

Gazeley Properties Ltd / Roscoe Capita Ltd

**Former Delta Works, Millmarsh Lane, Enfield, Greater  
London**

*ARCHAEOLOGICAL EVALUATION REPORT*

TQ 3660 9720

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October 2000



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## ARCHAEOLOGICAL EVALUATION

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## SUMMARY

*The Oxford Archaeological Unit (OAU) carried out a field evaluation at the site of the former Delta Works, Millmarsh Lane, in the Borough of Enfield, Greater London on behalf of Roscoe Capita Ltd consulting Engineers for Gazeley Properties Ltd. The evaluation consisted of eight machine excavated archaeological trenches distributed across the development area.*

*All of the trenches revealed the surface of the natural gravel subsoil which sloped gently down from the north-east and south-west to a slight hollow which ran through the centre of the site. In Trench 4, adjacent to the current River Lea Navigation, a paleochannel was revealed on a north-south alignment. This channel had silted up with substantial alluvial deposits. This sequence was sampled and could represent actions from the Early Mesolithic to the Roman/Saxon periods. The environmental assessment of the samples indicate an early prehistoric date for the sequence, similar to other environmental sequences from the area, however in the absence of any absolute dating these results are inconclusive.*

*It is possible that this alluvial sequence was the same as those recorded in the trenches on the eastern half of the site. Trench 8 in the south-west corner of the site, revealed three probable ditches, a post-hole and a single pit. Only the pit yielded any finds and was dated to the Middle Bronze Age, however this could not be related to the alluvial sequence. In Trench 7 on the central southern boundary of the site alluvial deposits sealed a buried soil, a tree-hole and a feature that contained 'bloom' derived from the production of iron. In Trench 5 a substantial undated, north-south orientated ditch, parallel to the River Lea Navigation, and filled by alluvial silts, was observed. It was re-cut once and probably backfilled in the post-medieval period. A number of ceramic land-drains sealed below an old plough-soil attested to the 20<sup>th</sup> century agricultural phase of the site.*

*Concrete structures relating to the sites modern and most recent industrial use truncated the earlier sequences in many places. The demolition and remediation work had also created a certain amount of truncation of the upper part of the sequences observed and in many places had completely removed all material overlying the natural geology.*

*In conclusion, while the environmental data are of some interest, it is considered that the assessment analysis carried out for this report is sufficient – the lack of good archaeological data on the site and in the surrounding area, means that detailed palaeoenvironmental analysis is not justified. Further site work is not recommended due to the modern truncation of the site.*

## 1 INTRODUCTION

### 1.1 Location and scope of work

1.1.1 In April, May and August 2000 OAU carried out a field evaluation at the site of the former Delta Works, Millmarsh Lane, in the Borough of Enfield, Greater London on behalf of Gazeley Properties Ltd and the Consulting Engineers Roscoe Capita Ltd in respect of a planning application for B1, B2 and B8 development. The archaeological brief was set by Robert Whythead of English Heritage, GLAAS (Greater London Archaeological Advisory Service), acting as Archaeological Advisor to the London Borough of Enfield. From this, Dr Royston Clark of CPM, acting on behalf of Gazeley Properties Ltd established the Archaeological Specification (CPM 1999) from which OAU prepared a Method Statement (OAU 2000). The content of both these documents was agreed with GLAAS. The development site is situated at TQ 3660 9720 and covers an area of 41,256 sq m (Figs 1 and 2).

### 1.2 Geology and topography

1.2.1 The site overlies (gleyic) argillic brown earths on aeolian silty drift over River Lea terrace gravel (Hamble 2 soil association; (Jarvis *et al.*, 1984)) at c.15m above OD. The site is located on former industrial ground and situated to the east of Enfield Town in Brimsdown. The eastern boundary of the development area is formed by the river wall of the historic River Lea Navigation.

### 1.3 Archaeological background

1.3.1 The archaeological background has been previously detailed in CPM's Specification (CPM 1999) and is summarised here.

1.3.2 Whilst no archaeological finds or deposits have been recorded from the development site it lies in an area of archaeological potential. Prehistoric and Roman artefacts were recovered during construction of the reservoir to the east of the site. A sequence of waterlain silty clays, containing layers radiocarbon dated to the Mesolithic and Neolithic (one of which is thought to indicate large scale burning) was identified during an evaluation of land to the south of the present development carried out by the Museum of London Archaeological Service (MoLAS) in 1993. No archaeological features were encountered. Alluvial material encountered during a separate MoLAS evaluation further to the south at Ponders End Flour mill, identified Post-medieval flood deposits. Other stray finds dating from the prehistoric period through to the post-medieval period have been recorded from the Enfield area.

#### ***Acknowledgements***

1.3.3 OAU are grateful to Lucy Thomas of Roscoe Capita, and to the contractors, Griffiths McGee, for their help and support. Fieldwork was coordinated by A. Mayes, and B. Matthews, and managed by D. Wilkinson.

### ***Evaluation aims***

1.3.4 The aims of the evaluation are as stated in section 3.3 of CPM's Specification, but in general are:

- ◆ To establish the presence/absence of archaeological remains within the development area and to determine the extent, thickness, condition, nature, character, quality, date, depth below ground surface and depth of any archaeological remains present.
- ◆ To establish the ecofactual and environmental potential of archaeological deposits and features.
- ◆ If significant archaeological remains are discovered, to determine what further mitigation measures may be required and to agree these with CPM, the Local Planning Authority and English Heritage.
- ◆ To make available the results of the investigation.

## **EVALUATION METHODOLOGY**

### **2.1 Scope of fieldwork**

2.1.1 The evaluation consisted of eight machine dug trenches with supplementary hand investigation of archaeological deposits.

### **2.2 Fieldwork methods and recording**

2.2.1 After machine excavation to the geological subsoil or to significant archaeological deposits the trenches were cleaned by hand and the revealed features were sampled to determine their extent and nature, and to retrieve finds and environmental 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).

### **2.3 Finds**

2.3.1 Finds were recovered by hand during the course of the excavation, and also during the environmental flotation process; all finds were bagged by context. Finds of special interest were given a unique small find number.

### **2.4 Palaeo-environmental Evidence**

2.4.1 The following strategy for palaeoenvironmental evidence was agreed with EH's Environmental Advisor, Jane Siddell:

2.4.2 Where moderate to abundant archaeological deposits and features are revealed, sampling for a number of investigations including plants, animals, fish and invertebrates will be undertaken. The potential of the material will be ascertained through the taking of bulk samples from a representative cross-section of features and



layers of all periods; these should be well dated or datable and well sealed (not mixed). The selection of these samples will therefore take into account the presence/absence of datable artefacts and the degree of residuality and intrusiveness (eg. of finds, recent or modern material etc.) within the deposits. The size of the bulk samples for evaluation assessment will be 20 litres or 100% of the deposit where less than that capacity.

- 2.4.3 High priority deposits for investigation are: primary fills of pits, wells, ditches and cess-pits, layers of middens, occupation surfaces and other discrete activity areas, contents of hearths, kilns and ovens, storage areas or containers. Discrete burnt or charcoal areas are of the 'greatest interest and shall be sampled, but sampling shall not be limited to areas of visibly burnt remains, for even charred plant remains are not necessarily visible within deposits, and many other types of material, including small finds, can be retrieved from the bulk samples.
- 2.4.4 Where waterlogged deposits occur (both within, archaeological features and from alluvial deposits), bulk samples of a minimum of 10 litres will be taken (or 100% of the deposit, if less than that capacity). Sub-samples of these waterlogged samples will be assessed by suitable specialists for the presence of plants, insects, and other biological indicators. Monolith samples for palynological investigations shall be taken where appropriate.
- 2.4.5 Bulk samples will be floated, with the flot collected in a 250 micron mesh. The residue (heavy fraction) will be sorted for artefacts and bone to 4mm and the finer fraction (to 500 microns) shall be scanned by a suitably experienced person to assess potential. After drying, the flots will be assessed by the specialist to ascertain the range and degree of preservation of the contents.
- 2.4.6 The assessment will estimate the presence of cereal grains, chaff and weed seeds as well as that of fish and small mammal bones and charcoal. Methodology and recording will be compatible with the procedures followed by MOLAS in the excavations at the Delta Cable Works in 1993.

### 3 RESULTS: GENERAL

#### 3.1 Soils and Ground Conditions

- 3.1.1 The site is located on former industrial ground overlying alluvial clays and silts, adjacent to the modern course of the River Lea Navigation.
- 3.1.2 Parts of the site were covered by existing structures and these were to be demolished, including the 'grubbing out' of any associated below ground structures. Certain areas of the site were heavily contaminated from previous industrial use, and these areas were highlighted for remediation by bulk removal. The excavated archaeological trenches followed closely on from the demolition and remediation works. On occasions these works had already removed any archaeological levels that may have survived the truncation by the foundations to the previous buildings. The infrastructure associated with the demolition and remediation site works restricted access to some of the original

trench locations prescribed by the Specification (CPM 1999). It was therefore necessary to relocate some trench locations - Trench 6 was abandoned, and Trench 7 was relocated.

- 3.1.3 Trench 4 was excavated below the water-table which was encountered at a depth of 12.70m OD.

### 3.2 Distribution of Archaeological Deposits

- 3.2.1 The upper level of the natural gravel followed a gentle slope up from either side of the slight hollow running north-west to south-east through the centre of the development area. This deposit sloped steeply down in Trench 2 forming the former bank and base of a paleo-channel adjacent to the current course of the River Lea Navigation.
- 3.2.2 The eastern part of the site saw varying depths of alluvial deposition over the natural gravel. This deposit was at its deepest where it filled the palaeochannel in Trench 4, decreasing in depth as it spread further west. In Trench 7, a thinning alluvial deposit sealed a buried soil (the only location where this was recorded) and the fills of two possible tree-boles, one of which contained bloom material from iron production.
- 3.2.3 No alluvial deposits were found in the western part of the site in Trenches 8 and 9. Trench 8 contained a number of cut features, including a post hole, three ditches, and a pit which contained redeposited Neolithic pottery and Middle Bronze Age pottery.

## 4 RESULTS: DESCRIPTIONS

### 4.1 Description of deposits

- 4.1.1 The deposits recorded during the evaluation will be reported on a trench by trench basis, and in order from the earliest lain deposit to the latest.

#### *Trench 1*

- 4.1.2 Trench 1 was located in the north-east corner of the development area. It measured 9.00m long by 2.30m wide by 1.40m deep, with the long axis orientated north-west to south-east.
- 4.1.3 Natural gravel 101 was encountered at 14.30m OD. This was overlain by possible modern make-up 102, a compact silty clay. This deposit was cut by feature 105 which contained a form of probable industrial residue (106), within which was a clay pipe fragment, and some white china ware. Make-up layers 103 and 104 overlay 106, and were cut by 107, a pit filled by a silty clay matrix (108), which contained modern building rubble. Extensive layers of building rubble make-up and hardcore material sealed this sequence.

#### *Trench 2*

- 4.1.4 Trench 2 was located on the extreme eastern limit of the development area immediately west of the wall of the River Lea. It measured 3.00m long by 2.50m wide by 1.60m deep, with the long axis orientated north-south.

- 4.1.5 Natural gravel 201 was encountered at 13.47m OD. This was overlain by two distinct episodes of alluvial silting. A dark greenish-grey silty clay (202) with occasional gravel inclusions up to 0.30m thick, was overlain by 203, a dark greyish-brown silty clay up to 0.70m thick.
- 4.1.6 The alluvial silts were removed in the western half of the trench by a large cut [204] which was filled with modern building rubble (205). This sequence was entirely overlain by a 0.60m thick layer of modern hardcore material.

### ***Trench 3***

- 4.1.7 Trench 3 was located towards the south-east corner of the development area. It measured 7.30m long by 2.50m wide by 1.70m deep, with the long axis orientated north-west to south-east.
- 4.1.8 Natural gravel geology was encountered at c.13.80m OD through out the base of Trench 3. This was overlain by 1.0m depth of dark greenish grey silty clay which contained brick fragments and can be interpreted as made ground derived from redeposited natural deposits. Overlying this was a 0.75m thick layer of modern crushed building material hardcore (303).

### ***Trench 4***

- 4.1.9 Trench 4 was located in the extreme south-eastern corner of the development area, immediately west of the western wall of the River Lea. It measured 18.00m long by 6.00m wide at the top of the trench, with a step at a depth of 1.00m from the existing ground level, reducing the trench dimensions to 16.00m long by 2.10m wide with an overall depth of 2.50m. The long axis was orientated north-west to south-east. The trench became waterlogged at a depth of 12.70m OD, c.2.30m down from existing ground level.
- 4.1.10 Natural gravel geology was encountered at c.13.20m OD in the north-west end of the trench at its highest point. A large feature, not fully revealed in plan or section by the excavated trench, was recorded running north-south and cutting the gravel. The projected natural gravel base to this feature sloped down to the east, forming a 2m wide shallow ledge and then down again more steeply to an unknown depth, (at least lower than 11.43m OD). This feature has been interpreted as a water cut paleo-channel and was filled with a series of probable water lain deposits. The sequence in this channel from earliest to latest was recorded as, in order of deposition: 408 - dark grey-brown organic silt, c.0.15m thick; 407 - compact chalky silt with occasional gravel inclusions c. 0.05m thick; 406 - compact dark reddish-brown silty clay with 30% organic matter, c.0.20m thick; 405 - compact light greyish white silty clay, c. 0.10m thick; 404 - tenacious dark greenish black near pure silty clay, 0.25m thick; 403 - dark greyish green silty clay recorded as 1.0m thick where it was not truncated. All these deposits, except 403, were sampled.
- 4.1.11 This channel sequence was cut by substantial modern earth moving activity (probably recent remediation works) and backfilled with redeposited natural containing building rubble (402); it was then levelled with building rubble hardcore (401).

### ***Trench 5***

- 4.1.12 Trench 5 was located towards the centre of the development area. It measured 21.00m long by 2.00m wide by 1.60m deep, with the long axis orientated north-west to south-east.
- 4.1.13 Natural gravel 507 was observed sloping gently down from 14.23m OD in the west of the trench to 13.99m OD in the far east of the trench. The natural gravel was overlain by a 0.70m thick light brownish-orange silty clay deposit (506), which is interpreted as an alluvial layer.
- 4.1.14 These deposits were cut by a large north-south running linear ditch [505], with steep sides and a flat base. The surviving dimensions of this ditch were 0.90m wide by 0.60m deep, and it was filled by a blue-grey silty clay deposit (504), which may represent alluvial silting, suggesting ditch 505 was a man-made water channel. This linear feature and its subsequent fill were largely removed by 503, a substantial secondary ditch on the same alignment with steep sides and a flat base, measuring 3.60m wide by 1.15m deep. The secondary ditch had a mid brown-grey silty clay fill (502), which contained small fragments of post-medieval pottery, clay pipe and oyster shell. Ditch 503 has been interpreted as a re-cutting action of 505, presumably when the former ditch had become heavily silted up.
- 4.1.15 The earlier sequence was truncated by later activity 508, which included modern service runs and make-up layers overlain by concrete surface slabs.

### ***Trench 6***

- 4.1.16 This trench was abandoned. Its position had been previously occupied by deep modern foundations which had been broken out - the resulting large machine-excavated hole penetrated the gravel natural, therefore removing any archaeological deposits that may have been present.

### ***Trench 7***

- 4.1.17 Trench 7 was located centrally, adjacent to the southern boundary of the development area. It measured 15.00m long by 1.80m wide by 1.45m deep, with the long axis orientated north-west to south-east.
- 4.1.18 Natural gravel geology was observed sloping gently down from 14.06m OD at the western end of the trench to 13.85m OD at the eastern end. This was overlain throughout the trench by 710, a 0.28m thick deposit of friable mid brownish-yellow silty sand, interpreted as a subsoil. 710 was overlain by a 0.12m thick compact mid brownish-yellow silty-clay, 709, which has been interpreted as a buried soil horizon.
- 4.1.19 Two features, 708 and 714, were observed in the upper horizon of this deposit. Feature 708 was recorded in section as being 1.60m wide and 0.40m deep, with steep sides and an undulating base. Its primary fill (707), a redeposited natural gravel, was concentrated in the deeper eastern part of the feature, and overlain by a mid yellowish-brown silty clay (705) to the west, within which was a u-shaped lens of

fire-reddened dark grey silty clay (706); this deposit was sampled (SS 8). Feature 714 was larger than 708, c. 2.0m in diameter, and at least 0.40m deep. Its amorphous shape was partly revealed in plan, and in section it was revealed to have an irregular base and sides. It was filled with two intermixed deposits, a bluey-grey silty clay (712), and a very dark brown silt with organic inclusions (713) which was sampled (SS 9). Both features were interpreted as tree boles/ or tree throw holes, with the suggestion that the fire reddening in deposit 706 may possibly be the result of deliberate tree clearance.

- 4.1.20 The fills of features 708 and 714, and deposit 709, were overlain by a 0.44m thick mid yellowish brown silty clay deposit, interpreted as an alluvial deposit. This sequence was truncated and overlain by modern activity; deposit 703 contained coke deposits from some form of industrial process, and 702 contained ash, which were in turn overlain by modern concrete surfaces and foundations.,

### ***Trench 8***

- 4.1.21 Trench 8 was located in the south-east corner of the development area. It measured 25.50m long by 3.50 m wide at the top of the trench, a step on the north side at 0.50m depth from the existing ground level avoided a modern obstruction and reduced the trench to a width of 2.50m, and a total depth of 1.30m, for its entire length. The long axis was orientated north-west to south-east.
- 4.1.22 Natural gravel geology was observed sloping gently down from 14.35m OD at the south-eastern end of the trench to 14.10m OD at the north-western end. Next in the sequence were five features which cut the natural gravel, two possible ditch terminals 811 and 815, a probable pit [809], a possible post-hole [819] and a north-south orientated linear [820].
- 4.1.23 Feature 811 was only partly revealed ( its full extent ran under the main south-west baulk); it had a slightly irregular linear shape in plan, an irregular undulating base and sides that were vertical on one side and steep on the other. Feature 815 was linear in plan, orientated approximately east-west and under the main south-west baulk. It measured 1.0m+ long by 0.50m wide, and was 0.08m deep with a rounded base. Both features were filled with brown silty clay, and yielded no finds.
- 4.1.24 A possible post-hole (819) was located c. 0.5m from the end of 815; it measured 0.22m in diameter by 0.16m deep. It was filled by a dark-grey silty clay (818).
- 4.1.25 Feature 809 was located at the north-east terminal of 811; it was approximately circular in plan with a diameter of 0.50m, it was 0.60m deep and had near-vertical sides with a concave base. A dark grey-brown silty clay (808) was the only fill in this cut, which yielded pottery, burnt bone and fire-cracked flint.
- 4.1.26 To the west of the previously described features a north-south orientated linear feature [820] was recorded crossing the full width of the trench. It had shallow sloping sides with a concave base and measured 0.86m wide by 0.13m deep. It was filled with a yellow-brown silty-clay

### ***Trench 9***

- 4.1.27 Trench 9 was located central to the western part of the development area. It measured 29.00m long by 2.00m wide by 1.10m deep, with the long axis orientated north-west to south-east.
- 4.1.28 Natural gravel geology was observed sloping gently down from 14.08m OD at the north-western end of the trench to 13.87m OD near the south-eastern end, with a more pronounced slope in the same direction down to 13.59m OD in the last five metres at the south-eastern end. This was overlain throughout the trench by (904) a 0.80m thick mid brown sandy gravel. In the north-east corner of the trench this was overlain by 903, a 0.20m thick mid brown sandy silt and a possible alluvial deposit, which was in turn sealed below a compact 0.35m thick deposit of reddish brown sandy clay (902), which may have modern origins.
- 4.1.29 Deposit 901 was a 0.50m thick layer of building rubble which overlay the earlier sequence, and features 914, 908 and 911 represent the recent demolition activities which were cut deep enough to truncate the natural gravel.

## **4.2 Finds**

### ***The Prehistoric Pottery by Alistair Barclay***

- 4.2.1 The evaluation produced a total of 16 sherds (228 g) of earlier prehistoric pottery, while a further 13 sherds (46 g) were recovered from an environmental sample (SS10). An additional amorphous fragment (10 g) is fired clay rather than pottery. All of the material was recovered from a single context (808), interpreted as the single fill of a small pit [809] in Trench 8.
- 4.2.2 The assemblage includes a number of featured sherds (rims and cordoned sherds) from at least four vessels in flint and flint and grog tempered fabrics of Deverel-Rimbury Bucket Urn type and of middle Bronze Age date. However, there are also a small number of sherds that appear to belong to one or more Plain Bowls of early Neolithic date and this includes part of a rim that is everted and has a perforation through the neck. These sherds are manufactured from a flint-tempered fabric that is noticeably different from the Deverel-Rimbury material with more sparse, ill-sorted and angular inclusions.
- 4.2.3 The general condition of the pottery is at least slightly worn and some cases sherds are very abraded (especially some of the early Neolithic sherds). It is likely that the early Neolithic sherds are residual within a middle Bronze Age context, it is also possible that the whole group represents redeposited material.

### ***The post-medieval pottery by Duncan H Brown***

- 4.2.4 Three sherds of post-Roman pottery were recovered from two contexts. They were recorded according to the MOLAS spot-dating system.

4.2.5 Context 106 produced one base sherd of white refined earthenware, probably late 19<sup>th</sup> or early 20<sup>th</sup> century in date.

4.2.6 Context 502 contained one small sherd of blue transfer-printed ware and the rim of a white refined earthenware mug or cup with three red lines painted around the outside of the rim and one on the inside. Both these sherds are likely to date to the late 19<sup>th</sup> or early 20<sup>th</sup> century, and most likely the first half of the 20<sup>th</sup>.

***The clay pipe by Ben Ford***

4.2.7 Two stem fragments of clay pipe, weighing 14 g, were recovered from the evaluation trenches on the former Delta Works, Millmarsh Lane Enfield. No particular conclusion can be drawn from such a small assemblage, except that the contexts they derive from are probably post-medieval.

Context	No. of fragments	Description	Date
106	1	Upper stem with small part of bowl form attached. Illegible stamp on both sides of stem.	Post-medieval
502	1	Central lower part of stem. No markings.	Post-medieval

***The metalwork by Ben Ford***

4.2.8 A single fragment of metal strip, probably some form of iron or steel was recovered from context (502) in Trench 5 from the evaluation trenches on the former Delta Works, Millmarsh Lane Enfield. No particular conclusions can be drawn except that it is probably of post-medieval date.

***The burnt stone by Ben Ford***

4.2.9 A total of 4 pieces of fire-cracked flint weighing 98g was recovered from the fill of a small pit in Trench 8, context 808. This material was associated with probable Middle Bronze Age pottery. The small quantity of this material restricts any attempt at a functional interpretation.

***The probable furnace material by Kayt Brown***

4.2.10 A small quantity of metal-working debris was recovered and recorded by type and weight. There were 10g of cinder and 1,715g of undiagnostic iron slag. Material of this nature has a broad date range and in the absence of any other dating evidence it can only be assigned a date from the Iron age to the 20<sup>th</sup> century.

Context	Type	Weight (g)
808	Undiagnostic slag	1517
704	Cinder	10
Total		1527

### ***The worked bone by Leigh Allen***

- 4.2.11 A short bone point (L:78mm) made from a cattle ulna was recovered from context 808. The point is incomplete and badly abraded with only small areas of the original surface surviving. The very tip of the point is missing. The absence of the surface and any wear patterns make it difficult to comment on the exact function of the point, but it is probably an awl designed to pierce or bore a hole in a softer substance such as leather or textile.

### ***The animal bone by Bethan Charles***

- 4.2.12 Two conjoining fragments from the head of the unfused femur were recovered from context (808). The size and fragmentary nature of the bone only indicates that the animal was juvenile and large, possibly cattle.

## **4.3 Palaeo-environmental remains**

### **Introduction**

- 4.3.1 A total of ten soil samples were retrieved from archaeological evaluation works at the site of the former Delta Works, Millmarsh Lane, Enfield. Samples 1-5 (SS 1-5) were taken for macroscopic plant and invertebrate remains from a sequence relating to a probable former channel of the River Lea in Trench 4. The same sequence was also sampled by means of a column monolith (SS 6) to gain a parallel pollen profile. A second column sample (SS7) was taken from a sequence in Trench 7, which was considered to represent a sequence of prehistoric sub-soil (710), prehistoric buried-soil (709), and subsequent alluviation (704). In addition two fills, (706)-(SS8) and (713)-(SS9), from two discreet features cutting this buried soil but sealed by the alluviation were sampled for charred plant remains, small bones and artefacts. A final sample (SS10) was taken for charred plant remains, small bones and artefacts from the single fill (808) of a pit excavated in Trench 9 which contained pre-historic pottery, animal bone, a bone object and burnt flint.

### ***Carbonized plant remains and charcoal by Dana Challinor***

- 4.3.2 Three soil samples, 30 litres in volume, were taken from the fills of two probable tree throw holes (706)-(SS8) and (713)-(SS9) in Trench 7, and a the single fill of a prehistoric pit (808)-(SS10) in Trench 8, for the recovery of charred plant remains. The samples were processed by mechanical flotation in a modified Siraf machine for the recovery of charred plant remains, with the sample held on a 500µm and the flot collected on a 250µm mesh. The flots were scanned under a binocular microscope at x10 and x20 magnification.
- 4.3.3 The flots were very small in size (10ml or less) and were dominated by modern intrusive material; roots, seeds and coal. A small amount of wood charcoal was present in contexts (706) and (808), which was identified as Maloideae (hawthorn, apple, pear etc.) and *Alnus/Corylus* type (alder/hazel). No other charred plant remains



were preserved. The samples have no potential to add to the environmental or economic reconstruction of the site.

### *Assessment of macroscopic plant and invertebrate remains by Mark Robinson*

#### Introduction

4.3.4 Archaeological trenching at the Enfield Delta Works, Enfield, London, exposed palaeochannel sediments of the River Lea which are believed to be of Mesolithic date. A sequence of samples from them was assessed for macroscopic plant remains.

#### Methods and Results

4.3.5 Sub-samples of 0.5kg were washed over onto a 0.2mm mesh and scanned under a binocular microscope. The biological remains observed were recorded.

Sample Number	Context Number	Soil Description	Macroscopic Plant remains
Sample 1	Context 404 (top of sequence)	Black clay.	Remains absent
Sample 2	Context 405	Pale grey sandy marl	Some shells of freshwater molluscs including <i>Bithynia tentaculata</i> , <i>Valvata piscinalis</i> and <i>Pisidium</i> sp.
Sample 3	Context 406	Dark grey peaty sediment	Humified and comminuted organic material including roots
Sample 4	Context 407	Grey marly clay.	Decayed roots
Sample 5	Context 408 (bottom of sequence)	Dark brown peat.	Comminuted organic material including roots and fragments of deciduous tree leaves. Some identifiable plant remains including seeds (Table 1) and fragments of Coleoptera, (Table 2).

#### Interpretation

4.3.6 The preservation of identifiable macroscopic plant and invertebrate remains from the sequence is restricted to the mollusc shells in Sample 2 and the waterlogged plant and Coleoptera (beetle) remains in Sample 5. The Coleoptera include *Agabus bipustulatus*, *Hydrobius fuscipes* and *Anacaena* sp., which are characteristic of stagnant water. They suggest the conditions under which Context 408 accumulated. The most numerous plant remains are seeds of *Betula pendula* or *pubescens* (birch) and bud scales of *Populus* sp. (aspen or poplar) from trees growing alongside the channel. *Salix* S. *Caprisalix* sp. (osier or willow), the host of the beetle *Phyllodecta vulgatissima*, is also likely to have been present. The other seeds are from plants appropriate to bankside or open fen wood habitats including *Filipendula ulmaria* (meadowsweet) and *Lycopus europaeus* (gipsywort). The absence of seeds of *Alnus glutinosa* (alder) from Sample 5 would suggest an early Mesolithic date for Context

408, perhaps between 10,000 and 7500BP, before the general expansion of *Alnus* on river floodplains.

- 4.3.7 The shells of freshwater molluscs in Sample 2 include the flowing water species *Bithynia tentaculata* and are consistent with an alluvial origin for the sediment of Context 40.

### Potential

- 4.3.8 Full analysis of Sample 5 for macroscopic plant and insect remains has much potential to give evidence for the reconstruction of the local environment of the site. However, it is important that radiocarbon dating is undertaken on macroscopic plant remains from the sample. The other samples have no useful potential for further analysis.

### Recommendation

- 4.3.9 Any decision to proceed with the full analysis of Sample 5 should be based on the archaeological importance given to establishing the early Mesolithic environment of the site.

**Table 1: Macroscopic Plant Remains from the Enfield Delta Works Sample 5, Context 408 (seeds unless stated)**

<i>Filipendula ulmaria</i>	meadowsweet	+
<i>Urtica dioica</i>	stinging nettle	+
<i>Betula pendula</i> or <i>pubescens</i>	birch	++
<i>B. pendula</i> or <i>pubescens</i> - catkin scale	birch	+
<i>Populus</i> sp. - bud scale	poplar	++
<i>Lycopus europaeus</i>	gypsy wort	+

+ present,      ++ many

**Table 2: Coleoptera from the Enfield Delta Works Sample 5, Context 408**

<i>Dyschirius globosus</i>	+
<i>Agonum</i> sp.	+
<i>Agabus bipustulatus</i>	+
<i>Hydrobius fuscipes</i>	+
<i>Anacaena</i> sp.	+
<i>Hydraena</i> sp. (not <i>testacea</i> )	+
<i>Silpha atrata</i>	+
<i>Olophrum</i> sp.	+
<i>Donacia</i> or <i>Plateumaris</i> sp.	+
<i>Phyllodecta vulgatissima</i>	+

### *A Pollen assessment analysis of Early Holocene sediments by Dr Robert G Scaife*

#### Introduction

- 4.3.10 A sample column for pollen analysis was taken through the fills of a palaeochannel adjacent to the River Lea at the site of the Delta Works, Enfield. This is in an area of the River Lea where earlier analyses have demonstrated rich late-Devensian and early to mid-Holocene peat and sediment sequences and related archaeology (Warren

1912,1916; Reid 1949; Allison *et al.* 1952). More recent analyses at Enfield Lock (Chambers and Mighall 1996) and upstream at Rye Meads, Stanstead Abbots (Scaife 1994) have demonstrated the presence of pollen which relates to the early Holocene pre-Boreal and Boreal periods, that is, corresponding with the Mesolithic archaeological period. Evidence of the latter is present at nationally important localities such as Broxbourne (Rikof's Pit: Warren *et al.* 1934) and Nazeing (Wymer 1977). The pollen assessment presented here confirms that the bulk of the sediment sequence similarly dates to the early Holocene period and is comparable with earlier work noted above. The work was also carried out in conjunction with analyses of insects and plant macrofossils by Dr. M Robinson.

**Stratigraphy**

4.3.11 The stratigraphy comprises intercalated sandy silts and black, very highly humified detrital organic silts and peat. The stratigraphy of the pollen monolith was described in the laboratory as follows.

Depth mm	Description	Munsell colour
0-120	Grey silt with brown mottles	10YR 4/2
120-220	Transition zone between grey/black of below and upper silt.	10YR 4/1 to 10YR 3/1
220-280	Black, humic silty clay	10YR 3/1 to 10YR 2/1
280-340	Sandy, calcareous. White-grey.	10YR 7/2.
340-440	Black, very humic peat.	10YR 2/1
449-519	Grey, sandy silt with calcareous fragments	

**Pollen Method**

4.3.12 The open section was sampled using a metal box monolith profile. Sub-samples were taken at an interval of 80mm in the laboratory and the sediment described. Samples of 1 or 1.5ml volume were prepared using standard procedures for the extraction of sub-fossil pollen and spores outlined in Moore and Webb (1978) and Moore *et al.* (1991). Absolute pollen frequencies were calculated using added exotic/spike (Stockmarr (1971) *Lycopodium* tablets) to the known volumes of sample. Pollen counts of generally 150 grains per level (the pollen sum) were made where possible plus pollen of all extant marsh taxa and spores of ferns. In some levels, especially higher in the profile (zone 3), pollen was poorly preserved and sparse and as such, a smaller number of grains was counted. These procedures were carried out in the Department of Geography, University of Southampton. Data obtained are presented in standard pollen diagram form (Fig. 8) with percentages calculated as follows:

- Sum = % total dry land pollen (tdlp)
- Marsh/aquatic = % tdlp+sum of marsh/aquatics
- Spores = % tdlp+sum of spores
- Misc. = % tdlp+sum of misc. taxa.

- 4.3.13 Taxonomy in general follows that of Moore and Webb (1978) modified according to Bennett *et al.* (1994) for pollen types and Stace (1992) for plant descriptions.

### The Pollen Data

- 4.3.14 Three local pollen assemblage zones have been recognised in the 0.32m of this profile. These are defined and characterised from the base of the sequence as follows.
- 4.3.15 **ENF 1: 480-360mm. *Pinus-Corylus* type.** Absolute pollen frequencies range from 36,000 grains/ml to 120,312 grains/ml. Percentages of *Pinus* are at their highest (40%) at the bottom of the zone declining upwards. *Ulmus* (to 7%) and sporadic *Quercus* are present. *Corylus* type is important, expanding from 42% at the base to 70% at 40cm. Herbs (to 18%) are dominated by Poaceae (14%) with occasional occurrences of *Caltha* type, *Ranunculus* type, *Filipendula* and *Bidens* type. There are small numbers of Ericaceae (*Calluna* and *Erica*). Marsh taxa comprise Cyperaceae (4%) with *Caltha* type, *Salix*, *Alisma* type and *Typha angustifolia/Sparganium* type.
- 4.3.16 **ENF 2: 360mm - 220mm. *Ulmus-Quercus-Corylus* type.** apf values are highest at 28cm (88310,00 grains/ml) but are generally in the order of 30-60,000 grains/ml. This zone is defined by reduction in *Pinus* and expansion of *Ulmus*, *Quercus* (8%) and highest percentage values of *Corylus* type (to 68%). There is also some increase in Cyperaceae in the marsh group. Percentages of *Dryopteris* type spores increase sharply in the upper level of this zone (to 55% tdlp+spores).
- 4.3.17 **ENF 3: 220m - 160mm. *Alnus-Corylus* type.** apf values decline to 12,000 grains/ml. The zone is defined by dominance of *Alnus* (40%) with *Corylus* type (30%). *Tilia* (<5%) is present. Spores of ferns are important with *Dryopteris* type (to 55%), *Pteridium aquilinum* (10%) and *Polypodium vulgare* (5%).

### The Inferred vegetation History

- 4.3.18 Pollen zone 1 and 2 appear to be of early Holocene age. That is, Flandrian Boreal period (Flandrian Chronozone Ib-Ic; the early Mesolithic). Whilst radiocarbon dating is required for confirmation, this pollen assemblage is diagnostic of the early Holocene, Boreal period (Flandrian Ib-Ic) for southern England (Godwin 1975; Scaife 1982; Bennett 1984) at c. 9500-8000 years BP as is suggested by the typical dominance for southern England of *Pinus* (pine) with *Ulmus* (elm) and *Corylus* (hazel) seen here in pollen zone ENF1. The absence of *Betula* (birch) in quantity suggests that the base of the profile post-dates the immediate post-glacial/early Holocene colonisation of this tree. That is, during the Pre-Boreal period (Flandrian Chronozone Ia) from c. 10,000 to 9500 BP.
- 4.3.19 In pollen Zone ENF 2, declining pine with expansion of oak, elm and hazel represents the start of expansion to dominance of deciduous woodland which ousted the pine woodland in the same way that pine ousted preceding early Holocene birch. Again this is typical evidence of the dynamic biogeography and vegetation changes which occurred during the early Holocene period. The prominence of hazel gave rise to the term Boreal hazel woodland and also to speculation over the use of and promotion of

hazel by Mesolithic hunting and foraging communities (see Smith 1970 and Simmons and Tooley 1978 for discussion). This is based on the frequent occurrence of charred hazelnuts on early Mesolithic sites, for example at Thatcham, Berkshire (Wymer 1962; Scaife 1992). This is, however, highly conjectural and whilst the Mesolithic clearly made use of the nuts, it is more likely that the importance of hazel at this time was a function of the complex vegetation dynamics of this phase of post-glacial woodland colonisation.

- 4.3.20 Zone ENF 3 contrasts with the preceding zones by having high values of alder with small numbers of the thermophile, *Tilia* (lindens/lime). These elements are typical of the middle Holocene Atlantic period (Flandrian chronozone II) from *c.* 7000-5000BP and later Chronozone 3 (Sub-Boreal and sub-Atlantic periods). The change to this pollen assemblage zone also corresponds with a stratigraphical change to ?alluvial clays/silts in which absolute pollen frequencies are substantially smaller. Consequently, it is possible that there is a hiatus in the profile at *c.*22cm when the palaeochannel was covered by /alluvial sediments.
- 4.3.21 Overall, these pollen data are comparable with other sites examined along the Lea Valley which seems to have a preponderance of early Holocene peat and early Mesolithic archaeological sites.

### Suggestions for Additional Work

- 4.3.22 Pollen was recovered from all 8 samples examined in sufficient numbers to enable pollen counts and a preliminary pollen diagram to be constructed. The pollen data clearly relate to the early post-glacial, early Mesolithic period in an area which has abundant archaeological evidence. Consequently, the site offers the opportunity for a more detailed palaeoenvironmental reconstruction of the local region which could be compared with existing regional data. Furthermore the site/sequence appears to span an important period of early Holocene woodland development. As such, this has importance for study of the wider changes in the post-glacial vegetation of southern England. Radiocarbon dating of the profile would confirm and establish the date of the profile and of the changes from pine to oak, elm and hazel woodland for this region. In order to complete this analysis to publication standard, the following are required:
- ◆ Pollen counts to be increased to the normal (i.e. statistically valid) minimum of 300-400 grains per level where pollen preservation makes this possible.
  - ◆ Additional pollen levels at 360mm and at zone boundaries (380mm, 220mm).
  - ◆ Radiocarbon dating of changes between 320 and 400mm.
  - ◆ Work to be compared with and integrated with other environmental aspects such as seeds and insects and other regional pollen data and archaeology.

### Summary

- 4.3.23 Pollen obtained from the sediments of a palaeochannel contain pollen dominated by pine and hazel along with oak and elm, the latter becoming more important. The sequence is referable to the early Holocene from *c.*9000BP (Boreal period) and therefore provides information on the environment of the early Mesolithic hunting

and foraging communities of the Lea Valley. There is a possible hiatus in the upper part of the profile with deposition of later Holocene alluvial silts/clays. With radiocarbon dating, further pollen analysis and integration with other palaeoenvironmental studies the site would deserve publication.

### ***Soils and Sediments by Dr Richard I Macphail***

#### **Introduction**

4.3.24 A 570 mm long monolith (Monolith 7) was received from Liz Stafford (Oxford Archaeological Unit). This monolith sampled, vertically contexts 710 (Subsoil), 709 (Buried Soil) and 704 (Colluvium/Alluvium). The monolith was examined and briefly described in order to evaluate the pedological sequence that is associated with a likely Mesolithic/Neolithic land surface and juxtaposed tree-hole to the west of the River Lea (OAU information).

#### **Results**

4.3.25 The monolith with a top at c. 14.76 m OD, samples the following layers;

<b>Context</b>	<b>Thickness</b>	<b>Colour</b>	<b>Description</b>
704	0-190 mm	Dark yellowish brown (10YR4/4)	fine sandy silt loam with faint yellowish brown mottles; few coarse sand and flint gravel; clear horizontal boundary to 709
709	190-300 mm	Very dark greyish brown to dark brown (10YR3/2-3/3)	fine sandy silt loam, with frequent strong brown (7.5YR5/6) mottles and occasional coarse manganese nodules; diffuse boundary to 711
711	300-570 mm	Dark greyish brown (10YR4/2)	4.3.26 poorly sorted coarse sandy loam, with common, coarse reddish yellow (7.5YR6/8) mottles; frequent gravel.

#### **Discussion**

4.3.27 It can be suggested that the prehistoric site soil (contexts 711 and 709) of the Delta Works, Enfield is located on (gleyic) argillic brown earths on aeolian silty drift over River Lea terrace gravel (Hamble 2 soil association; Jarvis (Jarvis *et al.*, 1984). Context 711 equates to a Btg subsoil horizon formed in sands and gravel, while context 709 can be interpreted as a thin topsoil/upper subsoil (Ah/Eb) formed in fine drift. This soil subsequently became covered by coarse colluvium/alluvium, possibly originating from eroded subsoils upslope, and gleyed (mottled) by rising groundwater related to overbank flow from the River Lea (Wyre soil series?). Such a landscape history could date to late prehistoric to Roman/Saxon inundations, according to dating at Enfield. Such dating has been carried out at Drayton Cursus, Oxfordshire (Thames), Bedfordshire (Ouse) and Raunds, Northamptonshire (Nene) (Macphail, 1999b; Robinson, 1992).

## Future work and costs

4.3.28 It can be suggested that a laboratory study involving soil micromorphology and bulk soil analyses (grain size, LOI, phosphate, magnetic susceptibility) would allow much more definition of the suggested past landscape history. Based upon the precedent of useful information attained from such soil sequences at Raunds and Drayton Cursus, a laboratory study would be able to identify the origins of 704, the land surface type/possible landuse (agriculture, animal pounding etc) of 709 and pedological history of 711 (Bouma *et al.*, 1990; Courty *et al.*, 1994; Crowther *et al.*, 1996; Macphail, 1994; Macphail, 1999a; Macphail, 1999b).

- ◆ 3 thin sections (sampling across context boundaries);
- ◆ bulk sample analyses (1 each from 704 and 711 and 2 from 709). (Analysis of grain size, LOI, phosphate-P, magnetic susceptibility and maximum potential magnetic susceptibility at University of Wales, Lampeter by Dr John Crowther);
- ◆ 2.0 days thin section analysis and reporting.

## 5 DISCUSSION AND INTERPRETATION

### 5.1 Reliability of field investigation

5.1.1 The excavated archaeological trenches followed closely on from the demolition and remediation works. On occasions these works had already removed any archaeological levels that may have survived the truncation by the foundations to the previous buildings. The infrastructure associated with the demolition and remediation site works restricted access to some of the original trench locations prescribed by the Specification (CPM 1999). It was therefore necessary to relocate some trench locations. Trench 6 had to be completely abandoned, and Trench 7 was significantly moved for the previous reasons. These factors meant that rather than an even distribution of trenches across the development area, there was a concentration of trenches to the east and west of the area.

### 5.2 Conclusions

5.2.1 The evaluation showed that the natural gravel slopes gently from the north-east and south-west towards a slight hollow running through the centre of the site. It was not possible to ascertain the significance of this hollow from the evaluation results.

5.2.2 Trench 4 sampled a palaeochannel on a north-south alignment (i.e. parallel to the existing River Lea Navigation). The incomplete sequence of alluvial deposits within this channel were sampled for macroscopic plant and invertebrate remains and one sample (Sample 5, Context 408) indicated a possible early Mesolithic date (though only from negative evidence, see 4.3.6 above). This sample has the potential to provide evidence for the reconstruction of the local environment if subject to full analysis. Pollen analysis from the fills of the same palaeochannel also indicates an early Mesolithic date, and the preliminary pollen diagram allows useful conclusions to be drawn about the prevailing environment. Further analysis would increase this

information if coupled with radiocarbon dating --however, the author of the pollen report is mistaken in identifying the area as having 'abundant archaeological evidence' (4.3.22) – the evidence is in fact very sparse.

- 5.2.3 Significant archaeological features and deposits were very rare. Trench 5 revealed a ditch, possibly post-medieval, which had been re-cut at least once. The lack of any associated activity may suggest that this was a field boundary. Trench 8 produced two features, one undated and one containing early Neolithic to middle Bronze Age pottery.
- 5.2.4 In Trench 7, two tree bole or tree-throw holes were found below a sequence of deposits which was sampled by monolith for soil and sediment analysis. This was characterised (see 4.3.27) as a thin topsoil/upper subsoil overlain by coarse colluvium/alluvium, possibly dating (by analogy with other sites some distance away) between the late prehistoric and Roman/Saxon periods.
- 5.2.5 The archaeological evidence, when taken overall, is disappointing. Although individual palaeoenvironmental specialists have indicated possible further analysis, there is very little archaeological evidence to which this could be related, either from the site or the surrounding area. Integrated study of palaeoenvironmental and archaeological evidence undoubtedly has an important role to play in areas where the landscape can be extensively studied, but its possible contribution to our knowledge of the past is less clear in heavily built-up areas such as that under discussion here, where much of the evidence has already been lost, and only pockets remain.
- 5.2.6 It is therefore proposed that a short note based on the results of this report should be published in an appropriate journal, but that no further analytical work is justified.

## 6 IMPACT OF THE DEVELOPMENT

### 6.1 Impact to date

- 6.1.1 The remediation of the site carried out in parallel with the archaeological evaluation will have removed most, if not all, archaeological and palaeoenvironmental deposits down to the natural gravel. Further fieldwork is not therefore justified.



## APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

<i>Trench</i>	<i>Ctxt No</i>	<i>Type</i>	<i>Max Thick . (m)</i>	<i>Comment</i>	<i>Finds/ soil samples (SS)</i>	<i>No./ wt</i>	<i>Date</i>
1	100	Group	-	Trench notes	None	-	
1	101	Layer	-	Natural Gravel	None	-	
1	102	Layer	0.20	Brown silty-clay	None	-	
1	103	Layer	0.50	Silty-clay made ground	None	-	
1	104	Layer	0.50	Made ground (CBM)	None	-	Modern
1	105	Cut	-	Poss drainage/ Modern (Demo?)	None	-	Modern?
1	106	Fill	0.25	Fill of 105 Modern industrial residues	Pottery, clay pipe	See reports	Post-med
1	107	Cut	-	Pit (Demo)	None	-	Modern
1	108	Fill	0.75	Only Fill of 107	None	-	Modern
1	109	Layer	1.00	Clay and rubble Make-up	None	-	Modern
1	110	Layer	0.50	Rubble hardcore	None	-	Modern
2	200	Group	-	Trench notes	None	-	
2	201	Layer	-	Natural gravel	None	-	
2	202	Layer	0.30	Dark greenish grey Silty clay alluvium	None	-	
2	203	Layer	0.65	Dark greyish brown Silty clay alluvium	None	-	
2	204	Cut	-	Pit (Demo?)	None	-	Modern
2	205	Fill	0.95	Fill of 204	None	-	Modern
2	206	Layer	0.65	Hardcore	None	-	Modern
3	300	Group	-	Trench notes	None	-	
3	301	Layer	-	Natural Gravel	None	-	
3	302	Layer	-	Dark greenish grey Silty clay alluvium	None	-	
3	303	Layer	-	Modern hardcore (CBM)	None	-	Modern
4	400	Group	-	Trench notes	None	-	
4	401	Layer	0.70	Modern hardcore (CBM)	None	-	Modern
4	402	Layer	1.65	Modern Made ground	None	-	Modern
4	403	Layer	-	Dark greenish grey Silty clay alluvium	None	-	

4	404	Layer	2.0+	Greenish black silty clay alluvium	SS1	SS6	-	Early Meso/ Mid Holocene
4	405	Layer	0.15	Pale grey sandy marl Silty clay alluvium	SS2		-	Early Meso/ Early-Mid Holocene
4	406	Layer	1.0+	Dark grey peaty silty clay Alluvium	SS3		-	Early Meso/ Early Holocene
4	407	Layer	0.10	Grey marly clay Alluvium	SS4		-	Early Meso/ Early Holocene
4	408	Layer	0.20+	Dark brown peat	SS5		-	Early Meso?/ Early Holocene
4	409	Layer	-	Natural Gravel	None	-		
5	501	Layer	0.90	Fill of 508. Concrete	None	-	Modern	
5	502	Fill	1.14	Fill of 503	Metal, CBM, pottery, clay-pipe, oyster	See reports		Post-med
5	503	Cut	-	N-S Ditch	None	-	Post-med	
5	504	Fill	0.40	Bluey grey silty clay. Alluvium Fill of 505	None	-		
5	505	Cut	-	N-S Ditch	None	-		
5	506	Layer	0.70	Alluvium	None	-		
5	507	Layer	-	Natural Gravel	None	-		
5	508	Cut	-	Filled by 501. Modern construction	None	-	Modern	
7	701	Layer		Modern hardcore	None	-	Modern	
7	702	Layer		Ashy sand make-up	None	-	Modern?	
7	703	Layer		Dark grey clayey silt	None	-	Modern?	
7	704	Layer		Yellowish-brown silty clay Alluvium	Cinder	SS7	-	
7	705	Fill		Yellowish brown Silty clay	None	-		
7	706	Fill		Dark grey silty clay Fill of 708	None	SS8	-	
7	707	Fill		Brownish yellow gravelly sand Fill of 708 Redep natural	None	-		
7	708	Cut		Poss tree throw hole	None	-		

7	709	Layer		mid browny yellow silty clay Buried soil	No ne	SS7	-	
7	710	Layer		mid browny yellow silty sand Buried sub-soil	No ne	SS7	-	
7	711	Layer		Natural gravel	None		-	
7	712	Fill		Bluey grey silty clay Fill of 714	None		-	
7	713	Fill		Fill of 714	Blo- om	SS9	See rep- ort	Late Iron Age -Early post-med
7	714	Cut		Poss Tree bole filled by 712 and 713	-		-	Late Iron Age -Early post-med
7	715	Cut		Modern disturbance	None		-	Modern
8	800	Layer	0.55	Concrete structure	None		-	Modern
8	801	Layer	0.18	Made ground	None		-	Modern
8	802	Layer	0.20	Made ground?	None		-	Modern?
8	803	Layer	0.25	mid brown clayey silt/ Garden soil	Modern pottery (not retained)		-	Modern
8	804	Fill	0.25	Fill of 805	None		-	Modern
8	805	Cut	-	Land drain	None		-	Modern
8	806	Layer	0.40	Yellow brown clayey-silt Subsoil	None		-	
8	807	Layer	-	Natural gravel	None		-	
8	808	Fill	0.38	Only fill of 809	Pottery, bone , burnt stone and SS10		See rep- ort	Middle Bronze Age
8	809	Cut	-	Small pit filled by 808	-		-	Middle Bronze Age
8	810	Fill	0.40	Fill of 811	None		-	
8	811	Cut	-	Poss. Ditch (NE-SW)	None		-	
8	812	Fill	0.08	Fill of 813	None		-	
8	813	Cut	-	Land drain?	None		-	Modern
8	814	Fill	0.08	Fill of 815	None		-	
8	815	Cut	-	Poss. Ditch (EN-SW)	None		-	
8	816	Fill	0.25	Dark grey clay Fill of 817	None		-	Modern?
8	817	Cut	-	Pit	None		-	Modern?
8	818	Fill	0.18	Fill of 819	None		-	
8	819	Cut	-	Poss post hole	None		-	
8	820	Cut	-	N-S Ditch	None		-	

8	821	Fill	0.13	Yellow brown silty clay fill of 820	None	-	
9	901	Layer	0.50	Grey sandy silt and CBM Made ground	None	-	Modern
9	902	Layer	0.25	Reddish brown sandy clay Made ground	None	-	Modern?
9	903	Layer	0.20	Greyish brown sandy silt	None	-	Modern?
9	904	Layer	0.80	Subsoil (imported?)	None	-	
9	905	Layer	-	Natural gravel	None	-	
9	906	Fill	0.80	Fill of 908	None	-	Modern
9	907	Fill	0.45	Fill of 908	None	-	Modern
9	908	Cut	-	Pit/Demo	None	-	Modern
9	909	Fill	0.80	Fill of 911	None	-	Modern
9	910	Fill	0.45	Fill of 911	None	-	Modern
9	911	Cut	-	Pit /Demo	None	-	Modern
9	912	Fill	0.45	Fill of 914	None	-	Modern
9	913	Fill	0.45	Fill of 914	None	-	Modern
9	914	Cut	-	Pit /Demo	None	-	Modern

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**APPENDIX 3 GLSMR/RCHME NMR ARCHAEOLOGICAL REPORT FORM**

## 1) TYPE OF RECORDING

Evaluation,

## 2) LOCATION

Borough: Enfield

Site address: Millmarsh Lane

Site Name: Former Delta Works Site Code: MLM 00

Nat. grid Refs: TQ 3660 9720 = centre of site:

Limits of site: N S  
E W

## 3) ORGANISATION

Name of archaeological unit/company/society: Oxford Archaeological Unit

Address: Janus House, Osney Mead, Oxford OX2 OES

Site director/supervisor: A Mayes / B Matthews Project manager: D Wilkinson

Funded by:

## 4) DURATION

Date fieldwork started Date finished: Various visits from April to August 2000

Fieldwork previously notified? YES/NO

Fieldwork will continue? NO

## 5) PERIODS REPRESENTED

Mesolithic?, Neolithic?, Bronze Age, Iron Age?, Roman?, Saxon? (pre-AD 1066), Post-Medieval, Unknown

## 6) PERIOD SUMMARIES

Mesolithic?, Paleo-channel and alluvial sequence

Bronze Age Middle Bronze Age pit

Post-Medieval

Unknown

## 7) NATURAL

Type: River Lea Terrace Gravel

Height above Ordnance datum: c.15m OD

#### 8) LOCATION OF ARCHIVES

- a) Please provide an estimate of the quantity of material in your possession for the following categories:

NOtes	PLans	PHotos	Ngtives
SLides	Correspondence	MScripts (unpub reports,	etc)
BUIk finds	SMall finds	SOil samples	
OTher			

- b) The archive has been prepared and stored in accordance with MGC standards and will be deposited in the following location: MUSEUM OF LONDON
- c) Has a security copy of the archive been made?: YES/NO

#### 10) BIBLIOGRAPHY

See Appendix 5

SIGNED:

DATE:

NAME :

Please return the completed form to The Greater London Sites and Monuments Record, English Heritage London Region, 30 Warwick Street, London W1R 5RD.  
Tel 0171 973 3731/3779 (direct dial)



## Illustrations

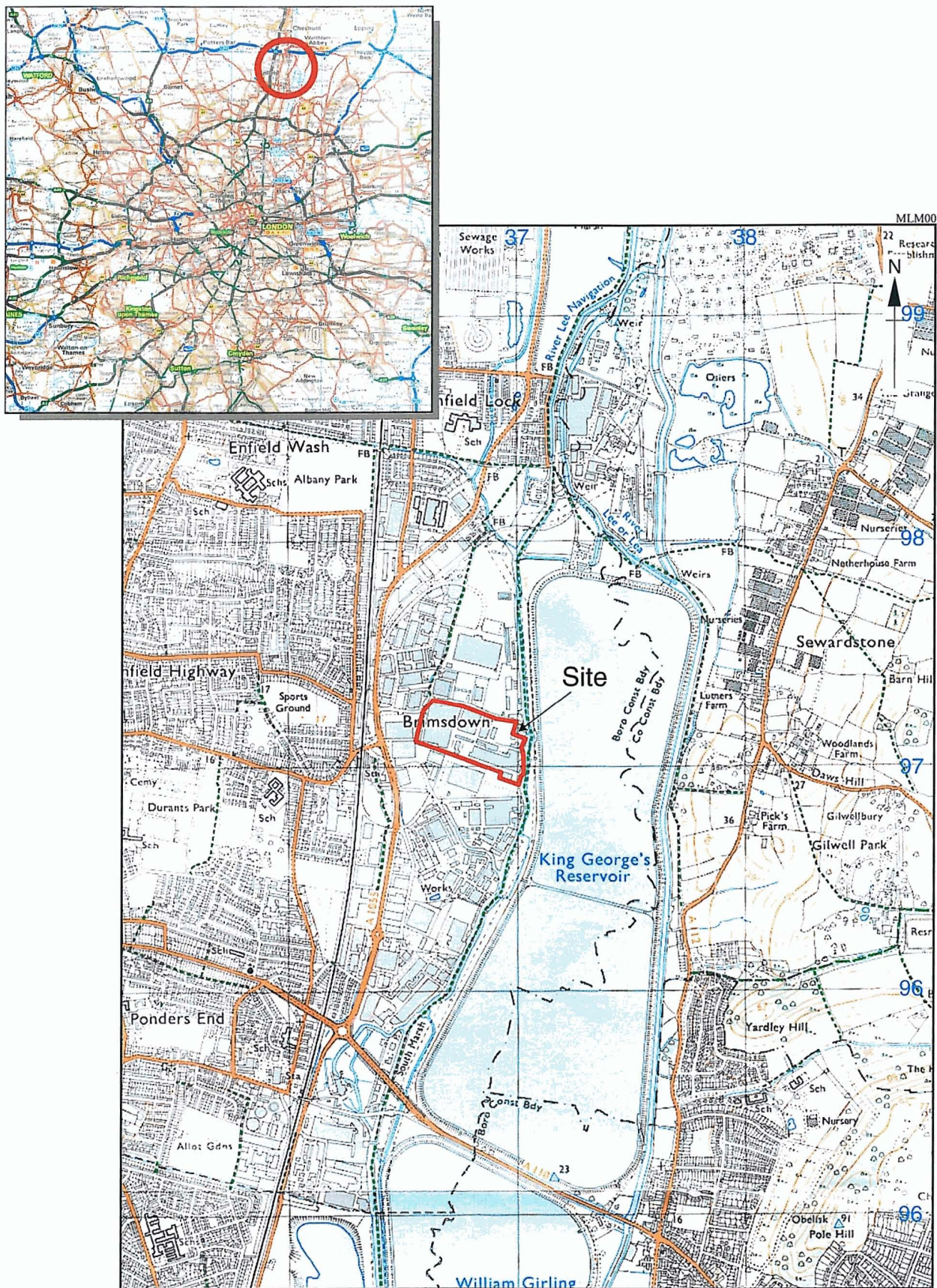
Fig 1	Site Location	} <u>These are obligatory in all</u>
	<u>evaluation</u>	
Fig 2	Site Plan showing trench locations	} <u>reports</u>
Fig 3	Plan [and sections] of Trench(es) X [and X].	
Fig x		
Fig x	Section[s] of ..	
Fig x		

The illustrations in the evaluation report must include a site location and a plan of trenches, field walking stints, etc. Where geophysical prospecting has been used the areas surveyed must be indicated. The OAU has a licence to reproduce OS maps for client reports, and therefore site location and trench location maps can be based on OS maps of a suitable scale. It is essential to provide the drawing office with: (i) a clean copy of the relevant OS map of suitable scale and (ii) the date of publication of the particular map to be used; it is a requirement of the licence agreement that the OS edition used/reproduced is indicated.

Fieldwalking plots will be generated by computer, but decisions will still be required on presentation: what materials to present on separate plots and which to illustrate together, size and style of symbols, and so forth.

In a field evaluation involving trenching it is not necessary to illustrate every section drawn on site. All trenches with significant archaeological features or deposits, should be illustrated by plan and where relevant sections of features/deposits should shown. The grouping of plans and sections should relate to the description of features/deposits in the text. The choice of illustrations to include is a matter for judgement. The decision should be made on the basis of any specific requirements of the curator and the needs of the text. Remember it is often easier to illustrate a point than to attempt to describe it in words. Always discuss illustrations with the Graphics Office: they have vast experience of illustrating evaluation reports.





Reproduced from the Ordnance Survey's 1:25,000 map of 1991 with the permission of the Controller of Her Majesty's Stationery Office © Crown Copyright. Licence No. 854166

Figure 1: Location of site.

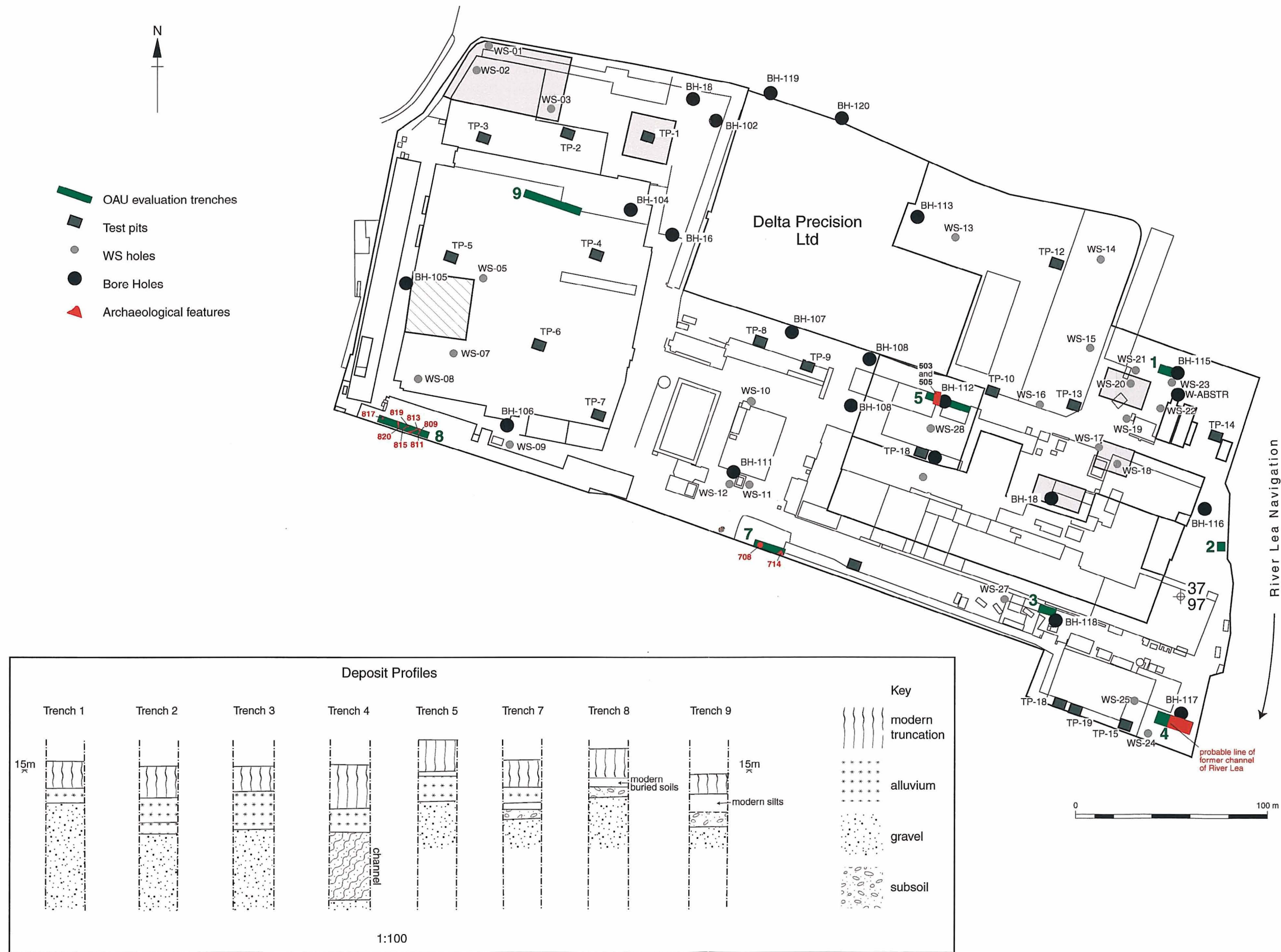


Figure 2: Location of trenches.

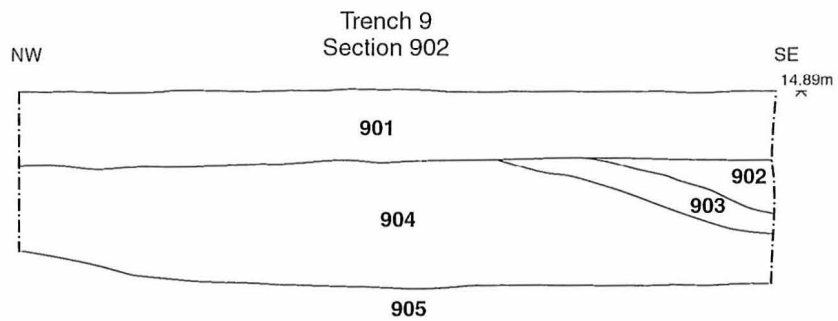
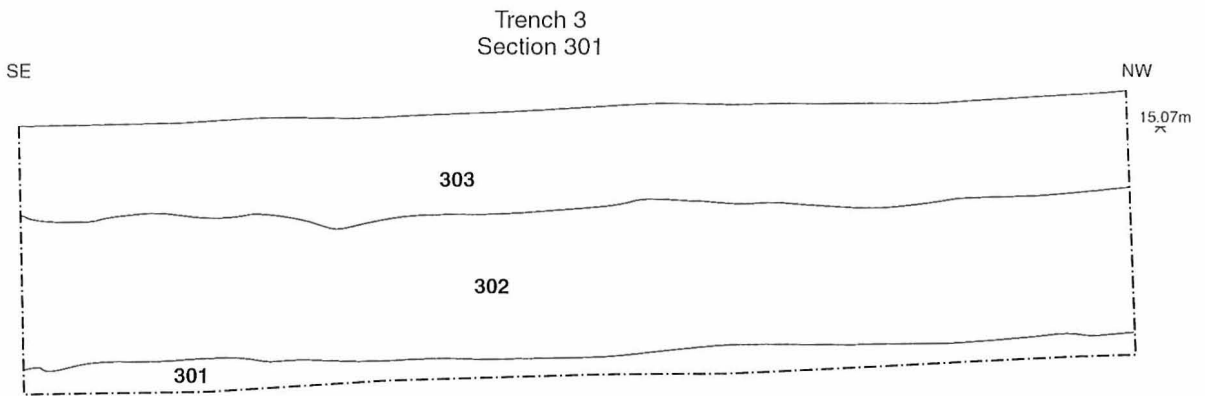
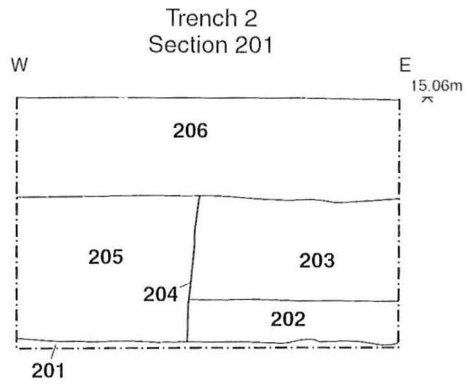
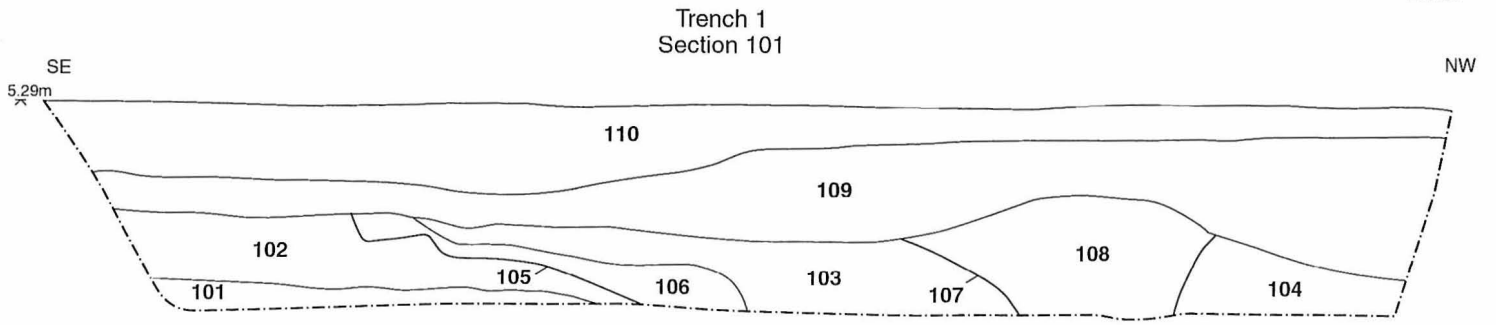


Figure 3: Trench 1, 2, 3, and 9, sections.

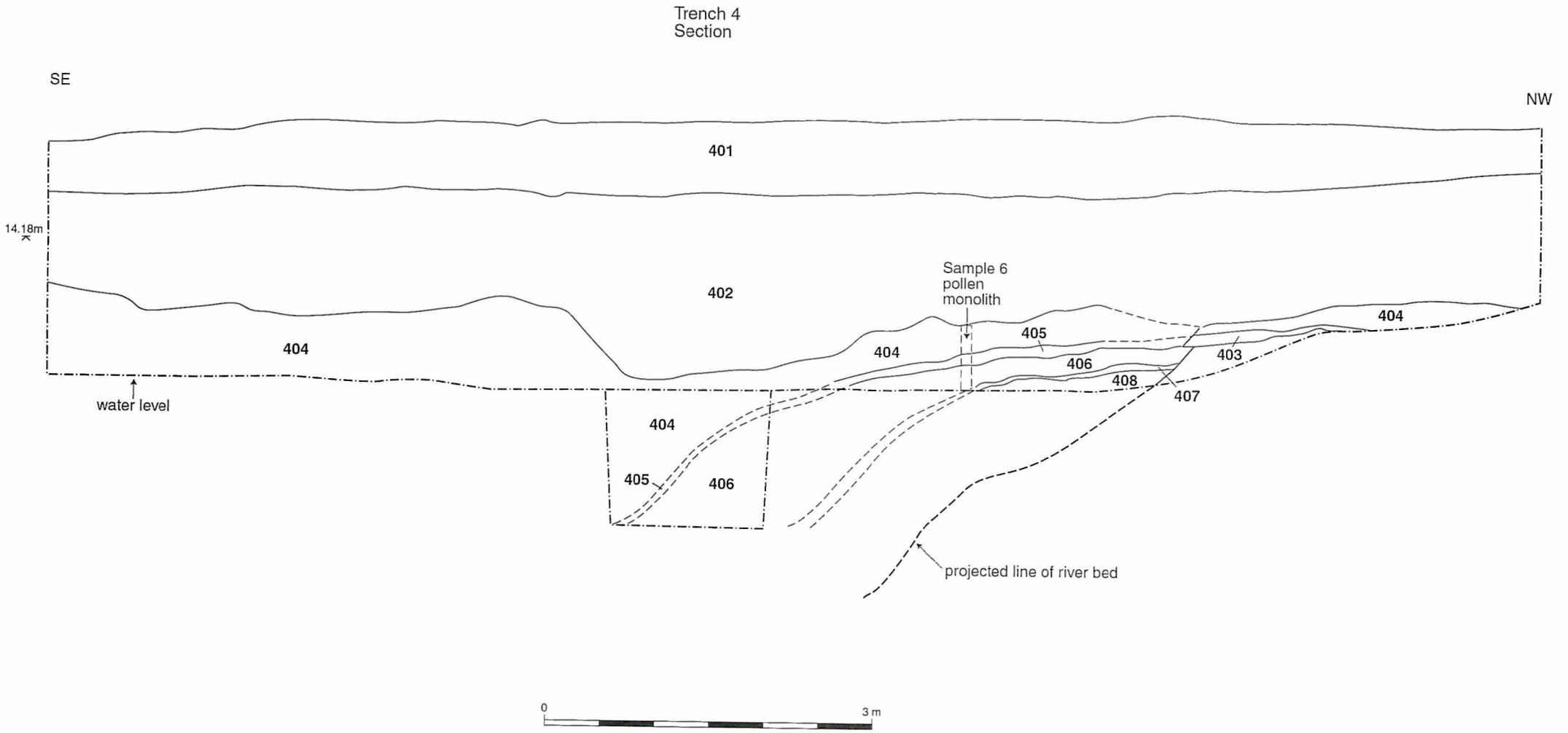


Figure 4: Trench 4, section.

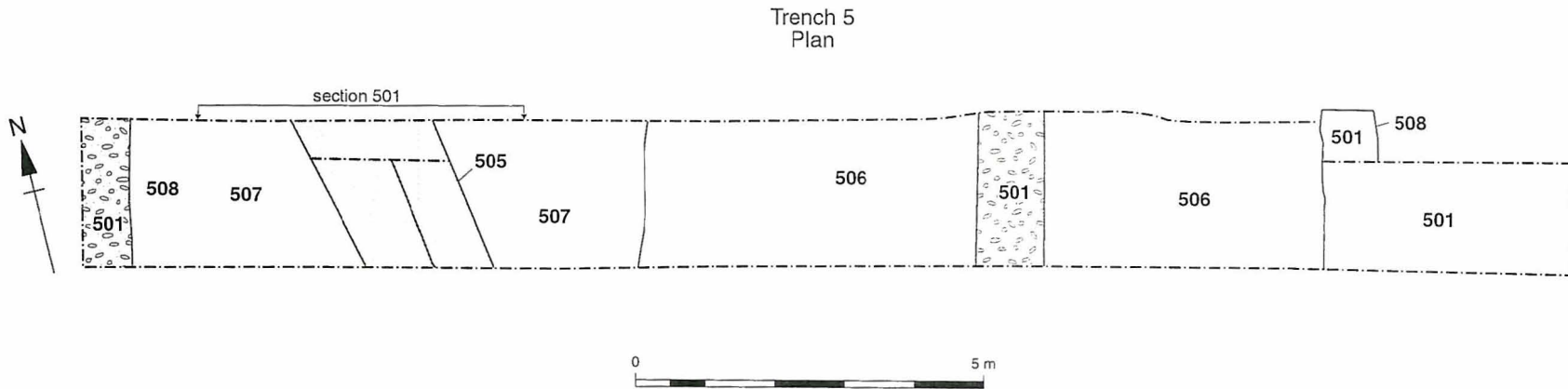
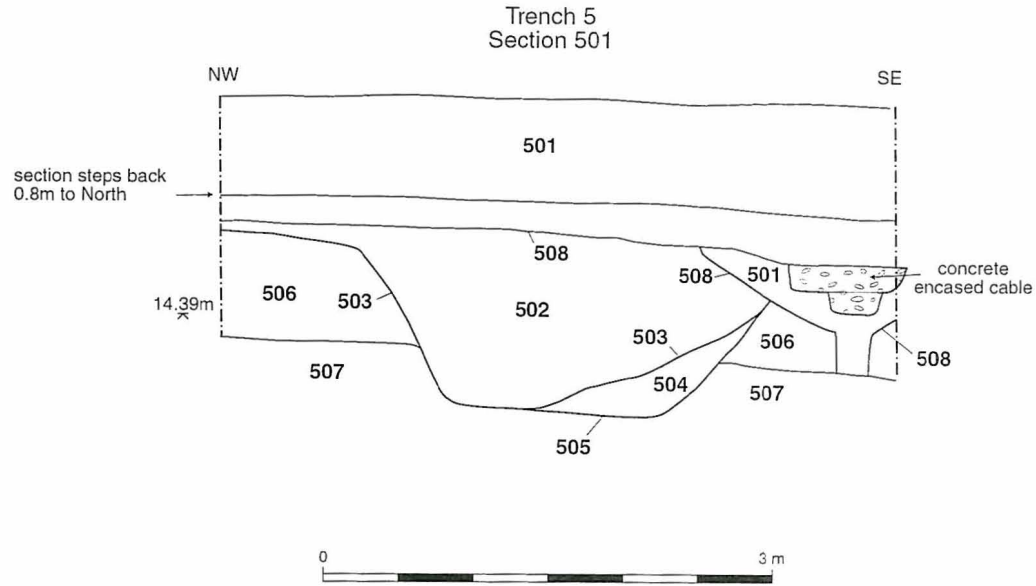
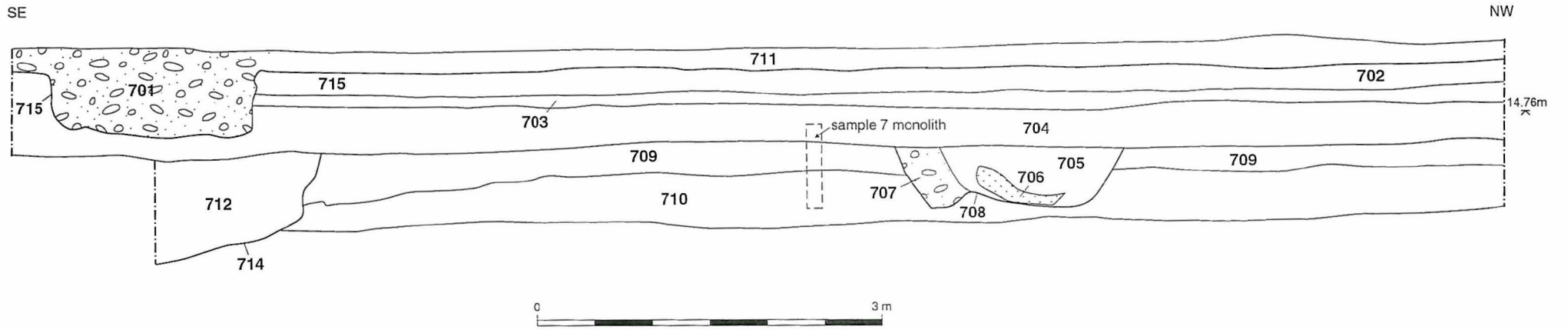


Figure 5: Trench 5, plan and section.

Trench 7  
Section 701



Trench 7  
Plan

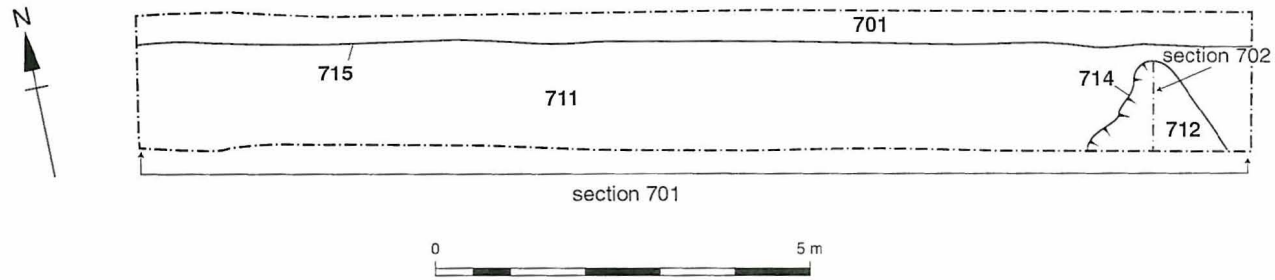
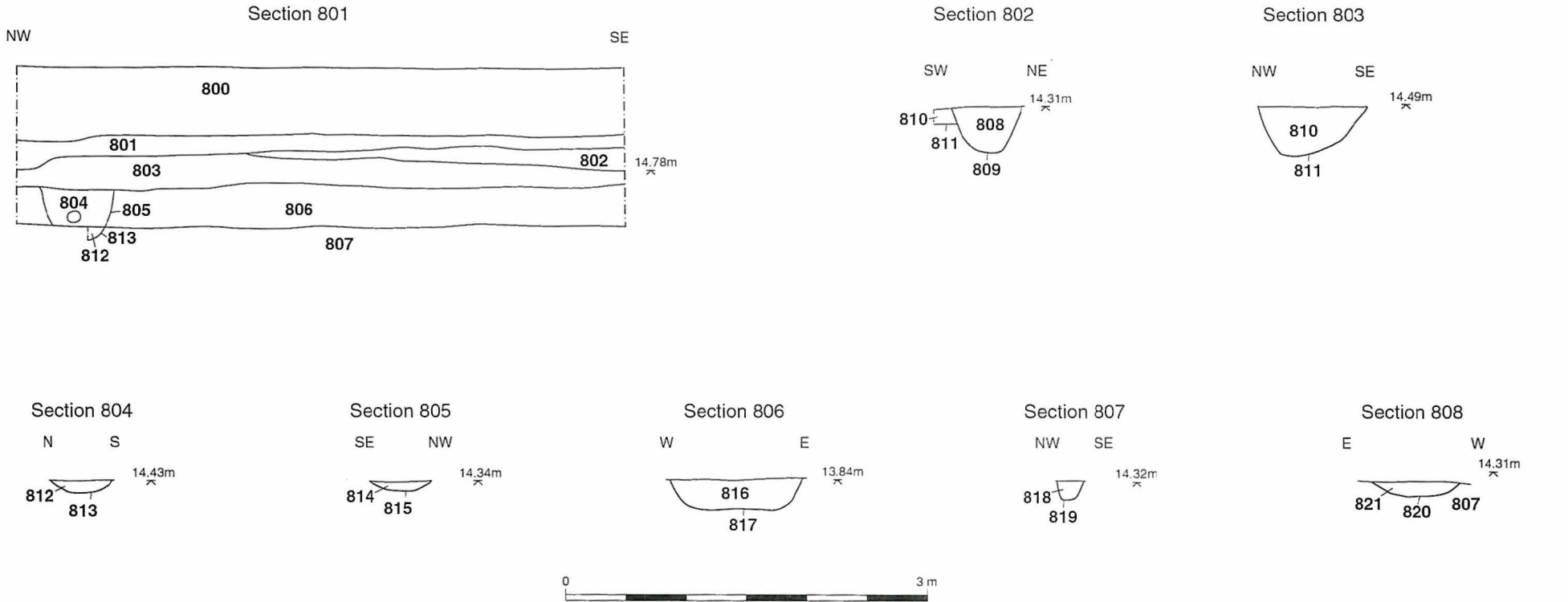


Figure 6: Trench 7, plan and section.





Trench 8, plan.

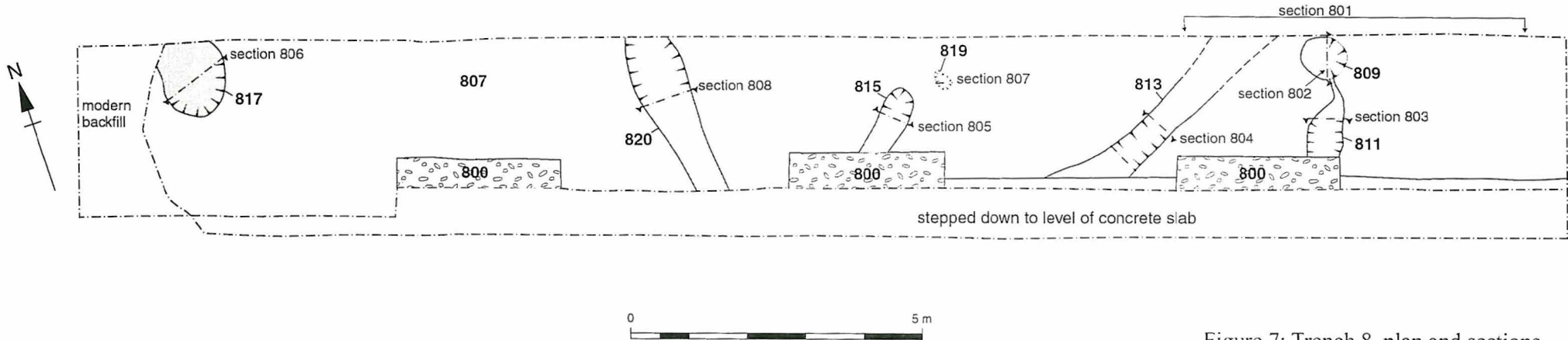


Figure 7: Trench 8, plan and sections.

# Delta Works

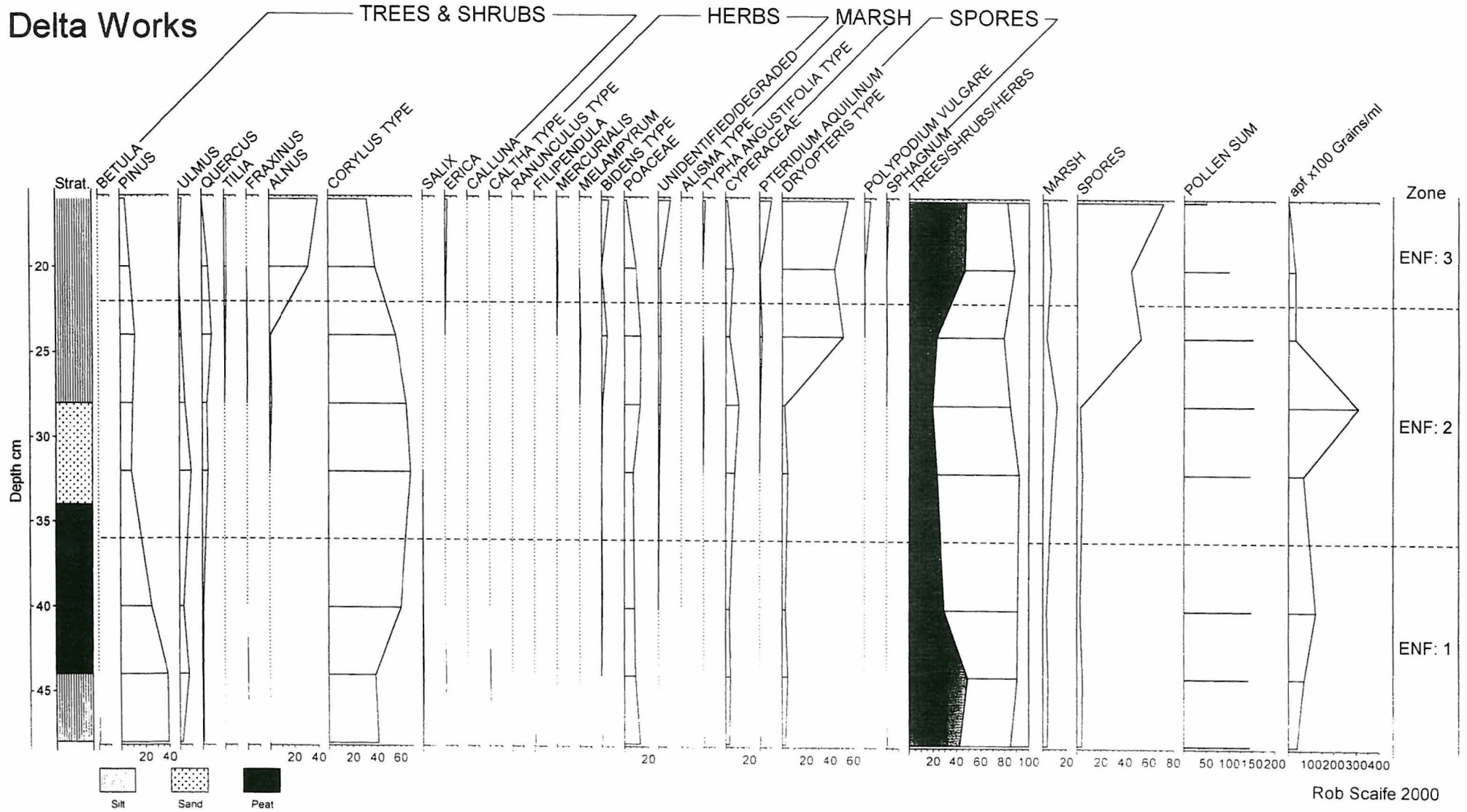


Figure 8: Pollen diagram from Trench 4





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