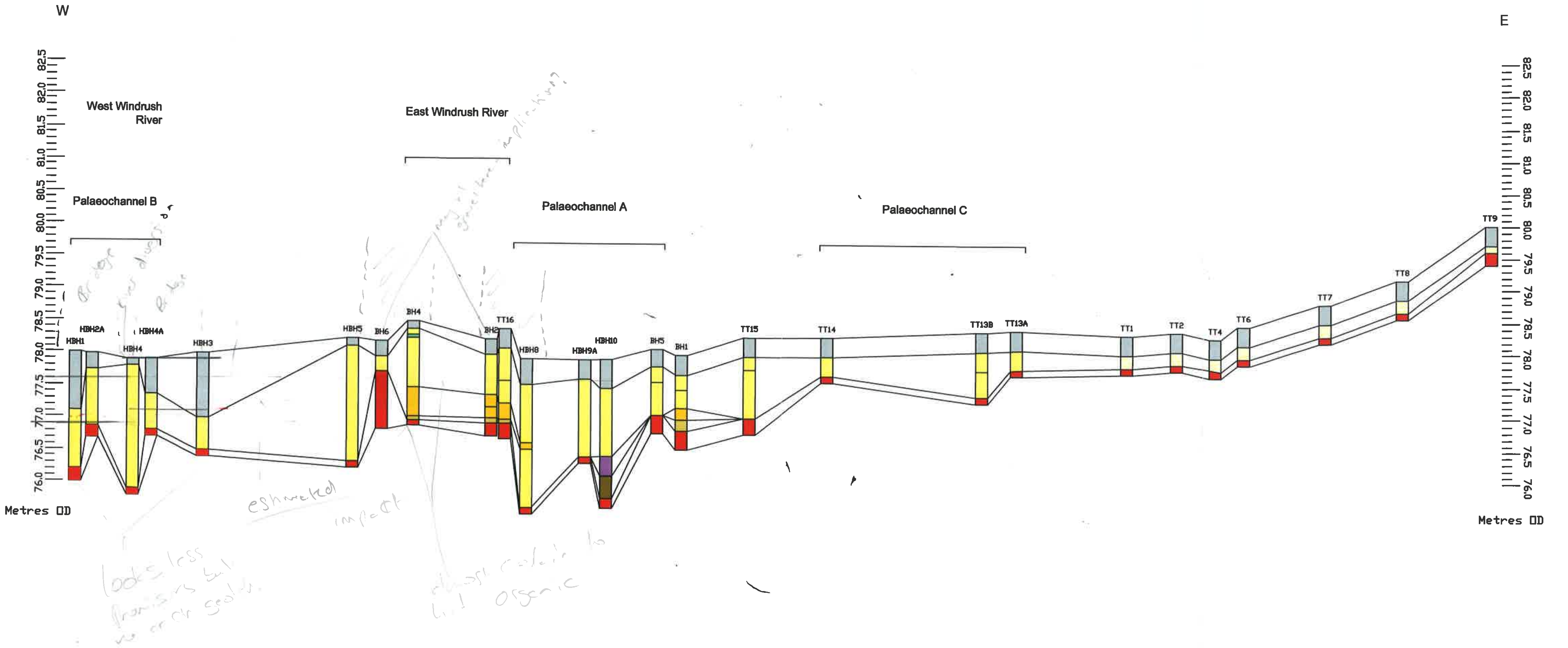

6: Topsoil
5e: Sand gravel
5: Silt clay - alluvium
5d: Alluvial subsoil
5b: Gravel sand
4a: Clayey peat
4b: Organic silt clay
4c: Clayey peat - organic silt clay
3-2: Fluvial gravel/ drift deposits

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W —— E

Not to scale

WITBY 04

Witney Cogges Link Road

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Figure 5: W-E stratigraphical cross-section

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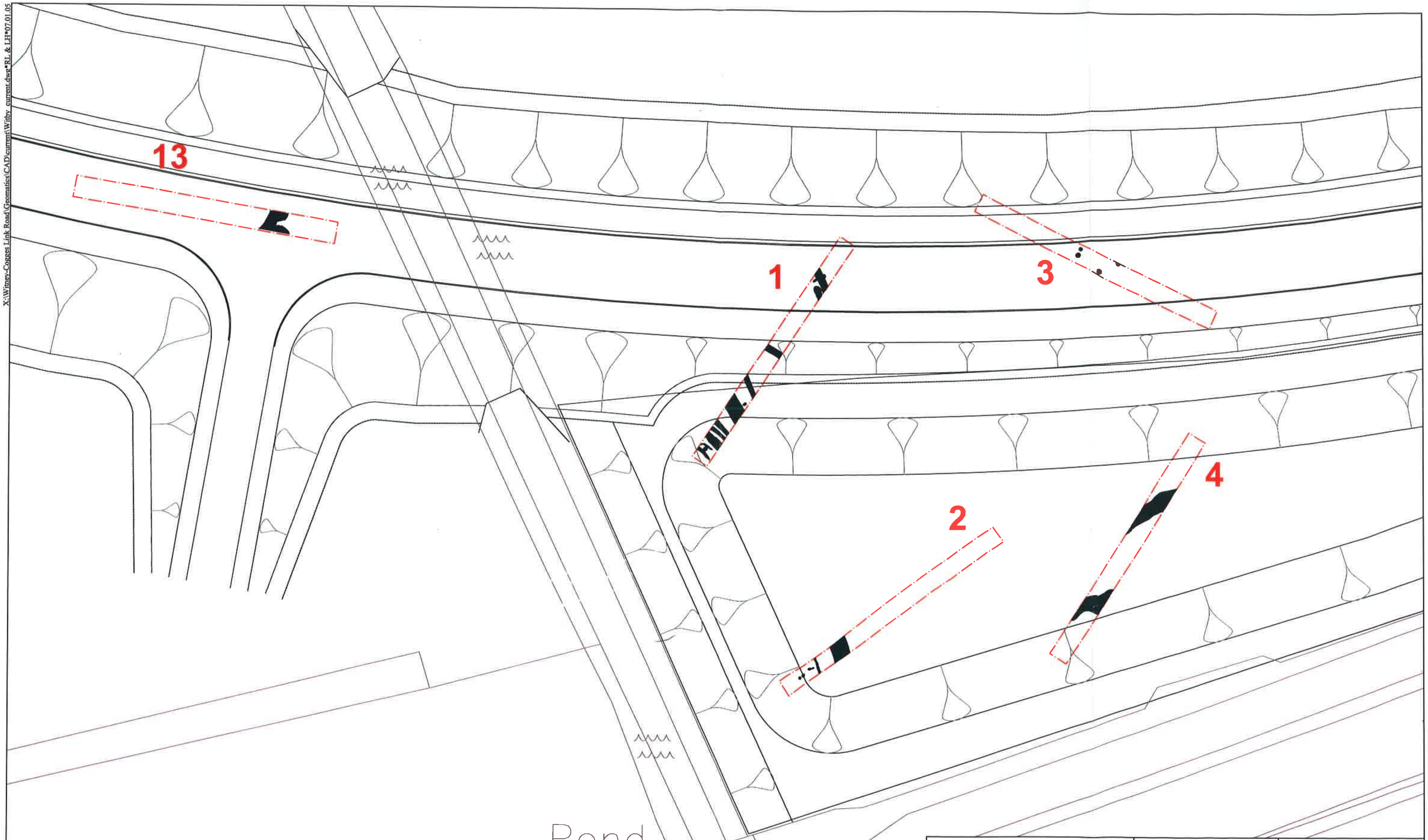

2 Evaluation trench

Excavated archaeological features

Survey Data supplied by : OA

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N

0 10 m

Scale at A3 1:400

WITBY04

WITNEY COGGES

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Drawing title	

Figure 6: Area of archaeological concentration

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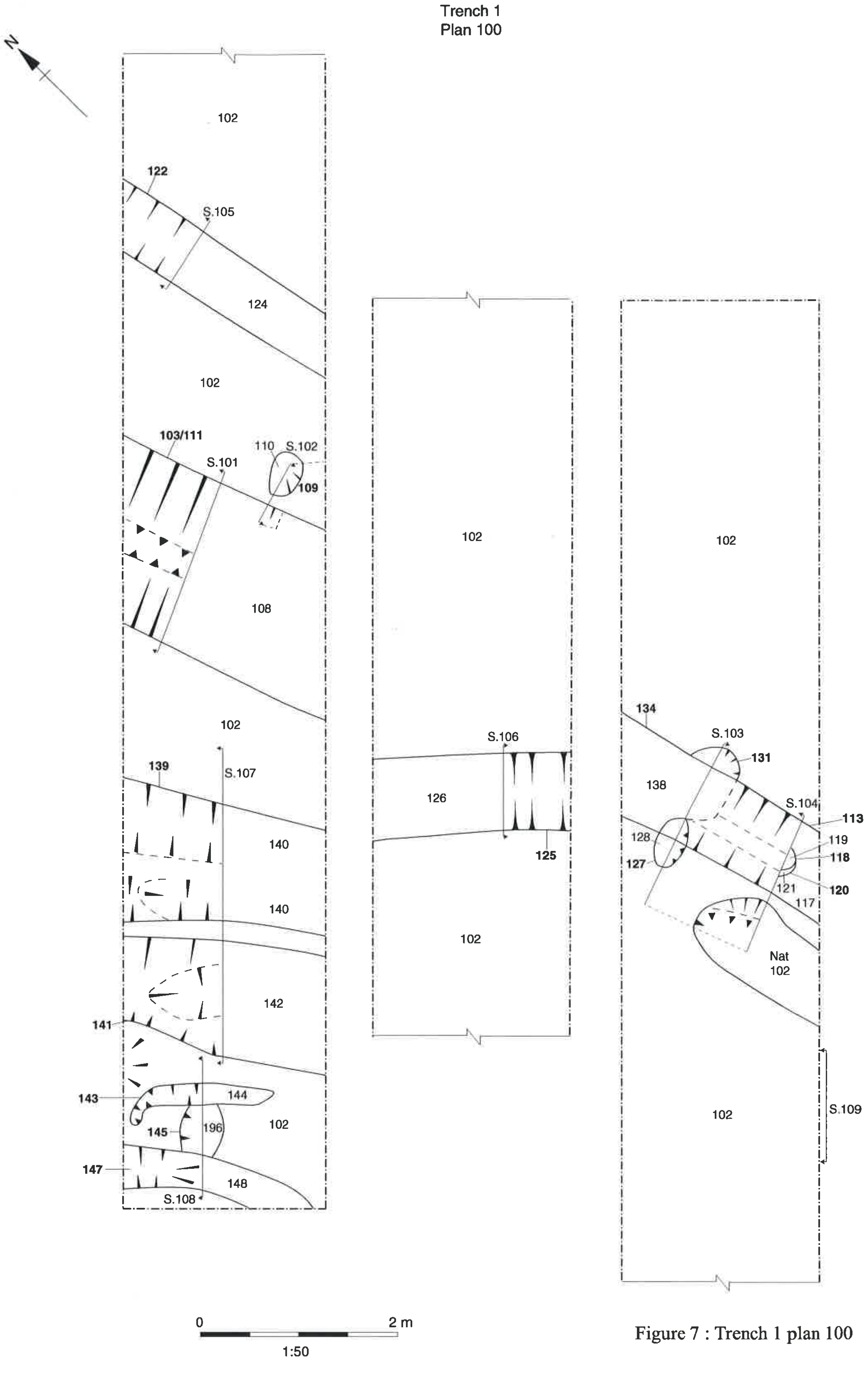


Figure 7 : Trench 1 plan 100

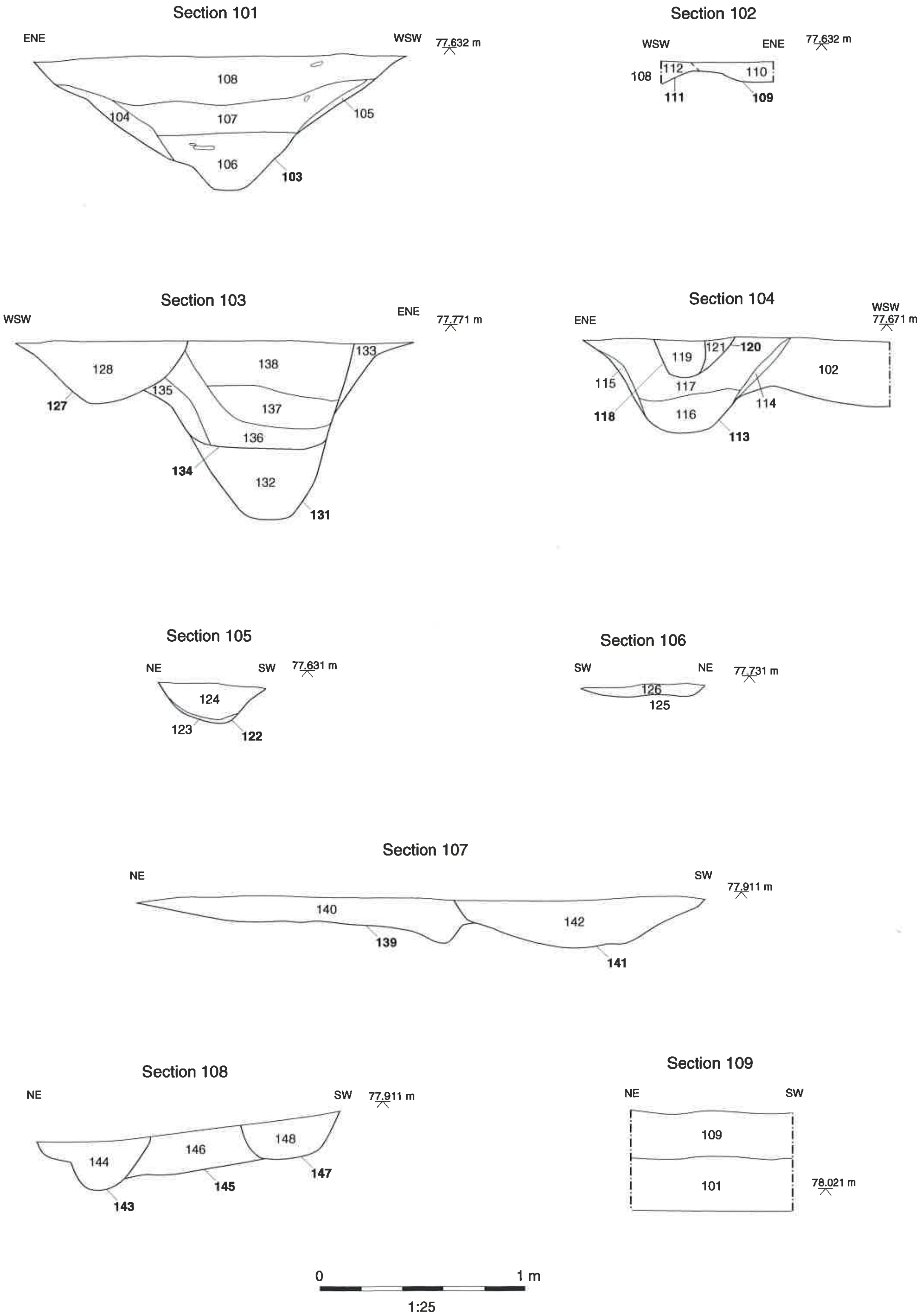


Figure 8 : Trench 1 sections 101-108

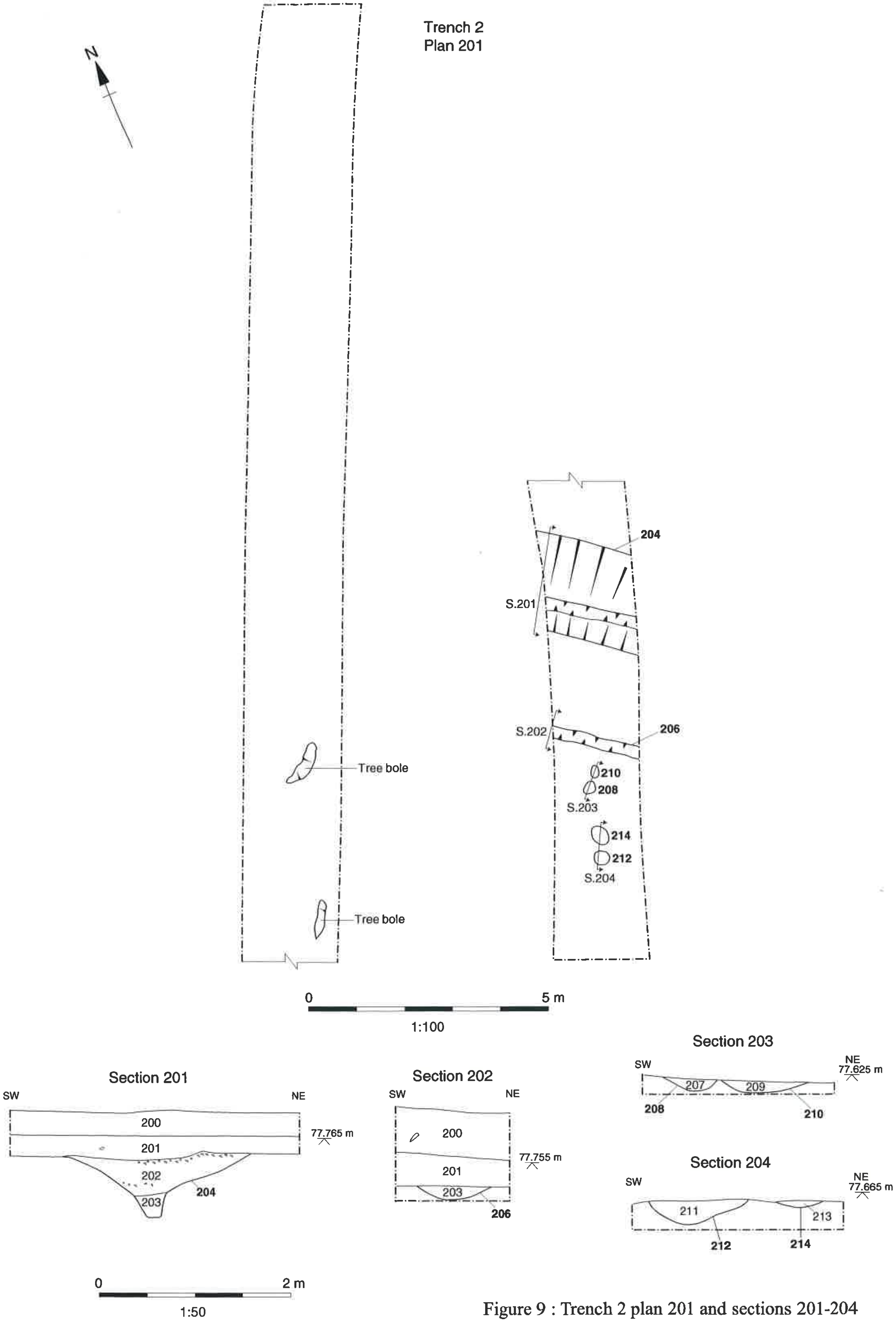


Figure 9 : Trench 2 plan 201 and sections 201-204

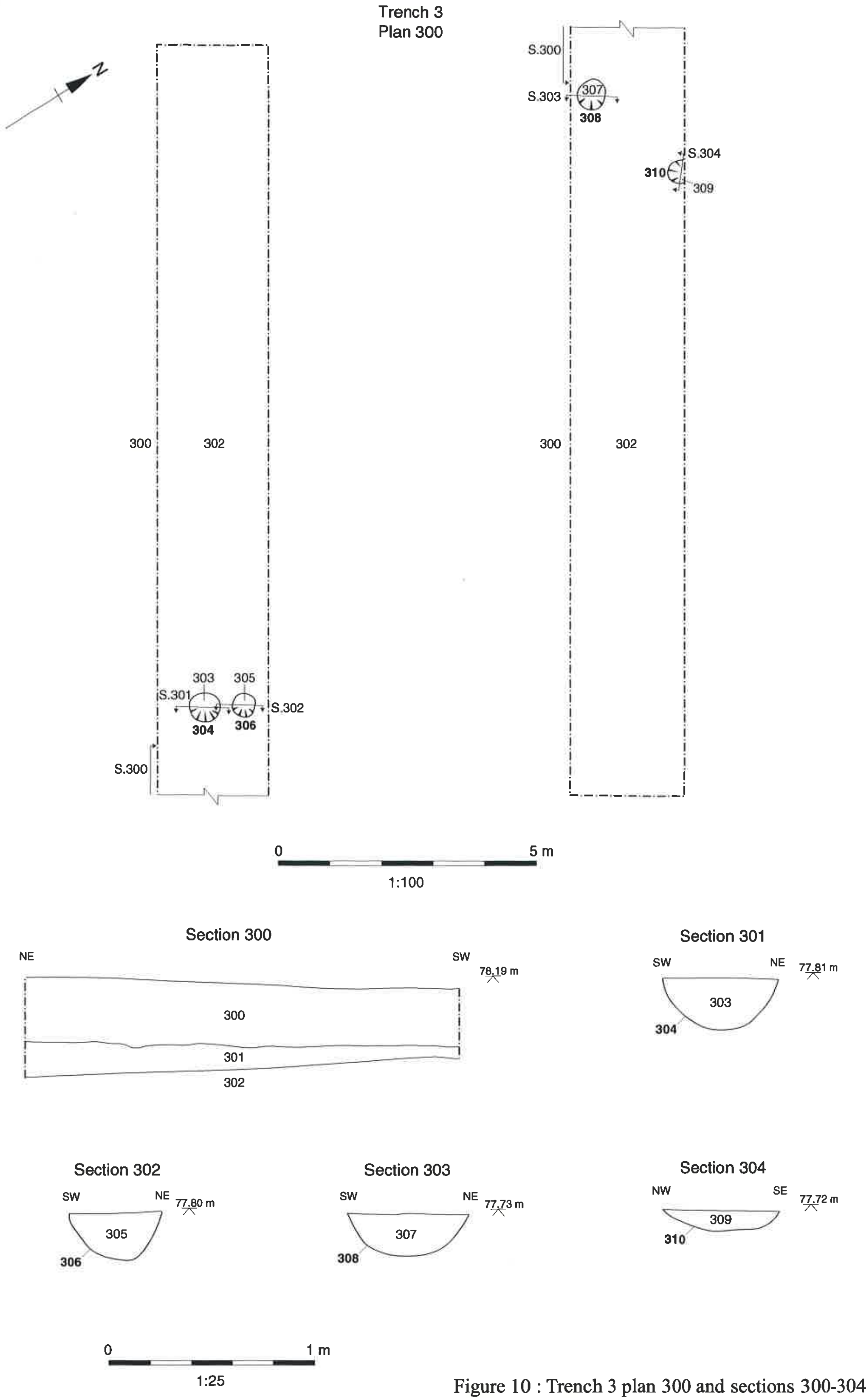
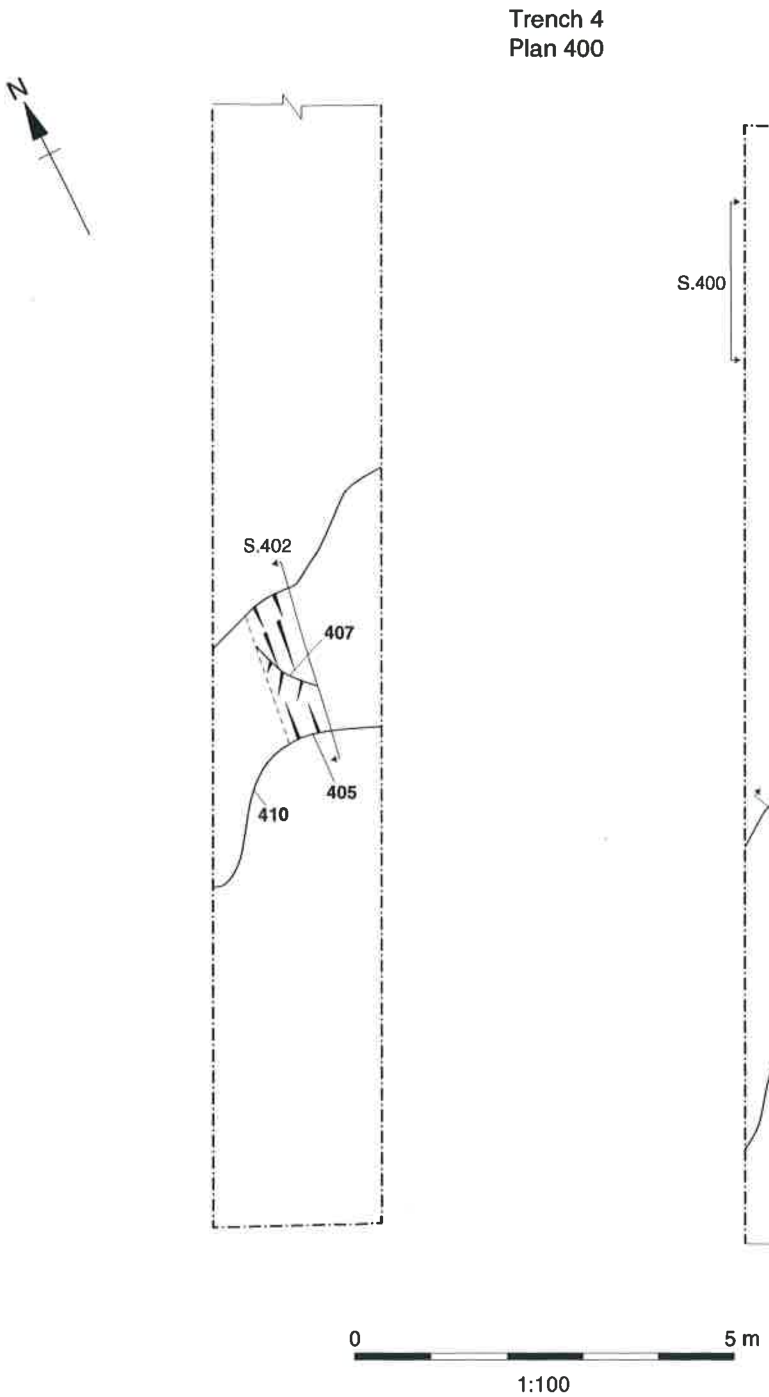


Figure 10 : Trench 3 plan 300 and sections 300-304



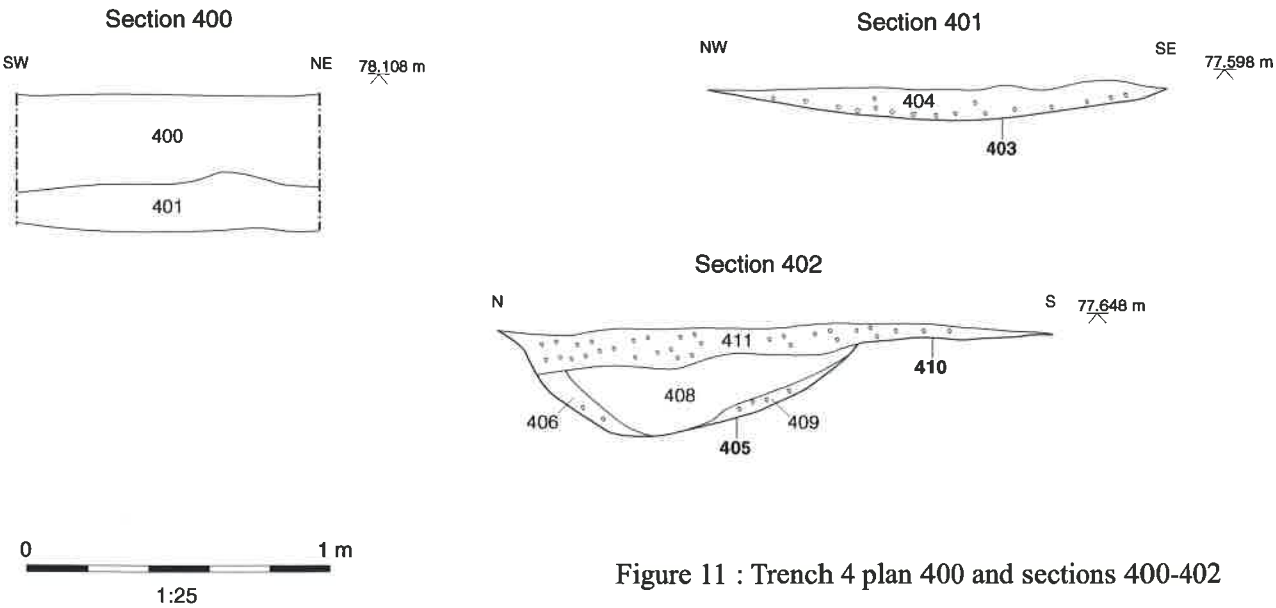


Figure 11 : Trench 4 plan 400 and sections 400-402

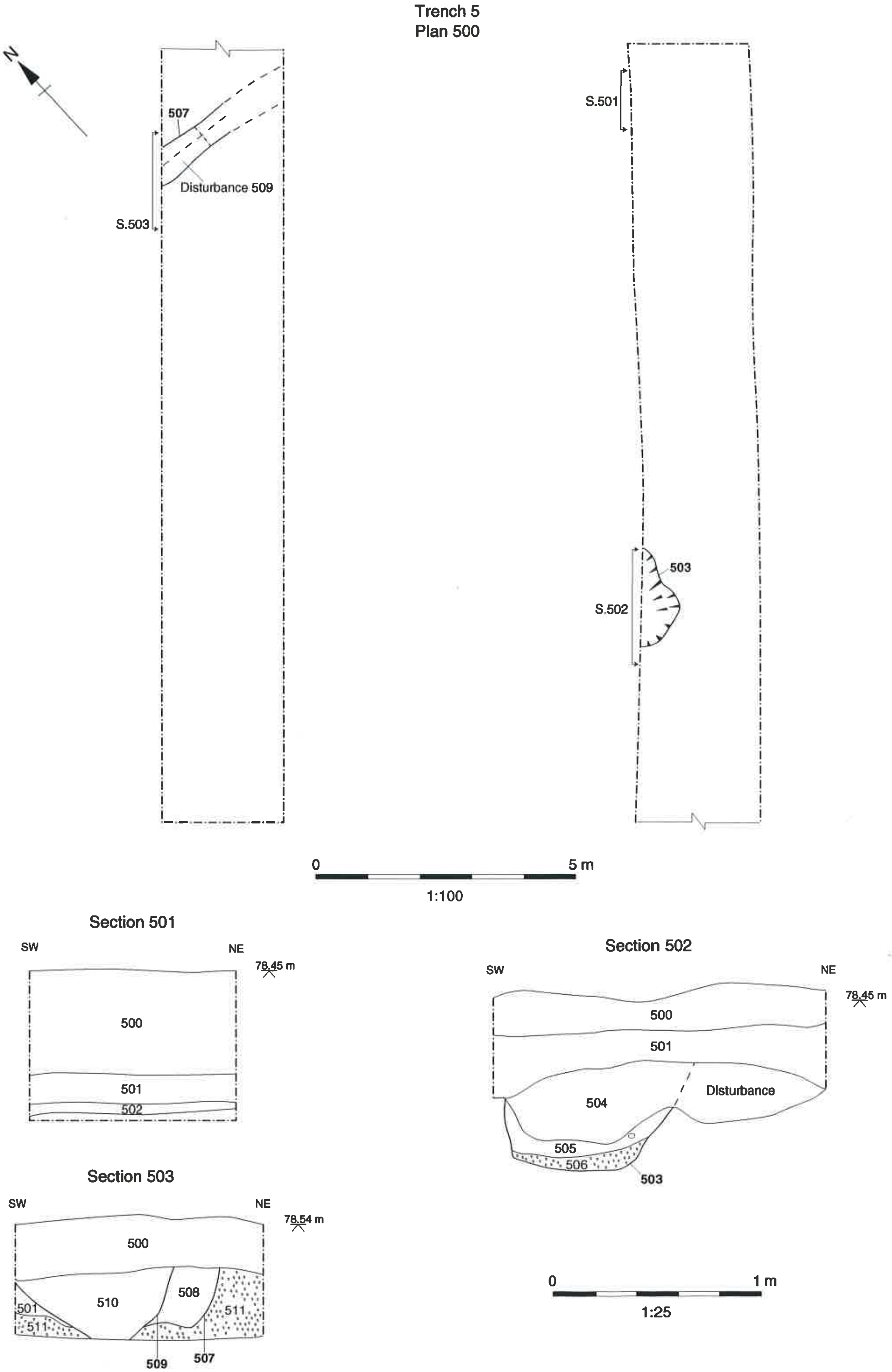


Figure 12 : Trench 5 plan 500 and sections 501-503

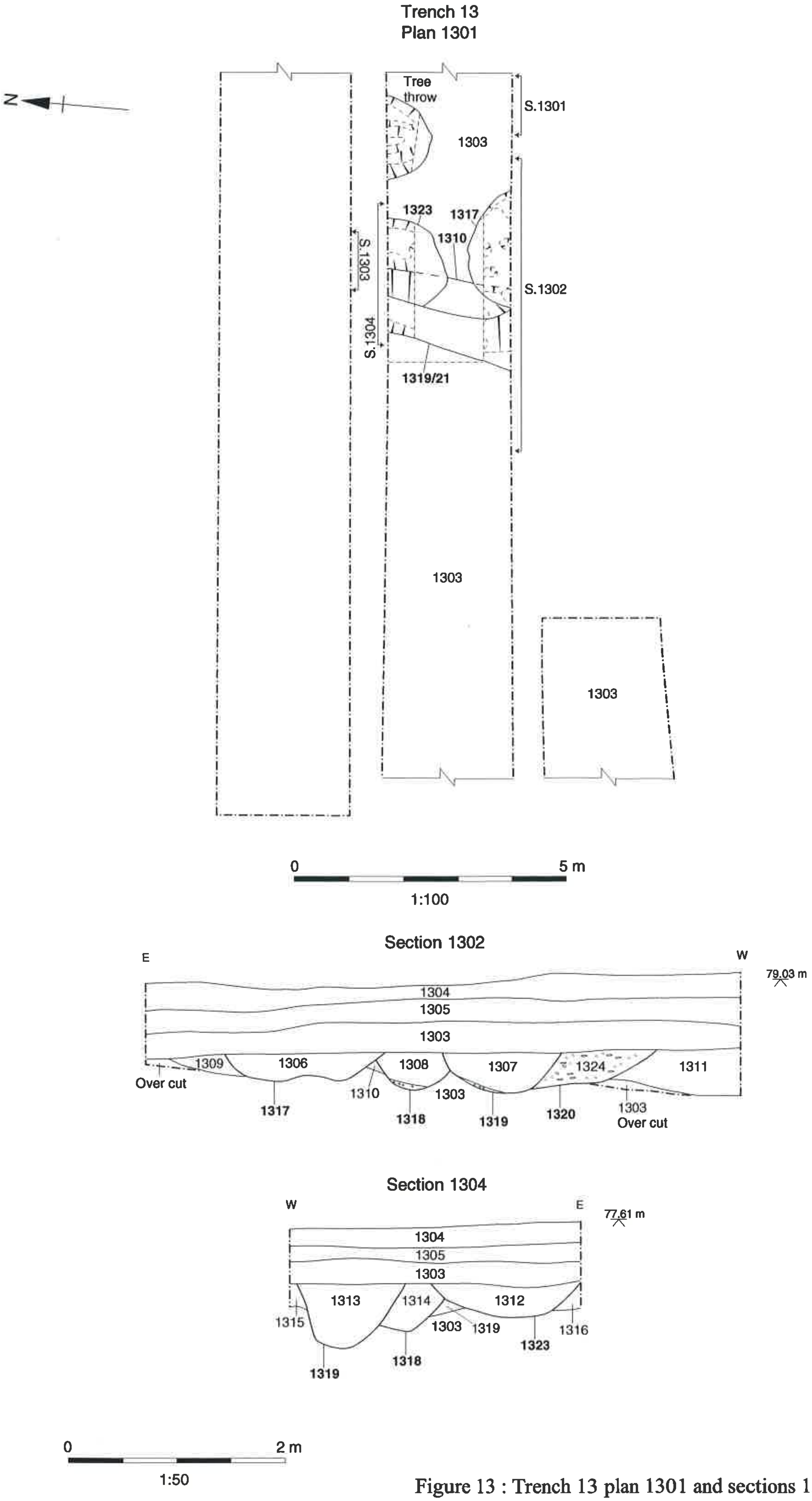


Figure 13 : Trench 13 plan 1301 and sections 1302, 1304

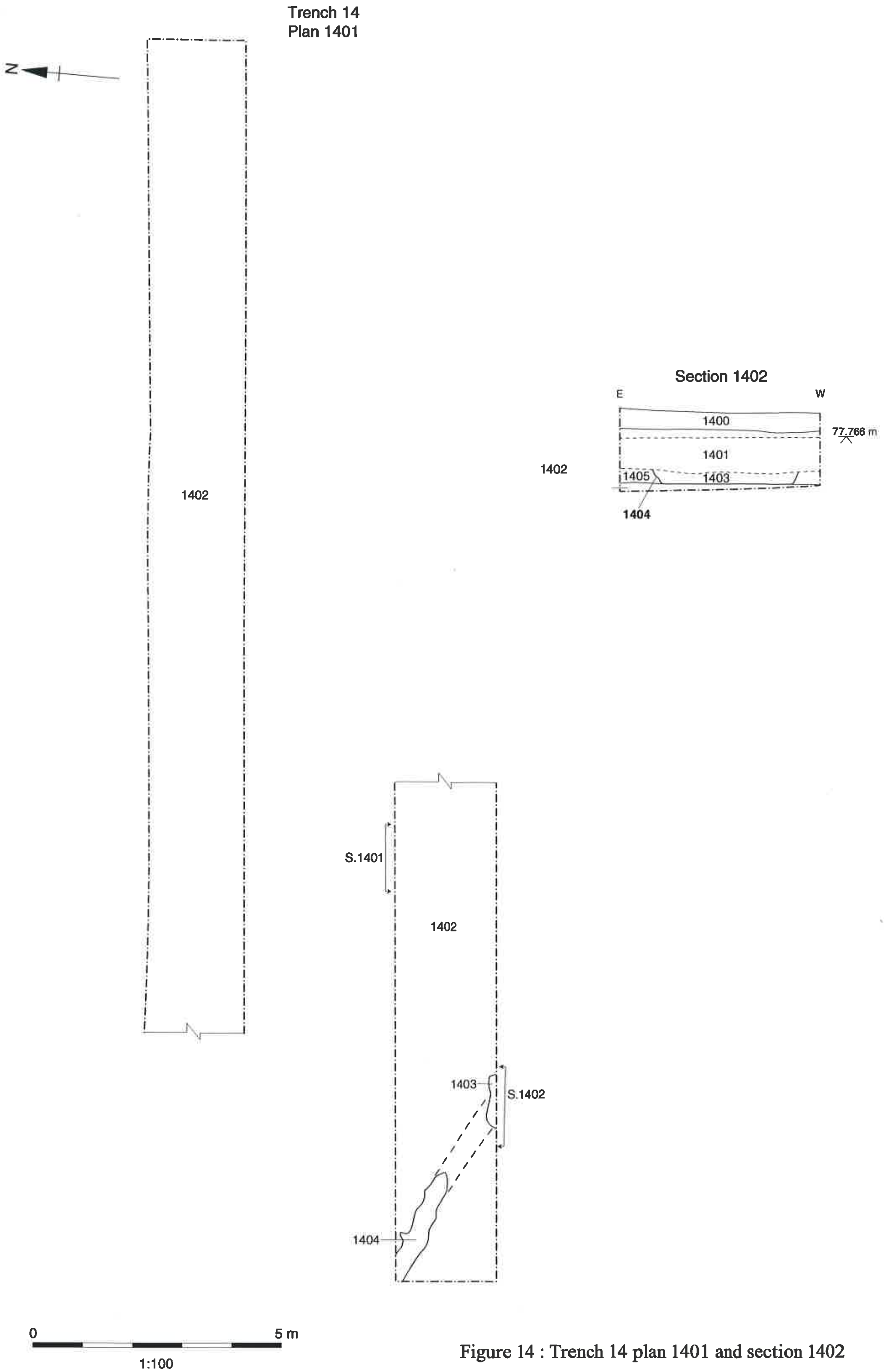


Figure 14 : Trench 14 plan 1401 and section 1402

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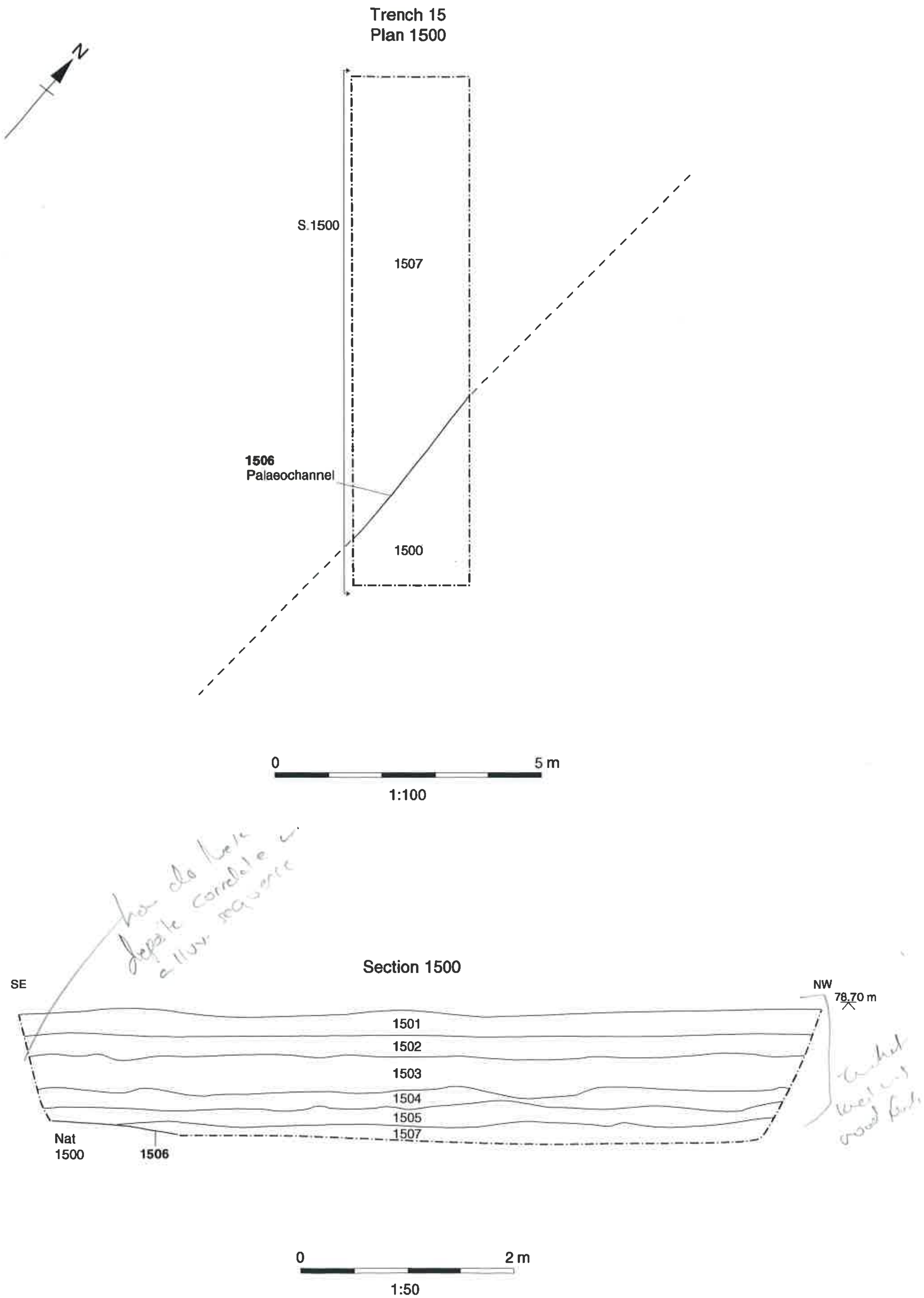
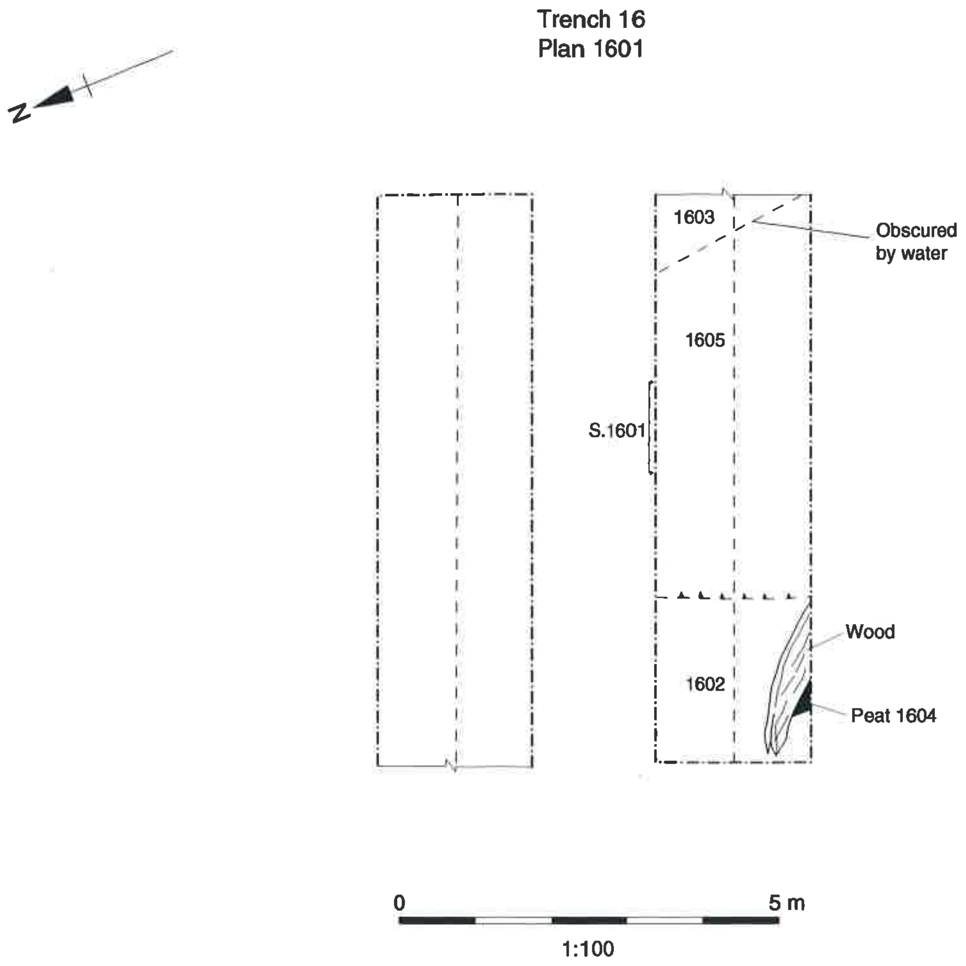


Figure 15 : Trench 15 plan 1500 and section 1500



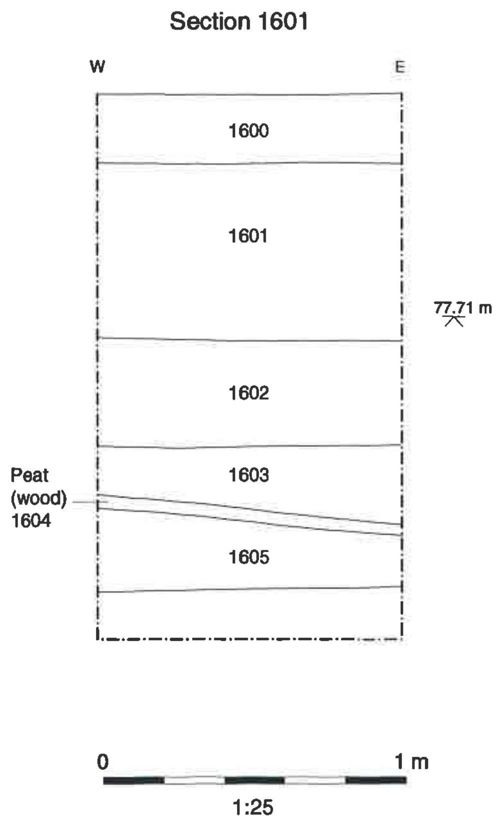
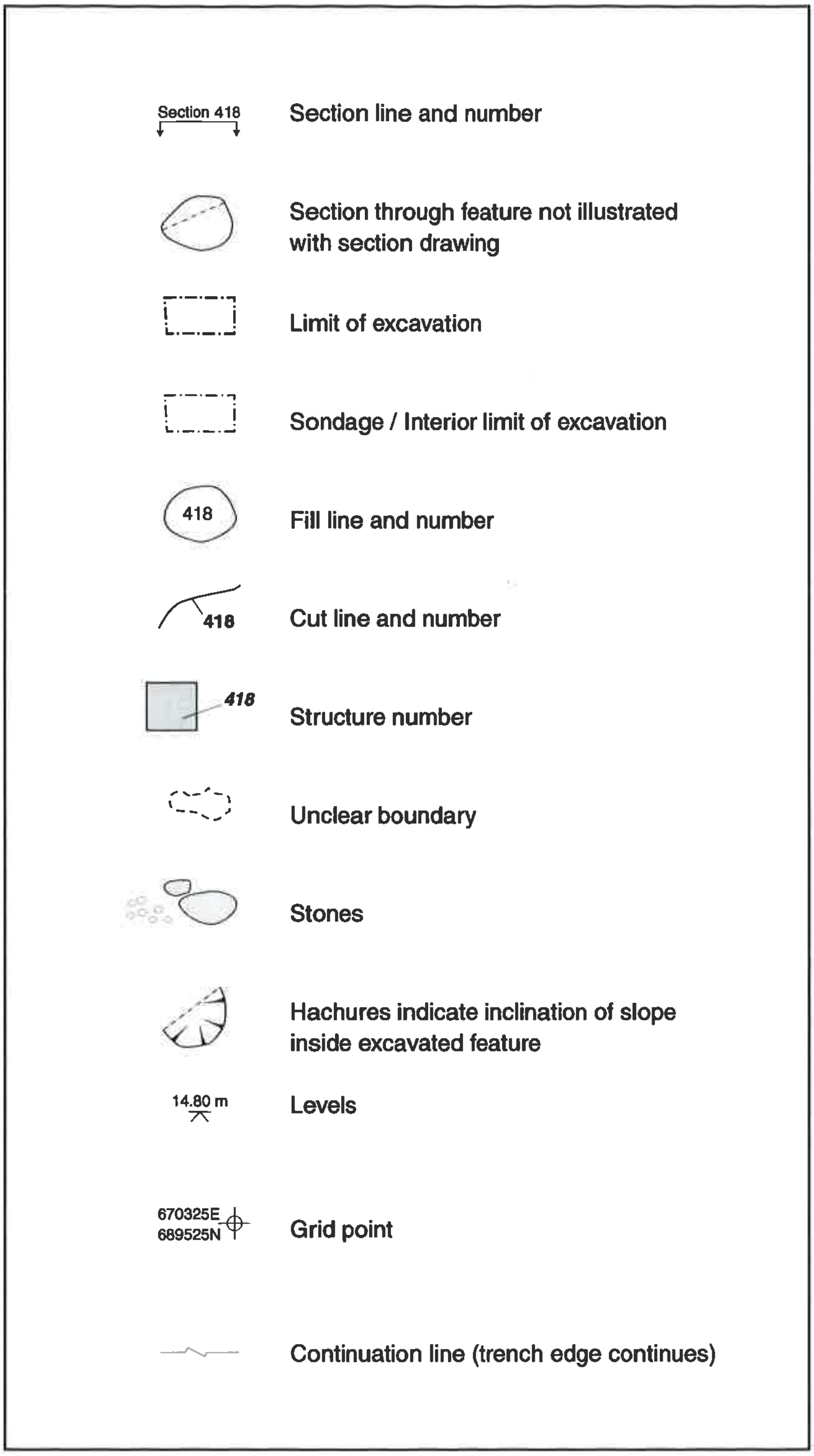


Figure 16 : Trench 16 plan 1601 and section 1601



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