GOLDEN SQUARE, WARRINGTON
Cheshire

Archaeological Evaluation and Watching Brief

Oxford Archaeology North

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Bovis Lend Lease

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SUMMARY

An archaeological planning condition has been attached to a proposal by Legal and General Properties Ltd for the extensive redevelopment of Golden Square, Warrington (centred on NGR SJ 6050 8830). In the first instance, an archaeological desk-based assessment of the study area was required, which was compiled by Oxford Archaeology North (OA North) in February 2002. The results of this assessment led to the recommendation that a programme of further archaeological investigation was required in advance of the proposed development; this was undertaken in October 2004 (OA North), at the request of Bovis Lend Lease. This comprised the archaeological watching brief during the excavation of nine test pits (UDP TP 1-9), excavated under the control of UDP Ltd, along the western and northern boundaries of the study area. Within the north-eastern part of the site, there seemed to be a greater potential for surviving archaeological deposits, although these could not be characterised within the confines of the test pits.

In March and August 2005, at the request of Bovis Lend Lease and with the advice of the Planning Archaeologist at Cheshire County Council (CCC), acting on behalf of Warrington Borough Council; three trenches were subject to archaeological evaluation (Trenches 1,6 and 9). The proposal for evaluation had originally consisted of ten trenches (Trenches 1-10) but the majority of these were later abandoned due to the presence of services, made ground and recent disturbance, or a change in design. An archaeological watching brief was also maintained for Test Pits 1 and 2. Trench 1 was positioned on the west side of the development area and measured 3m x 2m, reduced from its original size of 10m in length due to services. The remaining investigations were within the north-eastern quadrant of the development area. Trench 9 was also reduced in size from its original 30m length to 15.3m due to encountering services, and Trench 6 had to be abandoned after 5m of excavation of a 10m long trench due to contamination.

Trench 1, and Test Pits 1 and 2 revealed no significant archaeological features or deposits, but highlighted the high degree of disturbance that the site has been subjected to in fairly recent times. Within Trench 6 a cellar was located, possibly earlier than the eighteenth century in date, Trench 9 revealed two north/south aligned walls running parallel with each other, possibly perpendicular to an old street front, indicating the survival of structural remains within this vicinity. However the interpretation of these walls remain inconclusive due to the eventual size of the trench, reduced due to a concentration of services within the area.

It is recommended that if any further groundworks within the north-eastern corner of the site are carried out an archaeological watching brief should be maintained to assess the nature, extent and character of sub-surface archaeological deposits or structures.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to offer thanks to Mike Crawford of Bovis Lend Lease for commissioning the project, and also to David Fulham of Bovis Lend Lease for his logistical help during the fieldwork. Thanks are also extended to Mark Leah of Cheshire County Council for his help and advice.

The watching brief was undertaken by Hannah Gajos, and the trial trenching was carried out by Andy Lane, who also helped to compile this report. The drawings were produced by Marie Rowland. The project was initially managed by Tim Carew, and later by Emily Mercer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 Following the submission of a planning application by Legal and General Property Ltd for the extension, refurbishment, and enhancement of the Golden Square shopping centre in Warrington (NGR SJ 6050 8830) (Fig 1), the Planning Archaeologist at Cheshire County Council (CCC), acting on behalf of Warrington Borough Council, advised that a programme of archaeological investigation would be required. This would be carried out in advance and alongside the proposed redevelopment in order to inform the planning process and propose a mitigation strategy.

1.1.2 The redevelopment of Golden Square includes its extension to the north-west onto land presently occupied by the multi-storey car park and bus station. Therefore, the bus station will be relocated to a new facility on the north-east corner of the site.

1.1.3 On behalf of their clients, Legal and General, the consultants Robert Turley Associates Ltd commissioned Oxford Archaeology North (OA North) to conduct the first stage of the archaeological investigation. This consisted of a desk-based assessment completed in February 2002. This work identified a number of Industrial Period sites of archaeological significance, in addition to the north-west quadrant of the late-medieval town to be potentially impacted upon by the redevelopment. Consequently, it was recommended that the programme of archaeological works be expanded to allow for a series of sub-surface investigations. The primary objective of this was to characterise the survival of the archaeological remains across the site, and to provide for a good understanding of the archaeological potential that may be disturbed by the construction works. This proposed scheme of works was approved by the Planning Archaeologist (CCC), and was divided into three stages (*Appendix 1*):

- ***Stage 1:*** test pits excavated in an archaeologically controlled manner and evaluation trenching in advance of the construction programme;
- ***Stage 2:*** watching brief during breaking of modern ground surfaces in vicinity of evaluation trenches;
- ***Stage 3:*** evaluation trenching to be integrated with the development programme.

1.1.4 However, various subsequent changes made to the development proposal, with Bovis Lend Lease appointed as the main contractor, resulted in a revision of the above proposed stages of work. Before Stage 1 was implemented, a number of test pits were excavated under the control of UDP Ltd in October 2004 (Fig 2) to locate existing services. However, it also provided an opportunity to examine any sub-surface archaeological deposits present. Consequently, OA North was invited to undertake a watching brief during the test pit excavation (OA North 2004). The results showed that there were areas of significant modern disturbance that had truncated any pre-existing

archaeological deposits. The only areas offering potential for buried archaeological remains were the north-east corner of the site and the very south-west corner.

1.1.5 This work resulted in the archaeological test pits and small number of evaluation trenches proposed for Stage 1, and the watching brief intended for Stage 2 being abandoned. Instead, the programme of archaeological work was updated in March 2005 (*Appendix 2*), and approved by the Planning Archaeologist (CCC) (Fig 3).

- ***Revised Stage 1:*** test pits excavated by UDP Ltd and an archaeological watching brief maintained (*ibid*);
- ***Revised Stage 2:*** evaluation trenching to be in advance of the construction programme, March to September 2005.
- ***Revised Stage 3:*** watching brief to be integrated with the development programme, after September 2005.

1.1.6 The evaluation trenching had been brought forward to the revised Stage 2 to target the areas of potential, and was carried out between March and August 2005. The results of the evaluation are presented in this short document. Consultation with the Planning Archaeologist on the results from the revised Stage 2 led to no further archaeological work being necessary and revised Stage 3 was not undertaken.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The site comprises an area of *c* 7.8ha on the northern edge of Warrington town centre (Fig 1). It is bounded to the north by Midland Way, which acts as part of the town inner ring road, to the south by Sankey Street, and by Winwick Street/Horsemarket Street to the east. Those streets forming the eastern and southern boundaries are thoroughfares of medieval origin, which remain busy shopping streets. Legh Street forms the western boundary of the proposed development, and lies just outside the commercial core of the modern town; it was developed in the nineteenth century.

1.2.2 The present Golden Square Shopping Centre, built between 1974 and 1983, occupies much of the proposed redevelopment area. The old bus station was positioned immediately to the north-west, and was an integral part of the original design of the centre. Beyond Golborne Street, a multi-storey car park occupied the western part of the site, whilst grassed areas and access roads and paths lay to the north; the extreme north-east corner of the subject site was open ground prior to the commencement of the development. However, much of this was under redevelopment and construction by the second and final stage of archaeological works.

1.2.3 Warrington town centre lies immediately north of the River Mersey, and is relatively low lying. However, the southern part of the subject site is occupied by the eastern end of a ridge of slightly higher ground; thus, in the vicinity of the Barley Mow Inn, ground level lies at *c* 16m OD, but drops away to the

north, to *c* 12m OD immediately north-east of the present shopping centre. The solid geology consists of Lower Triassic Sandstones, with drift deposits of wind-blown sand of the Shirdley Hill Sand Group recorded above in the vicinity of the town centre (British Geological Survey 1967a; 1967b).

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 INTRODUCTION

2.1.1 The following has been reproduced as a brief synopsis of that information from the initial desk-based assessment (OA North 2002), which should be referred to for further detailed information (*ibid*).

2.2 PREHISTORIC PERIOD

2.2.1 Relatively numerous prehistoric remains have been found in the Mersey Valley, but no significant sites are known in the vicinity of central Warrington. A possible crannog discovered in the 1930s now seems much more likely to be a medieval structure (Gifford and Partners 1996, 5).

2.3 ROMAN PERIOD

2.3.1 The largest known Roman settlement in the Warrington area lies at Wilderspool, approximately 1.5km south-south-east of the site, on the south bank of an earlier channel of the Mersey. Here, two excavated areas of occupation some 800m apart are considered to have formed part of a single settlement *c* 10ha in size, predominantly industrial in character, containing large numbers of furnace bases and pottery kilns, the latter demonstrably in production for much of the second century AD (Hinchliffe and Williams 1992). The main road north from Wilderspool appears to have run east to ford the Mersey at Latchford, 1km south-east of Barbauld Street; thereafter, it turned north, and parts of the road have been traced beyond Bridge Street to the east (Dunlop and Fairclough 1932, 100-103).

2.3.2 However, evidence for Roman activity also exists north of the Mersey, in and around the modern town centre, including residual Romano-British pottery recovered 340m to the south of the development site (Williams 1982, 66-7), two finds of pottery (160m south and 80m east), a silver coin (360m south), and a bronze coin (380m north-west). More importantly, an excavation conducted in 2000 by the former Lancaster University Archaeological Unit (LUAU 2001) at the corner of Friars Gate and Barbauld Street (180m south), revealed three pits and two extensive deposits, which together produced 353 sherds of Romano-British pottery; the relatively restricted range of vessel forms represented, primarily in Wilderspool ware, may indicate that pottery was being made or distributed in the immediate vicinity (Heawood 2002).

2.4 EARLY MEDIEVAL PERIOD

2.4.1 Warrington is known to have become the head of a hundred sometime before the Norman Conquest (Farrer and Brownbill 1907, 305), although no archaeological finds or features of clear pre-Conquest date are known. The only archaeological evidence for activity consists of three logboats recovered relatively close together from the Mersey in 1908 and 1941, *c* 600m south-east of the development site, of which one was radiocarbon dated to cal AD 875-1040 (to two sigma; 1075 +/- 60 BP, Q-1392), and the two remaining boats

appear to have been of similar form. This spot may have been a focus for late Saxon activity, possibly associated with a wharf or area where boats were beached.

2.5 MEDIEVAL PERIOD

2.5.1 The Barony of Warrington was created in the early twelfth century, when the early lords established themselves at Mote Hill (Lewis *et al* forthcoming), *c* 1km east of the development site. Documentary references suggest the creation of a borough around the year 1230 (Farrer and Brownbill 1907, 305), and the right to hold a weekly market was granted in 1254, with an annual fair in 1255 (*op cit* 281, 341), likely around Mote Hill. In 1276, the Burgesses of Warrington complained that they were being constrained to render toll, tallage, and aids, and to perform customs and services other than those hitherto done (*op cit*, 342), which demonstrates that the lord of Warrington was keen to control and benefit from commercial activity.

2.5.2 The following year, 1277, the lord of the manor obtained a charter for a Friday market at Warrington, later transferred to Wednesday, and for a yearly fair of eight days duration. In 1292, an inquisition found that markets and a fair had been held in Warrington 'from beyond the memory of man', and the lord successfully established title to a market, fair, and gallows. Whilst continuing to take a close interest in the town, the lord forced the burgesses to give up their right to hold their own court in *c* 1300, thus removing one of the defining characteristics of a borough. The town subsequently remained under the authority of the lords of the manor for over 500 years (*ibid*). By the early fourteenth century, Warrington was one of the most important towns in Lancashire, and, in the lay subsidy of 1334, was assessed at a similar level to Wigan, Lancaster, Preston, and Liverpool (Cheshire County Council 2001).

2.5.3 The location of the focus of commercial activity was not explicitly stated in the documentary sources, and it has been argued that, when the borough was first established, it was sited in the Church Street area, immediately west of Mote Hill, where the lord could readily exercise control (Wells nd). However, by the later thirteenth century, there are several indications that the commercial heart of the borough had moved west to the modern town centre, where the old road west to Prescot crossed the major route leading north from the Mersey. One indication is the construction of a bridge across the Mersey at Bridgefoot, at least 1km south-west of Mote Hill, but much closer to the modern town centre (Lewis *et al* forthcoming), and would have carried one of the principal routes to the North. The establishment of a house of Augustinian Friars on a plot of land fronting onto the road leading north from the bridge (Bridge Street, known as 'Newgate' in 1485; Heawood 2002) is further confirmation that this area was becoming the commercial core, particularly as the friars were partially dependent on begging for alms, and sought sites with good access to the centres of towns.

2.5.4 There are also indications that the Church Street/Mote Hill settlement was declining in importance as the more westerly focus developed. The castle at Mote Hill was destroyed by fire in *c* 1260 (Grealey 1976, 40), and at around the same time, the family acquired a prestigious site at Bewsey in Burtonwood

(Lewis *et al*, *op cit*). This perhaps suggests that Mote Hill was no longer an advantageous seat of power.

2.5.5 It seems probable that the shift in the focus of the town was the product of a deliberate attempt by the lord of the manor to make the borough and market more accessible to travellers using the Mersey Bridge. Consequently, the new commercial core was assumed to have been deliberately planned and laid out to exercise close control of the market, and exact tolls from the traders. There are no thirteenth century references to the location of the market place, but it was arguably established north-west of the junction of Sankey Street and Bridge Street, within the bounds of the development site. This area enjoyed a dominant position at the east end of a ridge of high ground, and constituted the only relatively level site in the vicinity. A land grant of 1363 refers to this crossroads as 'Market Gate' (Crowe 1947, 54), and the market place was in this position when the Legh Survey (undertaken primarily with the concern for the portion of the town that belonged to Sir Peter Legh) was conducted in 1485 (Beaumont 1865), and remained in essentially the same place until the redevelopment of 1974-1983. However, it remains unknown whether this elevated site was an established settlement before the focus of the town shifted westwards (Wells 1998, 5).

2.5.6 The Legh Survey of 1485 gives a clear picture of the layout of medieval Warrington as a whole in that year (Beaumont 1865), and how the development site appeared during this time; houses extended all the way from the church to the market place, and continued westwards along Sankey Street; they also extended southwards down Newgate (Bridge Street) from the market place 'to the place where the bridge formerly stood'. The market place lay north of Sankey Street and West of Horsemarket Street, and the Legh manuscript refers to properties on Sankey Street lining the south side of the market, and to houses known as 'Pratt Row' on the north side, with long backplots extending north to the heath; Pratt Row appears to have stood on the north side of modern Lyme Street (H Wells pers comm), where the sixteenth century Barley Mow Inn still stands. One holding there was described as 'a fair messuage newly built, with two fair high chambers, with a kitchen and large garden containing a new oven at the north end' (Beaumont 1865).

2.5.7 Other sources indicate that houses lining Horsemarket Street formed the eastern perimeter of the market place, and that the west side of the original market place had already been built upon, and occupied by a number of small streets (Wells nd). It has been suggested that, by 1465, the encroachment of buildings onto the market place had already forced some market functions to other sites, for example, the horsemarket to Horsemarket Street north of the market, and the dairy market to Buttermarket Street (*ibid*). The limits of the medieval town can be inferred from the modern street pattern as represented on the eighteenth and nineteenth century maps; the north-western extent of the town appears to be represented by the curving course of Golborne Street, Queen Street, and Riding Street. The site of the manorial gallows has been tentatively located from documentary sources, and may have stood 60m south of the development site, whilst the fifteenth century manorial court house stood within the site, surviving until the nineteenth century (Ordnance Survey

1851); the earlier manorial court is considered to have been held in a similar position, in a hall close to the entrance to the market from Market Gate (Wells nd). The positions of two horse mills have also been identified, one lying at the west end of the former Mill Street, at the western side of the market, the other *c* 100m further north. Immediately beyond the north-east corner of the development site, the curved course of Factory Street, as represented on the 1772 map, suggests the presence of an early but significant landscape feature (Donbavand and Wallworth 1772; Cheshire County Council 2001, 47).

2.5.8 The late medieval market place, together with the surrounding frontages, and the streets and buildings which gradually encroached onto the open space, lay within the footprint of the Golden Square shopping centre constructed between 1974 and 1983. The Cheshire SMR contains no record of any archaeological recording being carried out during redevelopment, but substantial below-ground timber structures, stone foundations, and a very large number of wells, were rumoured to have been unearthed by the building contractors (Wells 2000, 5). A shopper on Sankey Street found a long cross silver penny of Edward III, minted between 1369 and 1377, in rubble on the edge of the Marks and Spencer site. Although some medieval remains may already have been disturbed by post-medieval cellaring, it seems certain that important archaeological deposits covering a large area were removed during the development.

2.6 POST-MEDIEVAL PERIOD

2.6.1 The post-medieval and modern town remained largely within the medieval town limits until the mid-nineteenth century, with the exception of limited expansion to the north on the western side of Horsemarket Street (Donbavand and Wallworth 1772; Hall 1826; Ordnance Survey 1851). The town continued to act as a market centre for the surrounding agricultural hinterland. However, industry was becoming an increasingly important part of Warrington's economy, particularly from the late seventeenth century. Two main factors have been identified as encouraging the growth of industry: firstly, improvements in the Mersey Navigation, with the river being made navigable from Liverpool to Warrington in 1690, and from Warrington to Manchester in 1720; and secondly, the position of the town on the best route across the Mersey and north into Lancashire (Grealey 1976, 20). Bank Quay was constructed in 1690, and allowed the town's manufacturers easy access to waterborne transport. Although there is evidence for a great variety of manufacturing, the most significant industries have been identified as textile making, particularly linen and coarse textiles such as sailcloth, and metal working (*ibid*). Copper smelting was important for much of the eighteenth century, with wire-working and the manufacture of files and other tools becoming significant before 1800. By 1825, sugar refining and copper working had largely ceased, but iron foundries and soap works were increasingly important, and supplemented the remaining established industries (Farrer and Brownbill 1907, 317).

2.6.2 The first large-scale map of Warrington dates from 1772 (Donbavand and Wallworth 1772) and demonstrates that by the late eighteenth century, the putative late medieval market place had been very severely encroached upon

by buildings; the relatively small open space that remained, in front of the Barley Mow Inn, is labelled 'Corn Market'. To the north-west and west, towards Golborne Street, the density of buildings was lower, with many open gardens; the only development west of Golborne Street was on the Sankey Street frontage, and along Heathside, roughly in the position of modern Bath Street. By 1851, the general disposition of buildings around the market place had changed little, although the west frontage had been rebuilt in the late eighteenth and early nineteenth centuries (Warrington Borough Council 1984); there had also been substantial infilling to the north and west, and the built-up area had extended to beyond Legh Street, newly established to the west of Golborne Street (Ordnance Survey 1851). Warrington was incorporated in 1847, and the new corporation pressed ahead with attempts to modernise the market area. The Old Court House at the south end of the market was demolished, and a new Market Hall in an ornate Italian style was opened in 1856 to house a meat market; a covered fish market was added to the north in 1873; and still stands today; and a glassed-roofed general market was constructed on land to the north of the Barley Mow (Warrington Borough Council 1984; Hayes 1991). All these structures are visible on the large-scale survey of Warrington conducted in 1880 (Ordnance Survey 1880). Three-storey timber-framed buildings on the south side of Cheapside may have been swept away during this development (Rimmer 1972), and comparison of the 1851 and 1880 maps suggests the re-orientation and rebuilding of the east frontage of the market. The entire market area discussed above lies within the development site.

2.6.3 Eighteenth and nineteenth century maps indicate that several warehouses, factories or workshops formerly stood within the development site. The 1772 map is not extensively annotated, but indicates that a sugar house stood to the north of Sugar House Lane, with a second located to the south of Riding Street (Donbavand and Wallworth 1772); the antiquity of the trade is demonstrated by the name 'Old Sugar House Lane', referring to the lane parallel to Horsemarket Street to the west. By 1851, the Corn Hill Wire Works stood to the north of Riding Street; the Market Street File and Tool Manufactory stood to the south; the King Street Pin Manufactory lay west of King Street; and the King Street and Golborne Street Breweries lay east of Golborne Street (Ordnance Survey 1851). In 1880, we can add the Excelsior File and Tool Works, newly constructed in the north-west corner of the subject site; an iron foundry in the north-east corner of the site; and the King Street Wire Works, which appears to have existed earlier, but was not annotated (Ordnance Survey 1880). Warrington's first station was built on one of two branches of the Warrington and Newton Railway, opened in 1831; the site of the station lies *c* 100m north of the subject site.

2.6.4 The Barley Mow Inn and Fish Market were the only upstanding structures within the subject site to survive the redevelopment of 1974-83, but a gazetteer compiled just before the demolition work commenced gives some impression of the vernacular architecture of the area (Grealey 1976, Gazetteer VII). Buildings considered worthy of note included a house in the alley connecting Market Street and Horsemarket Street of seventeenth to eighteenth century date; a house of *c* 1770 in the angle of Bewsey Street and Brown Street; the

west facade of Market Street, dating to *c* 1770; a late eighteenth century house adjacent to the Barley Mow, formerly inhabited by William Beaumont; and the Blackburne Arms of 1780-90. It appears that the Barley Mow was the only medieval or post-medieval building in the vicinity to have survived the redevelopments of the late eighteenth and nineteenth centuries.

2.6.5 Prior to the Golden Square development, no post-medieval artefacts are known to have been found within the site, but this almost certainly reflects the lack of archaeological work in the area. Two records of post-medieval finds pertain to an area some 200m to the south. The first record refers to the discovery of an elaborately decorated sixteenth century bronze tap, in the form of a cock and dolphin's head, together with an early seventeenth century ceramic vessel in the form of a 'wassail cup', both recovered during the excavation of foundation trenches adjacent to Bridge Street. The second relates to the discovery of part of an olive jar of Spanish origin, of sixteenth to seventeenth century date, found in a trench on the eastern side of Bridge Street (Wells 1998).

3. METHODOLOGY

3.1 PROJECT DESIGN

3.1.1 A revised project design (*Appendix 2*) was submitted by OA North in March 2005 for the proposed archaeological investigation at Golden Square, Warrington. The project design was adhered to for all recording practices, although the positioning and omission of trenches was determined by the programme of groundworks on site and ongoing findings from the fieldwork, with the approval of the Planning Archaeologist (CCC). Any revisions or updates to the original project design have been undertaken and approved verbally, although the amalgamation of Trenches 8, 9 and 10 was outlined in an additional method statement (*Appendix 3*). The work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

3.2 WATCHING BRIEF

3.2.1 Test Pits 1 and 2 (Fig 4) were partially machine-excavated, to a depth in excess of 2m. The work was observed and supervised by a suitably experienced archaeologist. Archaeological deposits were cleaned manually to define their extent, nature, form and, where possible, date.

3.2.2 All information identified in the course of the site works was recorded stratigraphically, using a system, adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records were available for inspection at all times.

3.2.3 Results of the evaluation were recorded on *pro-forma* context sheets. The site archive includes both a photographic record and accurate large scale plans and sections at an appropriate scale (1:20 and 1:10). All artefacts and ecofacts were recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.2.4 A full and detailed photographic record of individual contexts was maintained and, similarly, general views from standard view points of the overall site at all stages of the evaluation were generated. Photography was undertaken using 35mm cameras on archivable black and white print film as well as colour transparency, and all frames included a visible, graduated metric scale. Photographs records were maintained on special photographic *pro-forma* sheets.

3.3 EVALUATION TRENCHING

3.3.1 A programme of trial trenching was implemented to establish the presence or absence of any archaeological deposits. Originally ten evaluation trenches were required (*Appendices 1 and 2*; Fig 3) in order to provide a comprehensive

coverage of the site for the areas identified in the revised Stage 1 as offering good archaeological potential. However, Trench 5 was later abandoned as changes in the development plans led to the hardcore slab remaining intact. Trench 2 was also abandoned due to the extensive depth of disturbed ground exceeding excavation in this area. Trench 6 was abandoned after 5m of excavation due to contamination. Instead, the Planning Archaeologist requested that two test pits open to the north (TP1 and TP2) would be recorded in place of Trench 6.

3.3.2 It was also subsequently agreed between the client and the Planning Archaeologist (CCC) that two of trenches (Trenches 3 and 4), originally positioned to investigate beneath the bus station, would be included in the watching brief in the revised Stage 3 (see *Section 1*, above). The hardstanding slab in use for the bus station would remain and 2m x 2m holes would be cut through for the insertion of new foundations.

3.3.3 The position of the trenches was checked against service plans provided by the client, and the areas scanned for additional unknown or unmarked services using a cable avoidance tool (CAT) prior to excavation. The density of services led to on-site alterations to the proposed positions of trenches and their length (*Appendix 3*). Trenches 8, 9 and 10 were proposed for excavation on Golborne Street. However, investigations led to Trenches 8 and 10 being abandoned due to large main services prohibiting safe excavation. Trench 9 began as 30m in length but discovery on unknown services led to a reduction in size to 15.3m (Fig 4).

3.3.4 The trenches were excavated in a stratigraphical manner by a mechanical excavator under the supervision of an OA North archaeologist. The spoil heaps were scanned for artefacts.

3.3.5 The recording comprised a full description and preliminary classification of the features and materials revealed, on OA North *pro-forma* sheets. A plan was produced showing the location of all the trenches and features, with representative sections being drawn at a scale of 1:10. A photographic record, using monochrome and colour slide, and digital formats, was maintained.

3.3.6 The precise location of the evaluation trenches, and the position of all archaeological structures encountered, were surveyed using a total station. This data was then used to generate scaled plans within AutoCAD. The drawings were generated at an accuracy appropriate for 1:20 scale, but can be output at any scale required. Sections were manually drafted as appropriate at a scale of 1:10.

3.4 ARCHIVE

3.4.1 The results of the work will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a

properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

3.4.2 This archive can be provided in the English Heritage Centre for Archaeology format, both as a printed document and on computer disks as ASCii files (as appropriate). The paper archive will be deposited with the Cheshire Record Office, and the finds to the Warrington Museum within six months of the completion of the project.

4. RESULTS

4.1 INTRODUCTION

4.1.1 Due to the complications arising from the density of services in the area, along with revised methodologies of the project only three trenches were excavated (Trench 1, 6 and 9) (Fig 4). Two test pits were also observed (Test Pits 1 and 2) (Fig 4), to characterise the nature, extent and archaeological potential of the site, building on the information gleaned from Trench 6, which was considerably reduced in size owing to contamination issues. These test pits were observed as part of an archaeological watching brief.

4.2 TRENCH DESCRIPTIONS

4.2.1 ***Trench 1:*** located alongside Golborne immediately to the south-east of the multi-storey car park, Trench 1 was aligned north-east/south-west. It was reduced in size from 10m in length to accommodate for buried live services and measured 3m by 2m, and was excavated to a depth of 1.8m. The trench revealed mid-brown clay with pockets of orange clay natural geology at a depth of 0.3m below the surface, and was observed for 1.5m in depth. Overlying the natural geology was 0.3m of mid-brown silty-clay with frequent building rubble and grey hardcore inclusions (Plate 1).

4.2.2 ***Trench 6:*** located *c* 9m west of the south-eastern end of Bewsey Street, Trench 6 was aligned east/west and measured 5m by 2m (Plate 2). It was excavated to a depth of 2m, encountering the natural subsoil at a depth of 1.9m. The trench revealed a brick-built cellar, ***600*** (Plate 3), with a drainage ditch, ***604***, presumably associated with the drainage of the cellar, being located below floor ***602***. This ditch was cut into ***605***, a possible buried topsoil, which in turn overlay the natural subsoil ***606***.

4.2.3 ***Trench 9:*** located down the centre of Golborne Street at its eastern end, Trench 9 was aligned approximately east/west, measuring 15.3m by 2m, (reduced in size due to existing service constraints), excavated to a depth of *c*1.5m. The trench exhibited a layer of tarmac, 0.3m in depth, overlying 0.45m of crushed concrete hardcore ***901***, this overlay a demolition layer, 0.17m thick, of mid-grey-brown gritty clay with 70% brick and mortar fragments ***902***. This in turn overlay a pinkish-brown clay, redeposited natural ***906***, (Plate 6, Fig 5).

4.2.4 The trench revealed two brick walls, ***905*** and ***907*** along with a probable service cut ***904*** (Plates 4-5, Fig 5). Wall ***905***, located to the west Trench 9, was constructed of possibly machine-made, regular, unfrogged red bricks, *c*245mm by 120mm by 80mm. Two courses survived with rendering on the western face that has been whitewashed. The bricks were fairly dense with pebble inclusions, bonded with a sand mortar, and are possibly earlier than 1850. The wall was aligned north/south 0.25m wide, 0.17m deep with a length of 1.1m, extending to the north and truncated by service trench ***904***, to the south (Plate 7). The wall overlay redeposited natural clay ***906*** at a depth of 0.8m, and was sealed by demolition layer ***902***.

4.2.5 Wall ***907***, (Plate 8) located to the east of Trench 9, was constructed of handmade (moulded), unfrogged red/orange bricks, approximately 235mm by 115mm by 60mm. The bricks were thinner than that of wall ***905*** with air inclusions within a softer fabric. The bricks from wall ***907*** appear to be earlier than wall ***905***. Wall ***907*** survived to three courses high (0.21m), was cut into clay ***906***, and aligned north/south. It was 0.66m in length and was observed for 0.18m extending to the east under the trench limits. The bond was varied with a soft yellow sand mortar with charcoal inclusions, and the wall was partially demolished to the south. The wall was sealed by crushed concrete layer, ***901***.

4.2.6 The service trench, ***904***, was aligned approximately east/west and observed for 10.5m in length in a 1.05m wide cutting redeposited natural clay, ***906*** and wall ***905*** (Plate 7). The fill of this service trench was a dark grey-brown silty-clay, including gravels, mixed with 70% crushed brick and building material backfill ***903*** (Fig 5).

4.3 TEST PIT DESCRIPTIONS

4.3.1 ***Test Pit 1:*** located *c*20m east of Bewsey Street and *c*7m south of the railway Test Pit 1 measured *c*2.5m by 1.5m and was excavated to a depth in excess of 2m (Plate 9). This revealed at least 2m of made ground overlying mid-grey sandy-clay natural geology. It was evident that this area had been severely truncated by modern disturbance.

4.3.2 ***Test Pit 2:*** located immediately west of Bewsey Street and *c* 5m south of the railway, Test Pit 2 measured *c* 2m by 1.2m, and was excavated to a depth in excess of 2m (Plate 10), revealing over 2m of made ground. The natural geology was not observed within this test pit.

4.4 FINDS

4.4.1 In all, five fragments of pottery were recovered during the investigation from layer ***903***. The fragments are all relatively small, but unabraded, suggesting that the material has not moved far from its original place of deposition. Nothing in this small assemblage pre-dates the mid-late eighteenth century and is more likely to date to the nineteenth century. The group comprises three fragments of black-glazed redwares, all from large storage vessels. The fabric of one fragment is distinctive in being heavily laminated and extremely coarse, suggesting a late product of the Buckley kilns in North Wales. The other two are in a finer fabric, but with voids and grains of white crystalline material, possibly calcite to *c* 1 mm. In addition, there is one fragment of an underglaze transfer-printed white earthenware dish, probably of nineteenth century date, and a re-fired fragment of plain white earthenware. The discolouration of the latter, alongside the fact that it has been refired, suggests that the small group of finds probably reached the site in the course of midden clearance.

5. CONCLUSION

5.1 DISCUSSION

5.1.1 Trench 1 revealed no archaeologically significant remains, exhibiting a single layer of building rubble and hardcore; although this trench was small in size (3m by 2m), it would appear that this area of the development has little to offer. However, during the watching brief in 2004 (OA North 2004), Test Pit 1, situated towards the north-east of Trench 1, revealed a late seventeenth century deposit, representing a build up of material as a result of repeated incidents of nightsoiling. During this phase of investigation Test Pits 1 and 2 also revealed no significant archaeological features or deposits. However, they exhibited a substantial amount (2m+) of made ground, indicating the degree of disturbance towards the northern edge of the development site.

5.1.2 Archaeological deposits were revealed in Trenches 6 and 9. The cellar ***600***, located within Trench 6, elucidates on the changing nature of Warrington's commercial centre. A building is seen on the plot labelled 'Coopers Arms Inn' on the 1851 Ordnance Survey map. However, there has been a building on this site since 1772 (Dondavand and Wallworth). There were no finds recovered from this trench to aid in the dating of the activity. Trench 9 revealed two north/south aligned walls ***905*** and ***907***, running parallel to each other *c* 14.2m apart. The brick dimensions and bonding were different within each of these walls so it can be surmised that they are of differing periods, wall ***907*** being earlier than wall ***905***. Both walls run perpendicular to a former street frontage before the modern road system was developed. Due to the absence of flooring it remains inconclusive that these were the foundations for buildings or boundary walls. The level of truncation due to modern disturbance and redevelopment has all but removed evidence of earlier archaeological deposits or features from this area.

5.2 IMPACT OF DEVELOPMENT

5.2.1 The results obtained from Trenches 6 and 9 indicate the survival of dwellings or other structures within the north-eastern area of the development site, although a high degree of truncation was evident. Trench 1 and Test Pits 1 and 2 revealed no significant archaeological features or deposits so no further work is recommended within these areas due to the level of disturbed ground and the high concentration of services. The nature of the general level of survival of archaeological remains seen from the limited excavations would suggest that it is fairly scant in some areas with pockets of mainly late eighteenth or early nineteenth century below-ground structural remains. The remainder of the site has shown high levels of disturbance and made ground from twentieth century redevelopment.

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7. ILLUSTRATIONS

7.1 LIST OF FIGURES

7.2 LIST OF PLATES

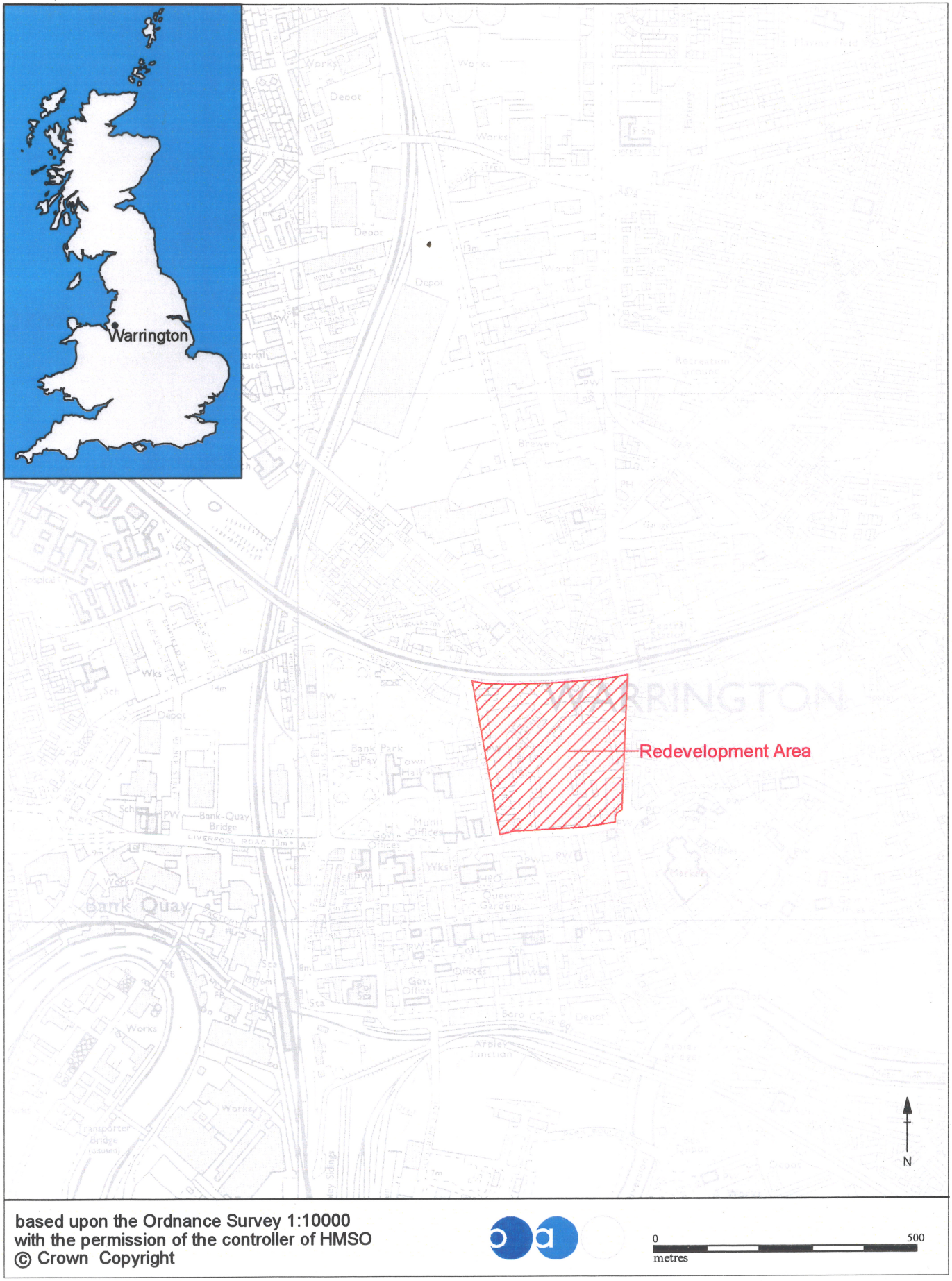


Figure 1: Location Map

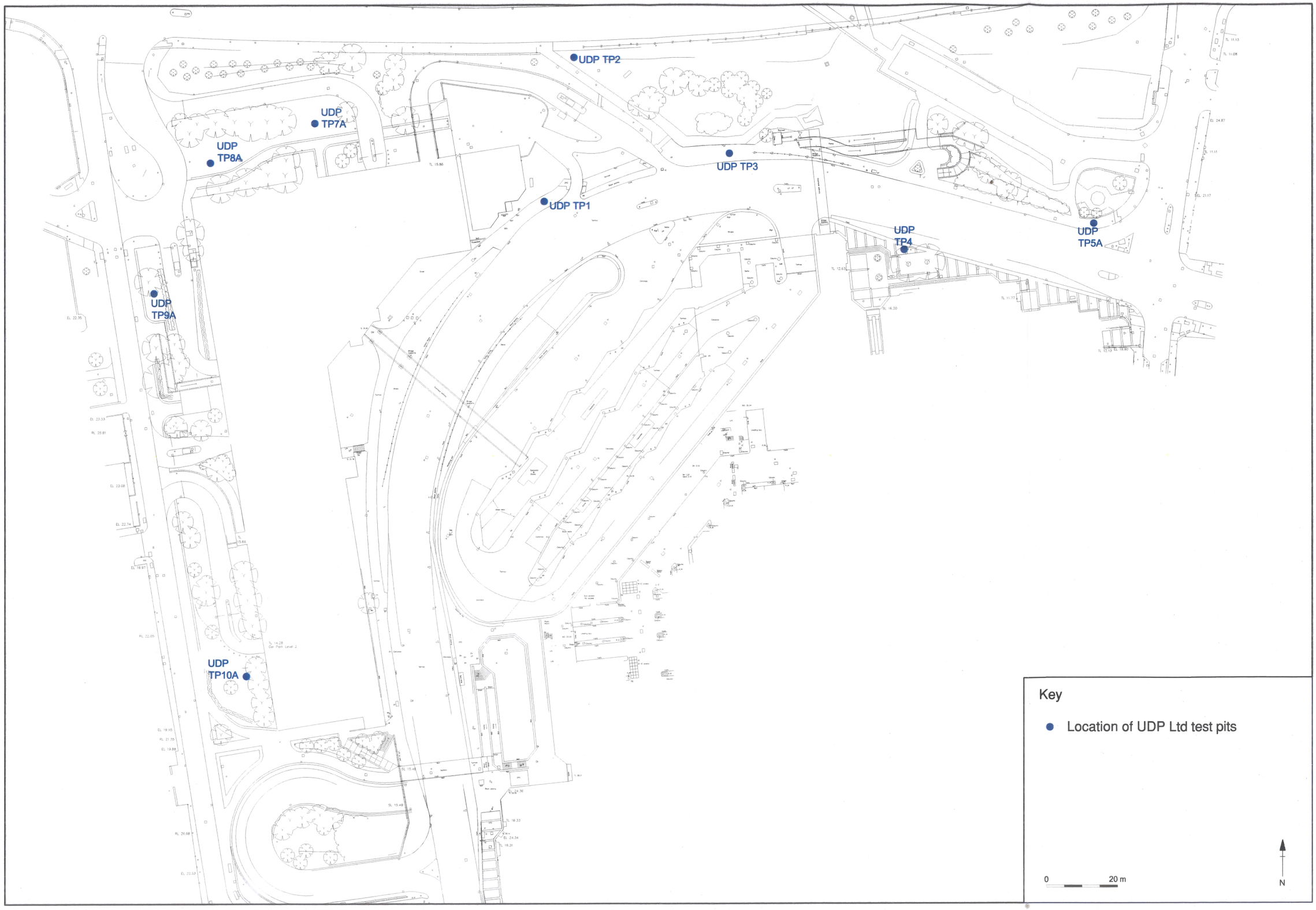


Figure 2: Location of test pits undertaken by UDP Ltd excavated under archaeological supervision (OA North 2004)

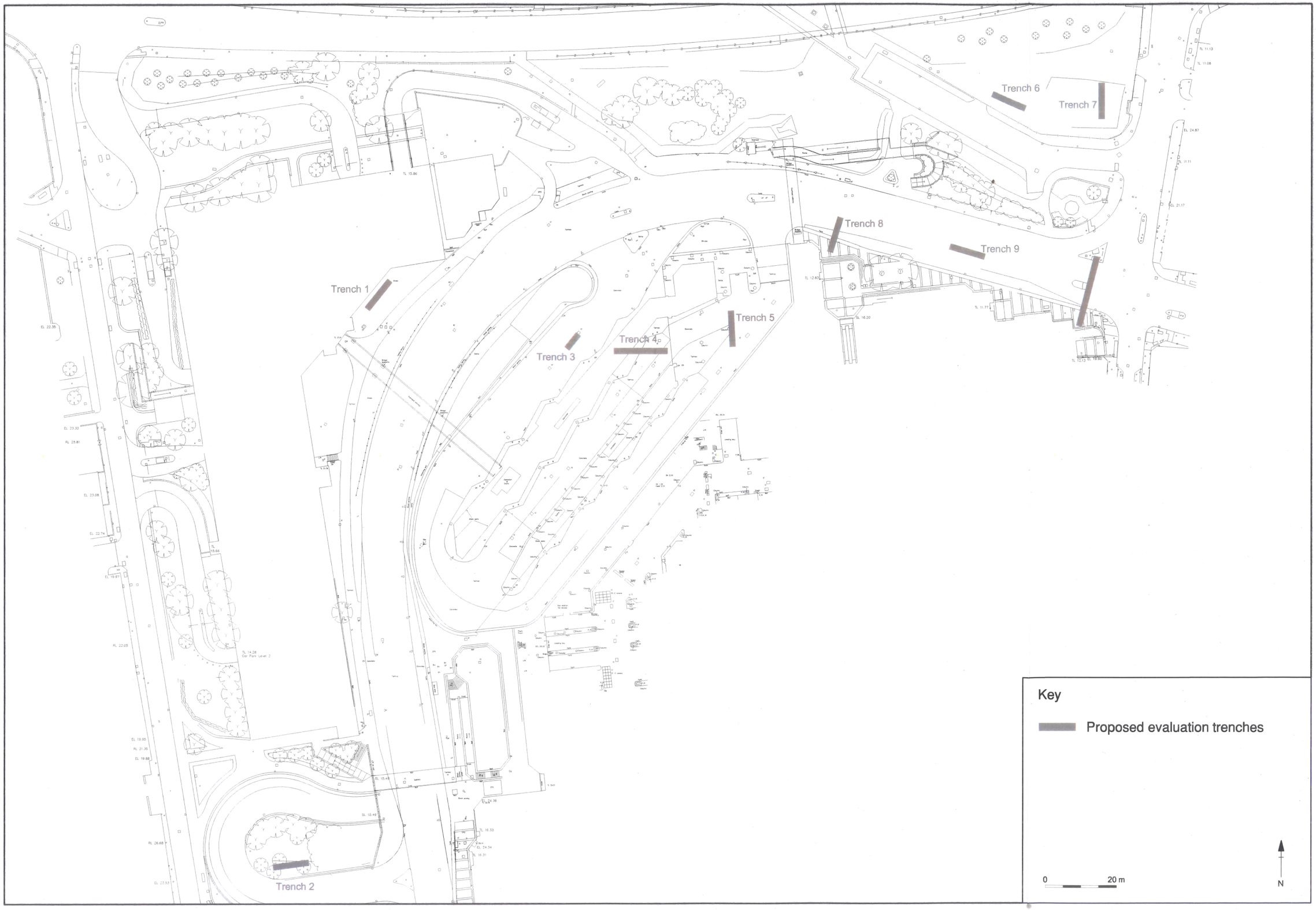


Figure 3: Plan of proposed evaluation trenches

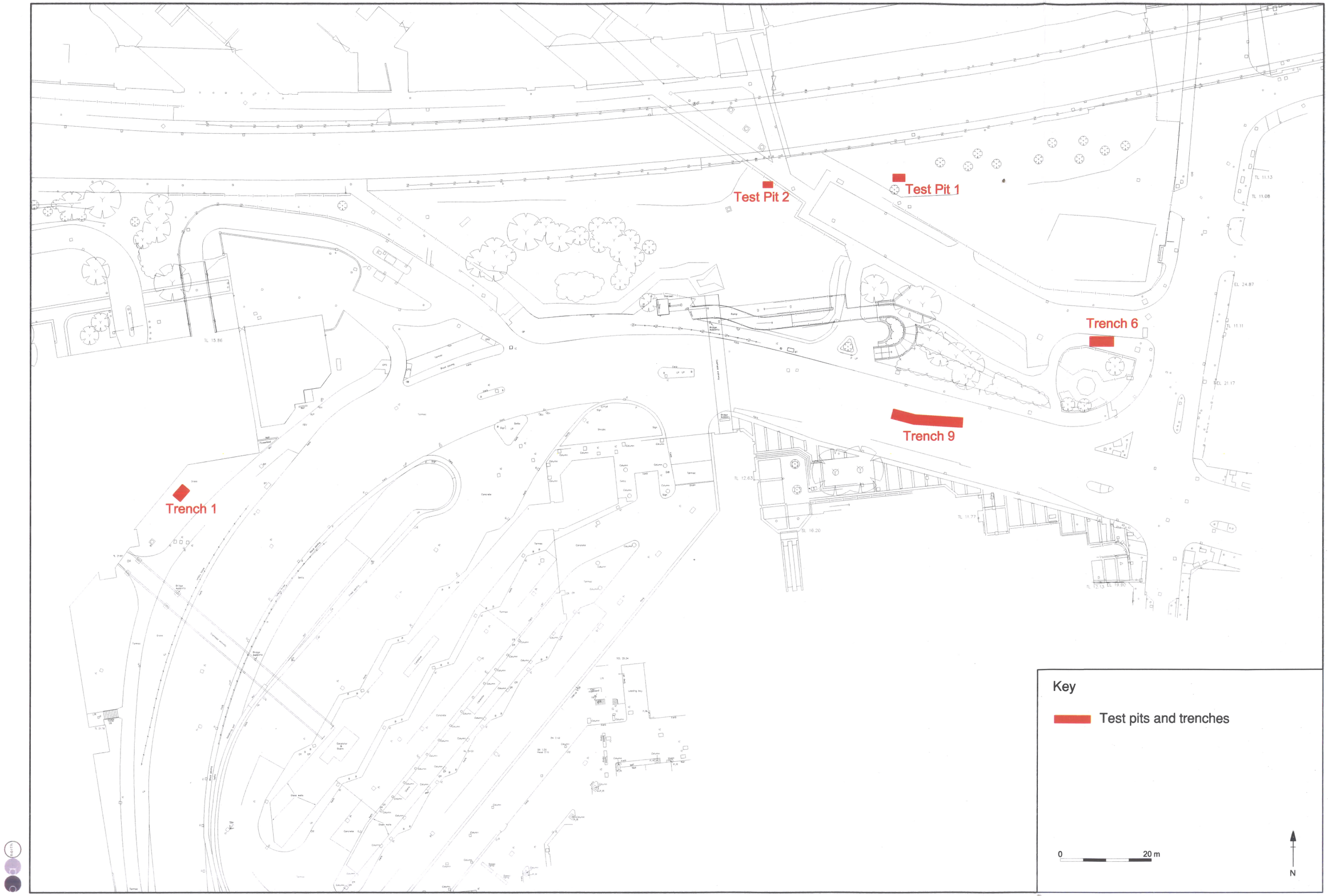
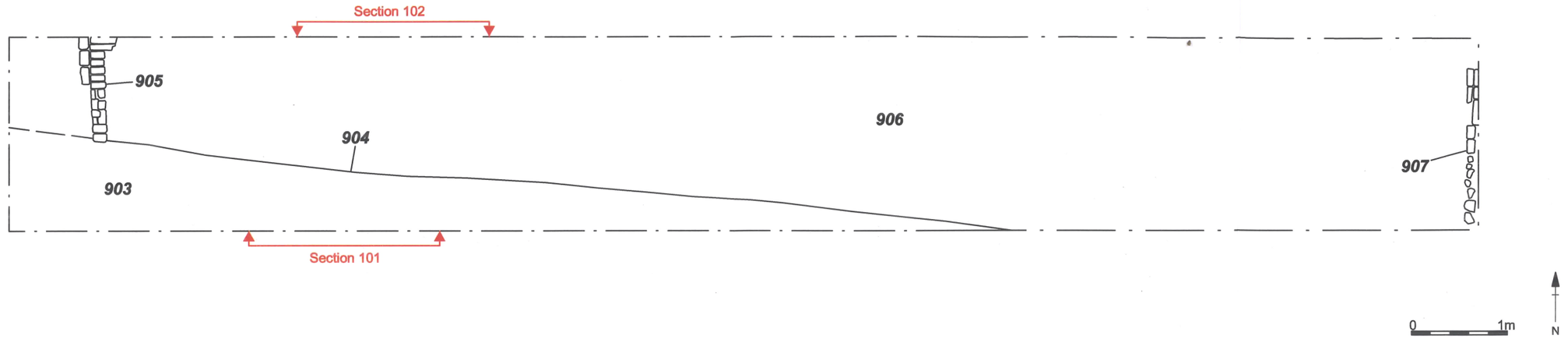
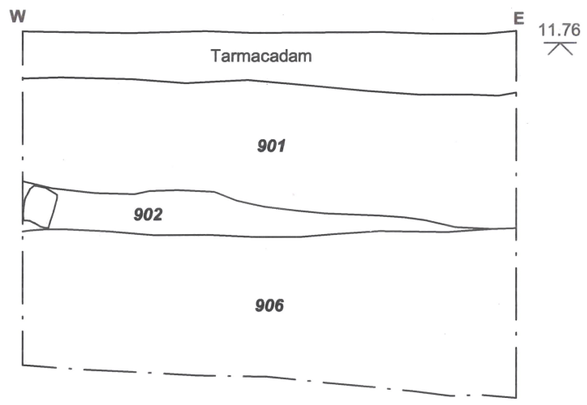
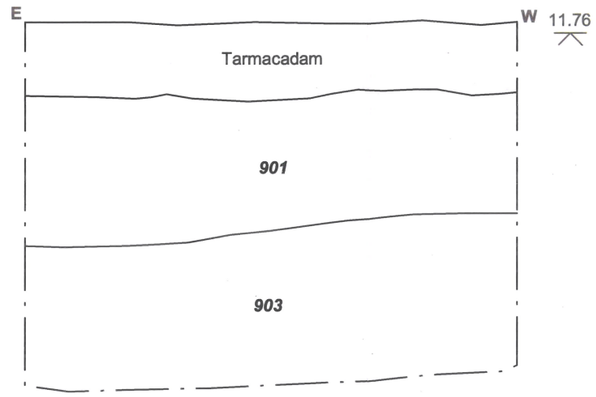


Figure 4: Location of test pits and trenches excavated





South-facing section 102 of Trench 9



North-facing section 101 of Trench 9

0 0.5m

0 0.5m

Key

11.76 levels

edge of context

edge of excavation

901 context number

stone

Figure 5: Plan and sections of Trench 9

Plate 1: South-east-facing section of Trench 1

Plate 2: Plan view of Trench 6

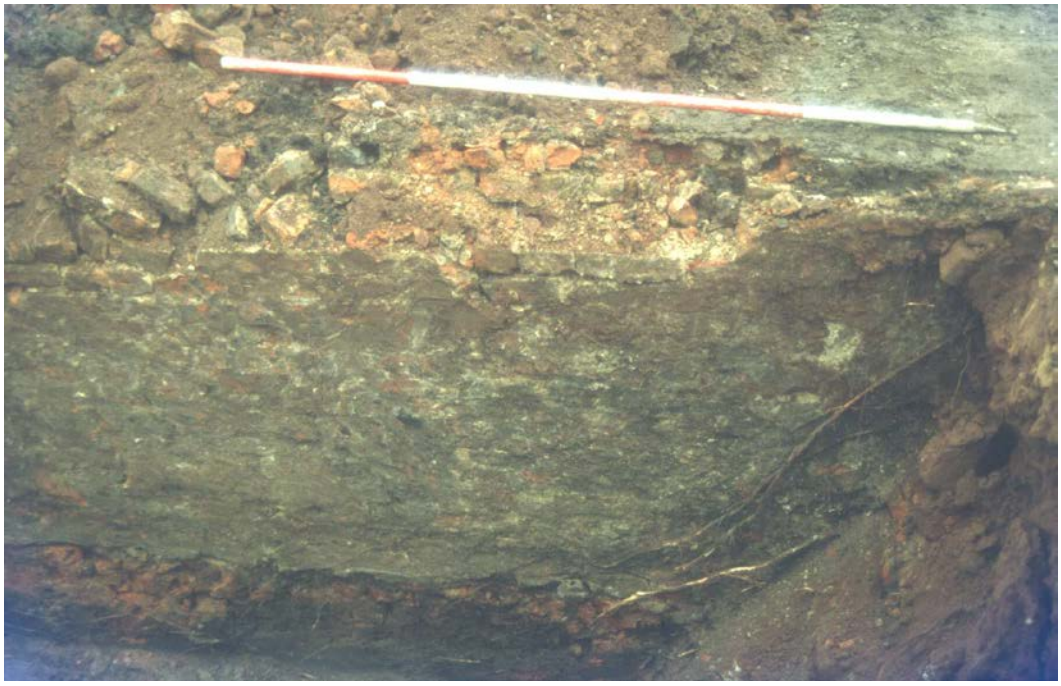


Plate 3: South-facing elevation of cellar wall ***600***, within Trench 6

Plate 4: View of Trench 9, looking east

Plate 5: View of Trench 9, looking west

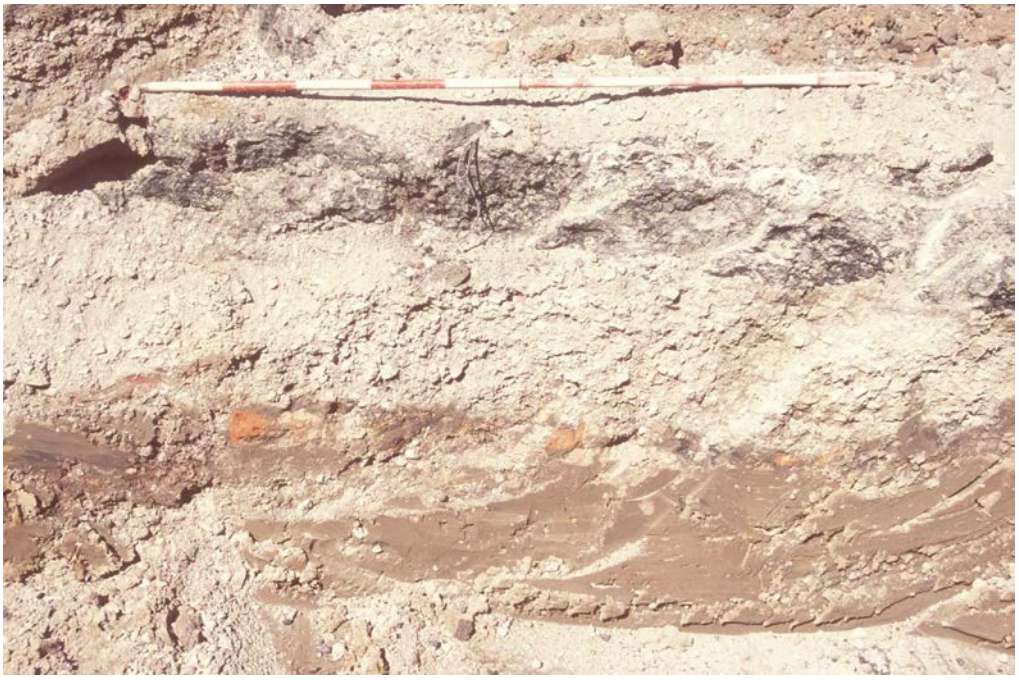


Plate 6: South-facing sample section of Trench 9

Plate 7: Plan view of wall ***905***, and service trench ***904***, within Trench 9, looking west

Plate 8: View of wall ***907***, looking east

Plate 9: General view of Test Pit 1, looking east

Plate 10: General view of Test Pit 2, looking west

APPENDIX 1: PROJECT DESIGN, JULY 2003

1 BACKGROUND

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 This project design is for a programme of archaeological work required as part of the Golden Square development in Warrington, and is designed to meet the requirements of a verbal brief issued by Mark Leah, the Planning Archaeologist for Cheshire. The site incorporates the present Golden Square Shopping Centre, together with Golborne Street, a multi-storey car park to the west, and presently undeveloped land to the north (SJ 6050 8830).

1.1.2 Planning permission has been granted for the development, which proposes the redevelopment of Golden Square. The site is bounded by Leigh Street to the west, Midland Way to the north, and by Winwick Street/Horsemarket Street to the east. The new development will extend Golden Square to the northwest onto land presently occupied by the multi-storey car park and the bus station. The development will necessitate the relocation of the bus station to a new facility on the northeast corner of the street. The multi-storey car park is to be demolished and Golborne Street will be closed.

1.2 PREVIOUS WORK

1.2.1 Previous archaeological work within the proposed development area is restricted to a desk-based assessment, which was produced by the Oxford Archaeology North (OA North 2002). This report identified a number of industrial sites of archaeological significance, in addition to the northwest quadrant of the late-medieval town.

1.2.2 This project design has been formulated to provide an archaeological programme of work for the area of the development, which is thought most likely to have the highest survival rate for potential archaeological sites.

1.2.3 The archaeological impact of the proposed redevelopment has been assessed by comparing the probable position of new groundworks with the distribution of areas of surviving archaeological potential. It is considered that the provision of new BHS storage facilities, new restaurant and leisure facilities, and a new bus station, towards the north of the subject site, may affect medieval or post-medieval remains surviving close to the northern limits of the medieval town; two sugar houses, the Corn Hill Wire Works, and an iron foundry are also known to have stood in the vicinity. Further west, the construction of a new basement level car park may impact upon medieval remains beneath Golborne Street and towards the northern end of the present bus station; remains of a nineteenth century file and tool works may survive in the north-west corner of the subject site, where it is proposed to construct the basement of a new department store. The sites (numbers refer to the OA North 2002 Assessment report) are outlined below:
Site 5: Excelsior File and Tool Works, late nineteenth century;
Site 6: House in angle of Bewsey Street, eighteenth century;
Site 7: Iron Foundry, late nineteenth century;
Site 8: Sugar House, eighteenth century;
Site 9: Corn Hill Wire Works, mid nineteenth century;
Site 10: Sugar House, eighteenth century;
Site 11: Market Street File and Tool Manufactory;
Site 12: Extents of medieval town, possible medieval deposits;
Site 13: Horse mill, significant medieval site
Site 14: King Street Brewery, nineteenth century
Site 15: Heathside, possible medieval settlement focus.

1.3 OXFORD ARCHAEOLOGY

1.3.1 Oxford Archaeology has over 30 years of experience in professional archaeology, and can provide a professional and cost effective service. We are the largest employer of archaeologists in the country (we currently have more than 200 members of staff) and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have. We have offices in Lancaster and Oxford, trading as Oxford Archaeology North (OA North), and Oxford Archaeology (OA) respectively,

enabling us to provide a truly nationwide service. **OA is an Institute of Field Archaeologists Registered Organisation (No 17**), and is thus bound by the IFA's Code of Conduct and required to apply the IFA's quality standards.

1.3.2 Given the geographical location of Warrington, it is intended to co-ordinate the project from our northern office in Lancaster. Between our two offices our company has unrivalled experience of working on post-medieval sites, and is recognised as one of the leading archaeological units in the country with regard to dealing with industrial archaeological projects. OA North has particular experience of industrial archaeology in the North West having undertaken in recent years excavation, building recording and post-excavation projects in both urban and rural environments; *inter alia* the survey, excavation, recording, analysis, consolidation, publication and consultancy relating to the 'Hotties' continuous glass tank furnace at St Helens (Krupa and Heawood 2002), the excavation of the former Calprina Works in Stalybridge (OA North 2003a), the excavation and survey of the Macintosh Mill in Manchester (OA North 2003b), and a continuing programme of archaeological investigation at the Torrs in New Mills. Recent urban medieval excavations include Elephant Yard, Kendal (1997-8), Berwick New Library (2001), Warrington Friary (2000) and the on-going Westmorland Gazette site in Kendal. OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 15 years. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

1.4 ARCHIVE DEPOSITION

1.4.1 The results of the evaluation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

1.4.2 The paper archive for the archaeological work undertaken at the site will be deposited with the County Record Office (Chester), and the finds archive will be deposited with the nearest museum which meets Museums' and Galleries' Commission criteria for the long term storage of archaeological material (MGC 1992).

1.4.3 Except for items subject to the Treasure Act, all artefacts found during the course of the project will be donated to the receiving museum.

2 AIMS AND OBJECTIVES

2.1 ACADEMIC AIMS

2.1.1 The main research aim of the evaluation will be to characterise the survival of the archaeological remains across the site, and to provide for a good understanding of the archaeological potential.

2.2 OBJECTIVE

2.2.1 The objective of the project is threefold: firstly, to expose and determine the level of survival of the remains of the post-medieval sites, whilst determining whether sub-surface remains exist with the potential to elucidate the industrial processes conducted on these sites.; secondly, to determine the presence and extent of the medieval settlement; and, thirdly, to assess the archaeological potential of the site for remains of other periods, and record any particularly significant features that might be exposed during the groundworks.

2.3 POST-EXCAVATION AND REPORT PRODUCTION

2.3.1 The site records, finds and any samples from the programme of archaeological works outlined below will form a checked and ordered site archive as outlined in the English Heritage guideline document *Management of Archaeological Projects* (2nd edition, 1991) (hereafter MAP 2). Following compilation of the project archive a report will be produced detailing the results of the excavation.

3 METHODS STATEMENT

3.1.1 The following work programme is submitted in line with the aims and objectives summarised above

3.2 FIELDWORK

3.2.1 The archaeological fieldwork has three stages:

- ***Stage 1:*** test pits and evaluation trenching in advance of the construction programme;
- ***Stage 2:*** watching brief during breaking of modern ground surfaces in vicinity of evaluation trenches.
- ***Stage 3:*** evaluation trenching to be integrated with the development programme

3.2.2 ***Stage 1****:* a series of 11 test pits and three evaluation trenches will be placed in the positions suggested on figure 1. The test pits will measure approximately 1.5m x 2.0m. Trench 1 and Trench 2 will measure 10m x 1.5m and Trench 3 5m x 1.5m.

3.2.3 Excavation of the uppermost levels of modern overburden/demolition material will be undertaken by a machine fitted with a toothless ditching bucket to the top of the first significant archaeological level. The work will be supervised by a suitably experienced archaeologist. Spoil from the excavations will stored adjacent to the trenches.

3.2.4 Machine excavation will then be used to carefully define the extent of any surviving foundations, floors, and other remains. Thereafter, structural remains will be cleaned manually to define their extent, nature, form and, where possible, date. It should be noted that no archaeological deposits will be entirely removed from the site. If excavation is to proceed below a depth of 1.2m then the sides will be stepped in.

3.2.5 The presence of post-medieval industrial sites will be considered significant, and in the event of these sites being exposed, limited investigation (such as a sondage) will be carried out to determine the presence of earlier remains concealed beneath.

3.2.6 In the event of the presence of archaeological deposits other than those relating to industrial sites, selected pits and postholes will normally be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features.

3.2.7 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.2.8 Results of the evaluation will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.2.9 A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the evaluation will be generated. Photography will be undertaken using 35mm cameras on archivable black and white print film as well as colour transparency, and all frames will include a visible, graduated metric scale. Extensive use of digital photography will also be undertaken throughout the course of the fieldwork for presentation purposes. Photographs records will be maintained on special photographic *pro-forma* sheets.

3.2.10 The precise location of the evaluation trenches, and the position of all archaeological remains encountered, will be surveyed by EDM tacheometry using a total station linked to a pen computer data logger. This process will generate scaled plans within AutoCAD 14, which will then be subject to manual survey enhancement. The drawings will be generated at an

accuracy appropriate for 1:20 scale, but can be output at any scale required. All information will be tied in to Ordnance Datum.

3.2.11 Human remains are not expected to be present, but if they are found they will, if possible, be left *in situ* covered and protected. If removal is necessary, then the relevant Home Office permission will be sought, and the removal of such remains will be carried out with due care and sensitivity as required by the *Burials Act 1857*.

3.2.12 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996.

3.2.13 ***Stage 2***: the removal of all modern ground surfaces in the area of the ***Stage 3*** evaluation trenches (Figure 2) will be carried out under archaeological supervision. This work will comprise observation during the removal of modern surfaces for the development works, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

3.2.14 ***Stage 3:*** a series of 12 evaluation trenches will be placed in the positions suggested on figure 2. The trenches will have the following dimensions: Trenches 1, 2, 5, 6, 7, 8 and 9 10m x 1.5m, Trenches 3 and 11 5m x 1.5m, trench 4 15m x 1.5m and Trenches 10 and 12 20m x 1.5m. The methodology for these trenches will be as sections 3.2.3 to 3.2.12 above.

3.3 OTHER MATTERS

3.3.1 Access to the site will be arranged via the Client.

3.3.2 The evaluation areas will be protected from public access by hoarding/security fencing to be erected by the client.

3.3.3 Spoil removed from the evaluation trenches/pits will be stored adjacent to the individual areas of work. Backfilling of the site will be the responsibility of the client.

3.3.4 The client is asked to provide OA North with information relating to the position of live services on the site. OA North will use a cable-detecting tool in advance of any machine excavation.

3.4 HEALTH AND SAFETY

3.4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991). OA North will liaise with the client to ensure all health and safety regulations are met. A risk assessment will be completed in advance of any on-site works.

3.5 POST-EXCAVATION AND REPORT PRODUCTION

3.5.1 ***Archive:*** the results of Stage 3.2 will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

3.5.2 This archive can be provided in the English Heritage Centre for Archaeology format, both as a printed document and on computer disks as ASCii files (as appropriate). The paper archive will be deposited with the Cheshire Record Office, and the finds to the relevant local museum within six months of the completion of the fieldwork.

3.5.3 ***Report:*** two copies of a bound and collated final report will be submitted to the Client within eight weeks of the completion of the fieldwork. The final report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above. In addition, recommendations for any further mitigation works and details of the final deposition of the project archive will also be made.

3.5.4 ***Confidentiality:*** the final report is designed as a document for the specific use of the client, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. WORK TIMETABLE

4.1 ***Archaeological Evaluation***

A ten day period is required to undertake ***Stage 1***, and twenty days for ***Stage 3***. ***Stage 2*** will be dependent upon the progress of the contractor.

4.2 ***Post-Excavation and Report Production***

A report will be submitted within eight weeks of the completion of the fieldwork, although a shorter deadline can be negotiated if necessary.

4.3 OA North can execute projects at very short notice once an agreement has been signed with the client.

5. STAFFING PROPOSALS

5.1 **STAFF PROPOSALS**

5.1.1 The project will be under the overall charge of **Alison Plummer BSc (Hons)** (OA North Senior Project Manager) to whom all correspondence should be addressed. Alison managed the excavation of the former Calprina Works in Stalybridge (OA North 2003), the excavation and survey of the Macintosh Mill in Manchester (OA North 2003), and the continuing programme of archaeological investigation at the Torrs in New Mills. Alison also managed the Golden Square desk-based assessment (OA North 2002).

5.1.2 The excavation is likely to be undertaken by **Sean McPhillips BA** (OA North Project Supervisor). Sean is an highly experienced field archaeologist, who recently directed the archaeological investigation of a complex of textile mills at the Torrs in New Mills.

5.1.3 The processing and analysis of any palaeoenvironmental samples will be carried out by **Elizabeth Huckerby BA, MSc** (OA North Project Officer), who has extensive experience of the palaeoecology of the North West, having been one of the principal palaeoenvironmentalists in the English Heritage-funded North West Wetlands Survey.

5.1.4 **Erika Guttmann, BA, MSc, PhD, MIFA** (OA North Project Officer) is OA North's in-house soil micromorphological specialist, and will be readily available for consultation throughout the duration of the project.

5.1.5 Assessment of any finds from the excavation will be undertaken by OA North's in-house finds specialist **Christine Howard-Davis BA, MIFA** (OA North Finds Manager). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England.

6. MONITORING

6.1 Monitoring of the project will be undertaken by the Cheshire Planning Archaeologist Archaeologist.

6.2 Access to the site for monitoring purposes will be afforded to the Planning Archaeologist at all times.

BIBLIOGRAPHY

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Heawood, RH, forthcoming recent excavations at Warrington Friary, J Cheshire Archaeol Soc

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United Kingdom Institute for Conservation (UKIC), 1990 *Guidelines for the preparation of archives for long-term storage*, London

APPENDIX 2: PROJECT DESIGN, MARCH 2005

1 BACKGROUND

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 This project design is for a programme of archaeological work required as part of the Golden Square development in Warrington, and has been designed to meet the requirements of a verbal brief issued by Mark Leah, the Planning Archaeologist for Cheshire. The site incorporates the present Golden Square Shopping Centre, together with Golborne Street, a multi-storey car park to the west, and presently undeveloped land to the north (SJ 6050 8830).

1.1.3 Planning permission has been granted for the development, which proposes the redevelopment of Golden Square. The site is bounded by Leigh Street to the west, Midland Way to the north, and by Winwick Street and Horsemarket Street to the east. The new development will extend Golden Square to the northwest onto land presently occupied by the multi-storey car park and the bus station. The development will necessitate the relocation of the bus station to a new facility on the northeast corner of the site. The multi-storey car park is in the process of demolition and Golborne Street will be closed.

1.2 PREVIOUS WORK

1.2.3 Previous archaeological work within the proposed development area is restricted to a desk-based assessment that was produced by Oxford Archaeology North (OA North 2002), and the watching brief that comprised the first stage of the current archaeological work (OA North 2004). The desk-based assessment identified a number of industrial sites of archaeological significance, in addition to the northwest quadrant of the late-medieval town.

1.2.4 This project design has been formulated to provide an archaeological programme of work for the area of the development that is thought most likely to have the highest survival potential for archaeological deposits.

1.2.3 The archaeological impact of the proposed redevelopment has been assessed by comparing the positions of new groundworks with the distribution of areas of surviving archaeological potential. It is considered that the impact towards the north of the subject site, especially, may affect medieval or post-medieval remains surviving close to the northern limits of the medieval town; two sugar houses, the Corn Hill Wire Works, and an iron foundry are also known to have stood in the vicinity. The construction of a new basement level car park may impact upon medieval remains beneath Golborne Street and towards the northern end of the present bus station; remains of a nineteenth century file and tool works may survive in the north-west corner of the subject site, where it is proposed to construct the basement of a new department store. The sites (numbers refer to the OA North 2002 Assessment report) are outlined below:

Site 5: Excelsior File and Tool Works, late nineteenth century;
Site 6: House in angle of Bewsey Street, eighteenth century;
Site 7: Iron Foundry, late nineteenth century;
Site 8: Sugar House, eighteenth century;
Site 9: Corn Hill Wire Works, mid nineteenth century;
Site 10: Sugar House, eighteenth century;
Site 11: Market Street File and Tool Manufactory;
Site 12: Extents of medieval town, possible medieval deposits;
Site 13: Horse mill, significant medieval site
Site 14: King Street Brewery, nineteenth century
Site 15: Heathside, possible medieval settlement focus.

1.3 OXFORD ARCHAEOLOGY

1.3.1 OA North has considerable experience of excavation of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 24 years. Evaluations, assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North is an **Institute of Field Archaeologists**

(IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

1.4 **ARCHIVE DEPOSITION**

1.4.1 The results of the evaluation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

1.4.3 The paper archive for the archaeological work undertaken at the site will be deposited with the County Record Office (Chester), and the finds archive will be deposited with the nearest museum which meets Museums' and Galleries' Commission criteria for the long term storage of archaeological material (MGC 1992).

1.4.3 Except for items subject to the Treasure Act, all artefacts found during the course of the project will be donated to the receiving museum.

2 AIMS AND OBJECTIVES

2.1 **ACADEMIC AIMS**

2.1.1 The main research aim of the evaluation will be to characterise the survival of the archaeological remains across the site, and to provide information to enable the archaeological potential to be understood.

2.2 **OBJECTIVES**

2.2.1 There are three objectives of the project: firstly, to expose and determine the level of survival of the remains of the post-medieval sites, whilst determining whether sub-surface remains exist with the potential to identify the industrial processes conducted on these sites; secondly, to determine the presence and extent of the medieval settlement; and, thirdly, to assess the archaeological potential of the site for remains of other periods, and record any particularly significant features that might be exposed during the groundworks.

2.3 **POST-EXCAVATION AND REPORT PRODUCTION**

2.3.1 The site records, finds and any samples from the programme of archaeological works outlined below will form a checked and ordered site archive as outlined in the English Heritage guideline document *Management of Archaeological Projects* (2nd edition, 1991) (MAP 2). Following compilation of the project archive a report will be produced detailing the results of the excavation.

3 METHODS STATEMENT

3.2 The following work programme is submitted in line with the aims and objectives summarised above

3.2 **FIELDWORK**

3.2.1 The archaeological fieldwork has three stages:

- ***Stage 1:*** watching brief during test pits, undertaken in October 2004.
- ***Stage 2:*** evaluation trenching in advance of the construction programme, to be undertaken from March to September 2005.
- ***Stage 3:*** watching brief to be integrated with the development programme, after September 2005.

3.2.14 Depending on the results of stages 2 and 3, further work may be required by way of mitigation.

3.2.15 ***Stage 1****:* this work has been reported (OA North 2004).

3.2.16 ***Stage 2****:* a series of seven evaluation trenches will be excavated, two expected to be in March and April 2005, and five in September 2005. These will measure approximately 1.7m x 30m.

3.2.17 The programme of archaeological evaluation will involve trial trenching to determine the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. It will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

3.2.18 A cable-detecting tool will be used in advance of any machine excavation. The topsoil, subsoil, and recent overburden deposits will be subject to careful mechanical excavation (with a toothless ditching bucket) down to the depth of the first significant archaeological deposits under constant archaeological supervision. The deposits will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. Thereafter, all excavation will proceed by hand in a stratigraphic manner. The trenches will not be excavated deeper than *c*1.2m to accommodate health and safety constraints, or less if the deposits are soft or unstable. Any requirements to excavate below this depth will involve stepping out the trench.

3.2.19 Trenches will be located by use of GPS equipment, which is accurate to +/- 0.25m, or using a TST (Total Station Theodolite). Altitude information will be established with respect to Ordnance Survey Datum, using a known Bench Mark or spot height.

3.2.20 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.

3.2.21 All information identified in the course of the site works will be recorded stratigraphically, using a system adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, monochrome contacts and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.2.22 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.2.23 A full photographic record will be maintained using 35mm cameras on archivable black and white print film as well as colour transparency. Digital photography will also be undertaken throughout the course of the fieldwork.

3.2.24 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording, if an appropriate sample is retained on advice from the recipient museum's archive curator.

3.2.25 The presence of post-medieval industrial sites will be considered significant, and in the event of these sites being exposed, limited investigation (such as a sondage) will be carried out to determine the presence of earlier remains concealed beneath.

3.2.26 Human remains are not expected to be present, but if they are found they will, if possible, be left *in situ* covered and protected. If removal is necessary, then the relevant Home Office permission will be sought, and the removal of such remains will be carried out with due care and sensitivity as required by the *Burials Act 1857*.

3.2.27 *Environmental Sampling:* environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable

deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insects, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified, and will be subject to the agreement of the Cheshire Planning Archaeologist and the client.

3.2.28 Advice will also be sought as to whether a soil micromorphological study, or any other analytical techniques, will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis have been provided as a contingency.

3.2.29 *Treatment of finds:* all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.

3.2.30 *Treasure:* any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

3.2.31 *Reinstatement:* it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. Following completion of the evaluation, the trench will be backfilled with the material removed in its excavation.

3.2.32 *Contingency plan:* a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc.

3.2.33 ***Stage 3:*** the groundworks that will be subject to the watching brief will be determined at a later date. This work will comprise observation during the removal of modern surfaces for the development works, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

3.3 HEALTH AND SAFETY

3.3.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991). OA North will liaise with the client to ensure all health and safety regulations are met. A risk assessment will be completed in advance of any on-site works.

3.4 POST-EXCAVATION AND REPORT PRODUCTION

3.4.1 ***Archive:*** the results of the fieldwork will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.

3.4.2 This archive can be provided in the English Heritage Centre for Archaeology format, both as a printed document and on computer disks as ASCii files (as appropriate). The paper archive will be deposited with the Cheshire Record Office, and the finds to the relevant local museum within six months of the completion of the fieldwork.

3.4.3 ***Report:*** two copies of a bound and collated final report will be submitted to the Client within eight weeks of the completion of the fieldwork. The final report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above. In addition,

recommendations for any further mitigation works and details of the final deposition of the project archive will also be made.

3.4.4 ***Confidentiality:*** the final report is designed as a document for the specific use of the client, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. WORK TIMETABLE

4.1 ***Stage 2 - Archaeological Evaluation:*** it is anticipated that this element will require approximately eight days to complete, two in March and April 2005, and six in September 2005.

4.2 ***Stage 3 - Watching Brief:*** this will be dependent upon the construction programme of the contractor.

4.3 ***Post-Excavation and Report Production:*** A report will be submitted within eight weeks of the completion of the fieldwork, although a shorter deadline can be negotiated if necessary.

5. STAFFING PROPOSALS

5.1 **STAFF PROPOSALS**

5.1.1 The project will be under the overall charge of **Tim Carew** (OA North Senior Project Manager) to whom all correspondence should be addressed.

5.1.2 Excavation of the evaluation trenching is likely to be supervised by either an OA North project officer or project supervisor. All OA North project officers and supervisors are experienced field archaeologists who have undertaken supervision of numerous small and large-scale evaluation and excavation projects.

5.1.3 Assessment of any palaeoenvironmental samples which may be taken will be undertaken by or under the supervision of **Elizabeth Huckerby MSc MIFA** (OA North project manager) and **Denise Druce PhD** (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North through her work on the English Heritage-funded North West Wetlands Survey, and has acted as palaeoenvironmental consultant to all OA North projects over the last 10 years. Denise is an experienced environmental archaeologist who has extensive knowledge in palynology. Denise has also undertaken research for CADW and is currently involved in the OA North Upland Peats project funded by English Heritage.

5.1.4 Assessment of any finds from the excavation will be undertaken by OA North's in-house finds specialist **Christine Howard-Davis BA, MIFA** (OA North Finds Manager). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England.

6. MONITORING

6.1 Monitoring of the project will be undertaken by the Cheshire Planning Archaeologist.

6.2 Access to the site for monitoring purposes will be afforded to the Planning Archaeologist at all times.

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English Heritage, 1991 *Management of Archaeological Projects*, 2nd edition, London

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United Kingdom Institute for Conservation (UKIC), 1990 *Guidelines for the preparation of archives for long-term storage*, London

APPENDIX 3: PROJECT DESIGN, JULY 2005

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.4 Bovis Lend Lease (the client) has requested that Oxford Archaeology North (OA North) submit a method statement to undertake an archaeological evaluation of Golborne Street, Warrington. The work is part of an ongoing programme of archaeological evaluation at the Golden Square development in Warrington, and is designed to meet the requirements of a planning condition and verbal brief issued by Mark Leah, the Planning Archaeologist for Cheshire. The development site incorporates the present Golden Square Shopping Centre, together with Golborne Street, a multi-storey car park to the west, and presently undeveloped land to the north (centred NGR SJ 6050 8830).

1.1.5 A desk-based assessment (OA North 2002) identified a number of industrial sites of archaeological significance, in addition to the north-west quadrant of the late-medieval town. An impact assessment of the proposed redevelopment showed that the provision of new BHS storage facilities, new restaurant and leisure facilities, and a new bus station, towards the north of the subject site, may affect medieval or post-medieval remains surviving close to the northern limits of the medieval town; two sugar houses, the Corn Hill Wire Works, and an iron foundry are also known to have stood in the vicinity. Further west, the construction of a new basement level car park may impact upon medieval remains beneath Golborne Street and towards the northern end of the present bus station; remains of a nineteenth century file and tool works may survive in the north-west corner of the subject site, where it is proposed to construct the basement of a new department store.

1.2.5 This project design is relevant only for the evaluation of Golborne Street, and is in addition to the original method statement relating to the whole of the development site. It was originally anticipated that three trenches, Trenches 8, 9 and 10, would be opened from west to east respectively within the street. This was programmed for July 21st-25th 2005 when access to Golborne Street was closed off by BLL, prior to the hand over of this area to Kier to begin construction thereafter. Service plans showed limited availability for trenching. Consequently, it was agreed with the client and Mark Leah that the three trenches would be amalgamated into one 30m long trench to be positioned close to the junction of Golborne Street with Horsemarket Street. Upon arrival on site, scanning with a CAT showed additional, unplanned services were present, reducing the available area. The trench was reduced to approximately 15m. However, problems beyond the control of OA North prevented the work from being carried out during the allotted construction window under BLL and it is now proposed that the work is carried out under the control of Kier.

2 OBJECTIVES

2.1 The assessment aims to evaluate archaeological deposits in order to determine their extent, nature and significance of any archaeological remains that may be threatened by the proposed development within what was once the medieval street frontage on Horsemarket Street. The results will provide information as to whether further investigation or mitigation work is necessary prior to the development taking place. To this end, the following programme has been designed.

2.2 ***Evaluation trenching:*** to undertake an evaluation trench to assess the street frontage area.

2.3 ***Report and Archive:*** the results will be incorporated into an overall written report for the development site and archive.

3. METHOD STATEMENT

3.1 EVALUATION

3.1.1 ***Introduction:*** the programme of trial trenching will establish the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. In this way, it will adequately sample the area and assess whether any further work will be required on site prior to construction.

3.1.2 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991) and the IFA's code of conduct.

3.1.3 ***Methodology:*** the tarmac will be opened with a breaking arm attached to a mechanical excavator. Thereafter, any overburden will be removed by machine (fitted with a toothless ditching bucket). All such work will be undertaken under archaeological supervision to the surface of the first significant archaeological deposit. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All features of archaeological interest must be investigated and recorded unless otherwise agreed with Mark Leah. The trenches will not be excavated deeper than 1.20m to accommodate health and safety constraints; any requirements to excavate below this depth will involve recosting.

3.1.4 All trenches will be excavated in a stratigraphical manner, whether by machine or by hand.

3.1.5 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.

3.1.6 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, colour slides and monochrome contacts) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.1.7 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.1.8 Trenches will be located by use of GPS equipment which is accurate to +/- 0.25m, altitude information will be established with respect to Ordnance Survey Datum. This information will be plotted onto an **updated digital plan (dwg) of the extraction area provided by the client**.

3.1.9 ***Access:*** liaison for basic site access will be undertaken through the client and it is understood that there will be access for both pedestrian and vehicular traffic to the site. Should there be any unforeseen delays resulting from access difficulties beyond the control of OA North a stand down rate will be charged.

3.1.10 ***Reinstatement:*** it is understood that there will be no requirement for reinstatement of the ground beyond reconstructive backfilling and general compaction by the excavator. Should there be a requirement by the client other than that stated this will involve recosting.

3.1.11 ***Fencing requirements:*** the trench will be protected during the course of the evaluation using heras fencing which is costed as a variation.

3.1.12 ***Environmental Sampling:*** environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified.

3.1.13 Advice will also be sought as to whether a soil micromorphological study or any other analytical techniques will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis will be provided as a variation.

3.1.14 ***Faunal remains:*** if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA north's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.

3.1.15 ***Human Remains****:* any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. Mark Leah of Cheshire CC and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. Such removal may also require costing as a variation, the amount of which will be made in agreement with the client.

3.1.16 ***Treatment of finds:*** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.

3.1.17 ***Treasure:*** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

3.1.18 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.

3.1.19 ***Contingency plan:*** a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be in agreement with the client.

3.1.20 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

4. HEALTH AND SAFETY

4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.

4.2 Full regard will, of course, be given to all constraints (services etc) during the watching brief as well as to all Health and Safety considerations. As a matter of course the Unit uses a Cable Avoidance Tool (CAT) prior to any excavation to test for services. However, this is not fool-proof and **it is assumed that the client will provide any additional information regarding services within the study area**.

5 PROJECT MONITORING

5.1 Whilst the work is undertaken for the client, the Planning Archaeologist, Mark Leah, will be kept fully informed of the work and its results and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with Mark Leah in consultation with the client.

6 WORK TIMETABLE

6.1 ***Evaluation Trenching:*** approximately two days will be required to complete this element with a team of two people.

6.2 ***Archive/Report:*** the report and archive will be produced following the completion of all of the fieldwork, and the archive deposited within six months.

6.3 OA North can execute projects at very short notice once a formal written agreement has been received from the client.

7 STAFFING

7.1 The project will be under the direct management of **Emily Mercer BA (Hons) MSc AIFA** (OA North senior project manager) to whom all correspondence should be addressed.

7.2 The supervisor on site will be **Andy Lane** (OA North supervisor) who has previously attended the site and is experienced in this type of project. Andy will be assisted by an OA North project assistant.

7.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis** (OA North project officer). Christine has extensive knowledge of finds from many periods, although she does have considerable experience with Roman finds, being involved with the excavations at Ribchester and at present with the Carlisle Millennium Project.

7.4 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North environmental manager). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.

8 INSURANCE

8.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

REFERENCES

English Heritage, 1991 *Management of Archaeological Projects*, second edition, London

SCAUM (Standing Conference of Archaeological Unit Managers), 1991 *Health and Safety Manual*, Poole

UKIC, 1990 *Guidelines for the Preparation of Archives for Long-Term Storage* London

UKIC, 1998 *First Aid For Finds*, London

APPENDIX 4: CONTEXT LIST

Context	Description	Thickness (max)
600	Brick wall aligned east-west, constructed from regular coursed red brick bonded with a whitish-grey mortar	1.30m
601	Crushed, loose brick rubble	0.10m
602	Cellar floor constructed from loose dark grey concrete	0.10m
603	Mid reddish-brown very loose silty-sand with very large sandstone blocks and wall sections <1.5m - backfill of cellar	1.40m
604	Drainage ditch aligned north-east to south-west which lies beneath ***602***. Backfilled with ***601***, and cut through ***605***	0.40m
605	Dark greyish-brown loose silty-sand with minimal inclusions - possible buried topsoil	0.50m
606	Light greyish-brown sandy-clay natural subsoil	
901	Crushed concrete – levelling hardcore layer	0.45m
902	Mid grey-brown moderately compact gritty clay – demolition layer	0.17m
903	Dark grey-brown moderately loose sitly-clay mixed with gravel – fill of ***904***	
904	Cut for services	
905	Brick wall aligned north/south	0.17m
906	Pinkish-brown compact/plastic clay – disturbed natural geology	0.9m+
907	Brick wall aligned north/south, constructed of varied bond red bricks with a soft yellow sand mortar	0.21m

APPENDIX 5: SUMMARY FINDS LIST

Context	Trench	Material	Category	Qty	Description	Date
903	9	Ceramic	Vessel	1	Body fragment black-glazed redware. Hard-fired laminated fabric, very coarse.	Mid-late eighteenth century?
903	9	Ceramic	Vessel	1	Body fragment black-glazed redware. Purplish hard-fired coarse but not laminated fabric.	Mid-late eighteenth century or later?
903	9	Ceramic	Vessel	1	Body fragment black-glazed redware. Bright orange soft-fired coarse but not laminated fabric.	Mid-late eighteenth century or later?
903	9	Ceramic	Vessel	1	Body fragment blue and white underglaze transfer-printed white earthenware dish.	Nineteenth century or later
903	9	Ceramic	Vessel	1	Concave plate rim fragment, salt-glazed earthenware. Slightly blackened, and with grey specks in glaze white earthenware plate or dish. Re-fired and discoloured.	Late eighteenth - early nineteenth century