



LAND AT WALTON HIGH SCHOOL, OXFORD ROAD, PENDLE, LANCASHIRE

Archaeological Evaluation



Oxford Archaeology North

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Bovis Lend Lease

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SUMMARY

A planning application (ref 13/06/0278) was submitted by Catalyst Education Ltd, acting on behalf of Lancashire County Council, for the demolition of Walton High School, Pendle, Lancashire (NGR centred SD 872 385) and the construction of a secondary community college to be known as Pendle Vale College. The proposed development shows that the area of a pedestrian entrance and the south-west corner of an all-weather pitch are to be situated over the former buildings of White Yates, a farmstead that appears on the Ordnance Survey (OS) First Edition maps of 1848 and 1893. Consequently, a condition of the planning consent was that an archaeological investigation must be undertaken prior to development to establish the archaeological significance of the site. An archaeological brief was issued by Lancashire County Archaeological Services (LCAS) detailing the required archaeological work. Oxford Archaeology North (OA North) was subsequently contracted by Bovis Lend Lease, acting on behalf of Catalyst Education Ltd, to excavate a single evaluation trench, measuring 10m x 2m, in the area previously occupied by White Yates in compliance with this brief.

Two layers of levelling deposits, **105** and **106**, were identified across the area of the evaluation trench, dating to the twentieth century. Directly below these deposits glacial till, **107**, was located that appeared to have been disturbed by twentieth century landscaping. A single cess pit was identified at the south-western end of the trench, dating to the nineteenth or twentieth centuries; it was at least 1.2m in depth. From mapping evidence, it would appear that the cess pit, if it belonged to an outside toilet, would actually be positioned within the probable dwelling of White Yates. It could also be speculated that this cess pit was associated with the allotments that later replaced White Yates in the first half of the twentieth century, located on the land now occupied by Walton High School.

The results of the evaluation suggest that any structural remains of White Yates have been destroyed by twentieth century landscaping of the site, presumably associated with the construction of Walton High School. However, it is possible that archaeological features of some depth, such as rubbish pits, may survive elsewhere within the area.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to express thanks to Victor Jackson of Bovis Lend Lease for commissioning the work, and to Simon Pratt and Mark Sandiford of Bovis Lend Lease for their co-operation during the course of the project.

The fieldwork was undertaken by Andy Bates and Kathryn Levey. All finds were assessed by Chris Howard-Davis. The drawings were compiled by Marie Rowland, and the report written by Andy Bates. Emily Mercer managed the project, and also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 A planning application (ref 13/06/0278) has been submitted by Catalyst Education Ltd, acting on behalf of Lancashire County Council, for the demolition of Walton High School, Oxford Road, Pendle, Lancashire (NGR centred SD 872 385; Fig 1) and the construction of a secondary community college to be called Pendle Vale College. The proposed development shows the area of a pedestrian entrance and the south-west corner of the all-weather pitch to be situated over the former buildings of White Yates, a farmstead shown on the Ordnance Survey (OS) maps 1848 (First Edition 6"; Fig 3) and 1893 (First Edition 25"; Fig 4). Consequently, a condition of the planning consent required an archaeological investigation to be undertaken prior to development in order to assess the archaeological significance of the site. Bovis Lend Lease, acting on behalf of Catalyst Education Ltd, requested a formal brief (*Appendix 1*) be issued by Lancashire County Archaeological Services (LCAS) for the required archaeological work. This brief included a visit to the Historic Environment Records (HER) and the excavation of a single 10m by 2m evaluation trench targeting the area of impact on the possible remains of White Yates. Oxford Archaeology North (OA North) was invited to submit proposals for the work (*Appendix 2*), and were commissioned to undertake the work in July 2006.
- 1.1.2 This report sets out the results of the work, incorporating data extracted from the HER to provide an historical context. The concluding chapter includes a discussion of the results, assesses the archaeological value of the site, and the impact of the development on the identified archaeological remains.

1.2 SITE LOCATION AND GEOLOGY

- 1.2.1 Walton High School is bound to the south-west by Walton Lane, to the south by a cemetery, to the north-west by Oxford Road and to the north-east by Hollins Road (Fig 1). The location of the evaluation trench is in the southern corner of the playing field containing the current all-weather football pitch. The area is one of late nineteenth to twentieth century urban development subsumed within the industrial town of Nelson.
- 1.2.2 The site is situated on the Lancashire Coal Fields, which date to the Westphalian period (310-300 million years ago) of the Upper Carboniferous. Underlying the coal measures is Millstone Grit, also of the Upper Carboniferous, formed in the Numurian period (327-310 million years ago; Edwards and Trotter 1954). The overlying drift geology comprises glacial till with some areas of sand west of Blackburn (Countryside Commission 1998). The soils, as mapped by the Ordnance Survey Soil Survey of England and Wales (1983), are predominantly of the Brickfield 3 series, which are cambic stagnogley soils, deriving from the underlying geology. In addition, there are

small areas of the Wallsea 2 series, a pelo-alluvial gley, essentially alluvial in nature (*ibid*).

1.3 HISTORICAL BACKGROUND

- 1.3.1 The nineteenth century town of Nelson lies within the historical township of Marsden, itself split into Great Marsden and Little Marsden (Farrer and Brownbill 1912, 536-41). At the centre of Great Marsden was Marsden Hall, which is still extant and located *c* 1km to the south-west of Walton High School, although the land historically attached to the hall extended to within 350m of the school. In 1894 the township was dissolved, with land divided between the new townships of Colne, Brierfield and Nelson (*ibid*).
- 1.3.2 Nelson took its name from the famous admiral of the Battle of Trafalgar of 1805 (Smout 1999, 94). The town grew up around a crossing in the roads between Burnley and Colne and the road north through Barrowford, which was centred around the Lord Nelson Inn that had existed from at least 1818 (Farrer and Brownbill 1912, 540-1). Nelson was one of the expanding east Lancashire industrial towns associated with the textile industry, its growth stimulated by the coming of the railway and canal networks (Smout 1999, 94). In 1864 a local board was formed for the district of Nelson, and in 1890 a charter on incorporation was granted under which Nelson was governed by a Mayor, six aldermen and 18 councillors (Farrer and Brownbill 1912, 540-1). The extension of the Lancashire and Yorkshire Railway Company Accrington to Burnley line, from Burnley to Colne, was opened in February of 1849, which passes through Nelson and runs to the north-west of Walton High School. The Leeds and Liverpool Canal also runs through Nelson, but some distance to the west of Walton High School. The canal was opened in Leeds in 1777, although the work on its deviation south of the River Calder into the Nelson and Burnley districts did not begin until the 1790s (Clarke 1990, 85-100).
- 1.3.3 No archaeological sites are known within the immediate vicinity of Walton High School (*c* 500m) that pre-date the post-medieval period. However, it could be speculated that White Yates farmstead, which would have been associated with an agricultural as opposed to industrial landscape, has earlier origins. White Yates is marked on the First Edition OS map of 1848 (6":1 mile) and the First Edition OS map of 1893 (25":1 mile), but by the 1912 Second Edition OS map White Yates had been demolished and no longer existed. The terraced houses on the opposite side of Walton Lane had been built by the OS map of 1912. The area of the present school field had become allotments by the Third Edition OS map of 1932, which were still visible on a 1963 aerial photograph of the site (13/9261).
- 1.3.4 Much of the development of this area of Nelson dates from the late nineteenth to early twentieth century. A number of cotton mills are located within the immediate vicinity of the Walton High School from this period. Three of these, Glenfield Mill (PRN 21939; NGR SD 87060 38180), Malvern Mill (PRN 21944; NGR SD 86980 38250) and Lee Bank Mill (PRN 25274; NGR SD 86879 38689), were steam powered cotton weaving mills, the earliest

being Glenfield Mill built between 1890 and 1910. The mill latest in the immediate vicinity to be constructed was Boundary Mill (PRN 21913; NGR SD 86960 38850) a taper and sizing mill built in 1923 to serve the surrounding textile industry.

- 1.3.5 Adjacent to Walton High School, to the east side on Burnley Road, is a cemetery. The cemetery chapel is a single-storey stone-built structure constructed in 1895 on land purchased in 1892 (PRN 17889). The cemetery has an ornate wrought iron gateway, with moulded sandstone piers (PRN 17890).

2. METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 The archaeological evaluation was conducted in adherence with the project design (*Appendix 2*). The work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 BACKGROUND COLLATION

- 2.2.1 Several sources of information were consulted, in accordance with the project design. The study area comprised a 0.5km radius centred on Walton High School. The principle source of information was the County Historic Environment Record, with a brief visited made to the County Records Office to consult historic maps. The resultant information was intended to provide an historical context to the evaluation investigation.
- 2.2.2 ***Lancashire County, Historic Environment Records (HER):*** the Lancashire County HER, formerly the Sites and Monuments Record (SMR), held in Preston was consulted. The HER is a database of all archaeological sites in Lancashire, and is maintained by Lancashire County Council. Aerial photographs of each site are also held by the HER and were consulted. Secondary sources held by the HER were also located.
- 2.2.3 ***Lancashire County, Records Office (CRO(L)):*** the County Records Office in Preston was visited to examine the Ordnance Survey maps relating to the study area.

2.3 EVALUATION TRENCH

- 2.3.1 A single trench, 10m long by 2m wide, was positioned in the southern corner of the current playing field, on the western side of the development area. It was positioned to include the north-western exterior wall of the former White Yates dwelling where, if surviving, it would be impacted upon by ground works associated with the proposed development. The trench was excavated using a JCB mechanical excavator fitted with a 1.6m wide toothless ditching bucket, under the supervision of an OA North archaeologist. The trench was excavated in a stratigraphical manner down to either the first archaeological deposits or natural glacial till, with all spoil scanned for artefacts. Any further excavation was completed manually.
- 2.3.2 The recording comprised a full description and preliminary classification of the deposits and materials revealed on OA North *pro-forma* sheets. A plan was produced showing the location of the trench, with representative sections being drawn at a scale of 1:10 or 1:20. A photographic record using monochrome and colour slide formats was maintained.

- 2.3.3 The position of the trenches was located with a total station tied into the Ordnance Survey grid. This was incorporated with digital map data in a CAD system to create the location map.
- 2.3.4 All finds recovered were bagged and recorded by context number; all significant finds were retained and have been processed and temporarily stored according to standard practice (following the United Kingdom Institute for Conservation guidelines (UKIC 1990)).

2.4 ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA, English Heritage (1991) and UKIC (1998) guidelines. The paper and digital archive will be deposited in the Lancashire Records Office, Preston, with a copy to the Lancashire Historic Environment Record (HER). The material archive (artefacts and ecofacts) will be deposited with the Museum of Lancashire in Preston.

3. EVALUATION RESULTS

3.1 INTRODUCTION

- 3.1.1 A single evaluation trench was excavated over the site of the former White Gates farmstead (Figs 2-5), a brief description of which is given below. A context list with more detailed descriptions can be found in *Appendix 3*. The finds are also discussed, with a summary list in *Appendix 4*.

3.2 RESULTS

- 3.2.1 The excavated trench measured 10m long and 2m wide, orientated in a north-west/south-east direction, and reached a maximum depth of 1.1m (Fig 5; Plate 1). Its excavation proceeded through 0.2m of topsoil, **104**, followed by two levelling layers, **105** and **106**, used during the landscaping of the area. The upper levelling layer, **105**, was formed predominantly by re-deposited glacial till, and measured 0.46m thick. The lower layer, **106**, comprised imported dark grey sediment measuring 0.62m thick, containing pottery sherds and bricks (Fig 5; Plate 2). These deposits are twentieth century in date, and in places it is clear that the landscaping of the area has truncated the underlying glacial till.
- 3.2.2 A single feature was found at the south-eastern end of the trench, cess pit **103**. It measured a minimum of 1.12m in length, continuing beyond the south-eastern end of the trench, and 1.5m wide (Fig 5; Plate 3). The pit reached a depth of at least 1.2m, but could not be completely excavated due to health and safety constraints. Three deposits were recorded in section (Fig 5), a lower cess deposit, **102**, at least 0.6m thick, above which a small deposit of redeposit glacial till, **108**, measured 0.1m thick. The upper fill of the feature comprised a second cess deposit, **101**, 0.43m thick. No lining to the pit was present. Finds from both deposits date from the late nineteenth to twentieth century (see *Section 3.3*, below).

3.3 FINDS

- 3.3.1 In all, 30 fragments of artefacts were recovered during the investigation, including a range of material, including pottery, glass, ceramic building material, and small fragments of wood. The fragments are all of small to medium size, and unabraded. The distribution of finds within the trench can be seen in Table 1 below.
- 3.3.2 The finds are all of very late date, with almost nothing earlier than the end of the nineteenth century. The pottery is largely confined to kitchenwares in black-glazed fabrics and several fragments of a single grey stoneware jar of common form. This material cannot be dated with any precision. In addition, in leveling layer **106** were fragments of a blue and white transfer-printed plate, and a blue feathered-edge plate, both in whiteware and thus most likely

to be of mid nineteenth century date. The general date range of the pottery is reinforced by the presence of late nineteenth to twentieth century vessel glass and sheet window glass. However, the cement-based building material and machine-made bricks from levelling layer **106** both suggest a twentieth century date.

- 3.3.3 The cess deposits **101** and **102** contained dry wood fragments suggesting that the cess pit was not of any great age. The presence of aluminium in **102** also points to a twentieth century date and a drawn wire nail, also from **102**, is thought to be a similar age.
- 3.3.4 A copper alloy link from the topsoil **104** could be a simple buckle, although there is no sign of a central bar that would confirm identification. Again it is unlikely to be of any early date.

Context	Pottery	Glass	Metal	Wood	Other	Totals
101	8	1	0	1	0	10
102	0	0	2	1	0	3
104	3	5	1	0	0	9
106	4	1	0	0	3	8
<i>Totals</i>	15	7	3	2	3	30

Table 1: Distribution of finds

4. DISCUSSION

4.1 CONCLUSIONS

- 4.1.1 No structural evidence of the White Yates farmstead was located within the evaluation trench, and the area appears to have been landscaped in the twentieth century. It is thought that the landscaping activity has removed previous deposits and the foundations of White Yates, with the level of disturbance indicated by the disturbance of the glacial till. This is most likely to date to the construction of the school in order to create the playing field. The cess pit marks the position of an outside toilet, but its location would be within the structure of White Yates as suggested by historical maps. It is possible that this feature post-dates the demolition of White Yates, and dates from the time the land was occupied by allotments, subsequently sealed below the levelling deposits. Alternatively, the position of the buildings as indicated by the First Edition OS map of 1893 is slightly different when aligned with modern mapping, and this position is therefore outside the farm buildings.

4.2 IMPACT

- 4.2.1 The structure of White Yates appears to have been destroyed by twentieth century landscaping of the site, which in places has truncated the glacial till subsoil. Therefore, it is thought that the proposed development in the area of the evaluation trench will have limited to no effect on archaeological remains. However, there remains the possibility of rubbish pits or other deeper cut features associated with the farmstead, surviving at depth below the level of truncation associated with the construction of the Walton High School playing field.

5. BIBLIOGRAPHY

5.1 CARTOGRAPHIC SOURCES

Ordnance Survey, 1848 *Lancashire Sheet 64*, first edition 1:10560

Ordnance Survey, 1893 *Lancashire Sheet LVI.03*, first edition 1:2500

Ordnance Survey, 1912 *Lancashire Sheet LVI.03*, second edition 1:2500

Ordnance Survey, 1932 *Lancashire Sheet LVI.03*, first edition 1:2500

Ordnance Survey, 1983 *Soil Survey of England and Wales: Soils of Midland and Western England*

5.2 LANCASHIRE HISTORIC ENVIRONMENT RECORDS

PRN 17889, Cemetery Chapel, Walton Lane, Nelson

PRN 17890, Gateway and railings of cemetery, Walton Lane, Nelson

PRN 21450, Well

PRN 21931, Boundary Mill, Hacking Street, Nelson

PRN 21939, Glenfield Mill, Glenfield Road, Nelson

PRN 21944, Malvern Mill, Waterford Street, Nelson

ELA 721, Lee Bank Mill, Pinder Street, Nelson

13/9261 Aerial Photograph 2nd June 1963

5.3 SECONDARY SOURCES

Clarke, M, 1990 *The Leeds and Liverpool Canal: A History and Guide*, Leyland

Countryside Commission, 1998 *Countryside Character Volume 2: North West*, Cheltenham

English Heritage, 1991 *Management of Archaeological Project*, 2nd edn, London

Edwards, W, and Trotter, FM, 1954 *British Regional Geology: Pennines and the Adjacent Areas*, London

Farrer, W, and Brownbill, D (eds) 1912 *The Victoria County History of Lancashire*, **6**, Newcastle

Smout, M, 1999 *Towns and Villages of Britain: Lancashire*, Wilmslow

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

UKIC, 1998 *First Aid for Finds*, London

6. ILLUSTRATIONS

6.1 FIGURES

Figure 1: Site location

Figure 2: Trench location plan

Figure 3: Extract from First Edition Ordnance Survey Map, 1848, 1:10560, showing White Yates

Figure 4: Extract from First Edition Ordnance Survey Map, 1893, 1:2500, showing White Yates

Figure 5: Plan of evaluation trench and sections

6.2 PLATES

Plate 1: View of trench, facing south-east

Plate 2: South-west-facing section of trench

Plate 3: South-east end of trench showing cess pit **103**

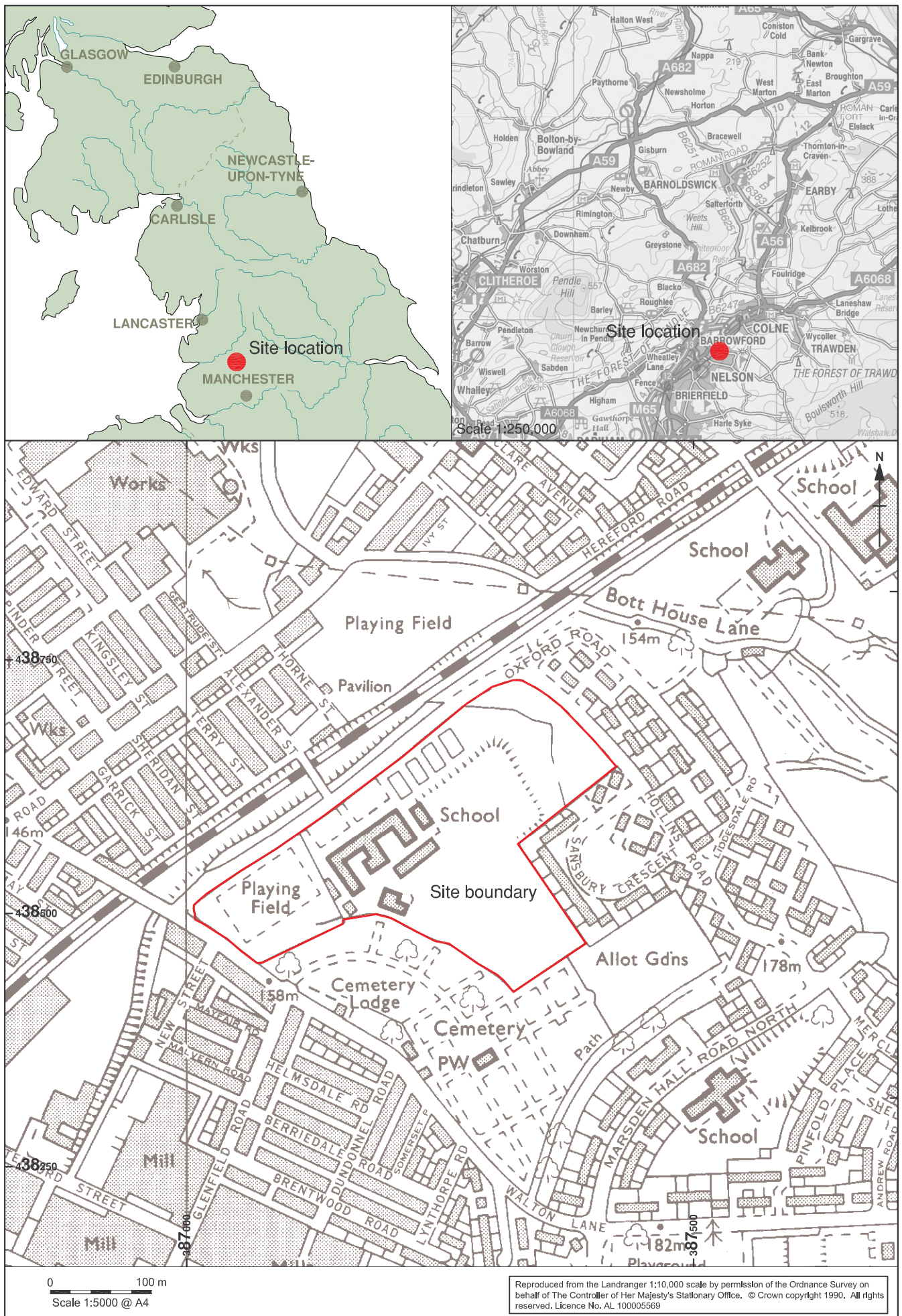


Figure 1: Site Location

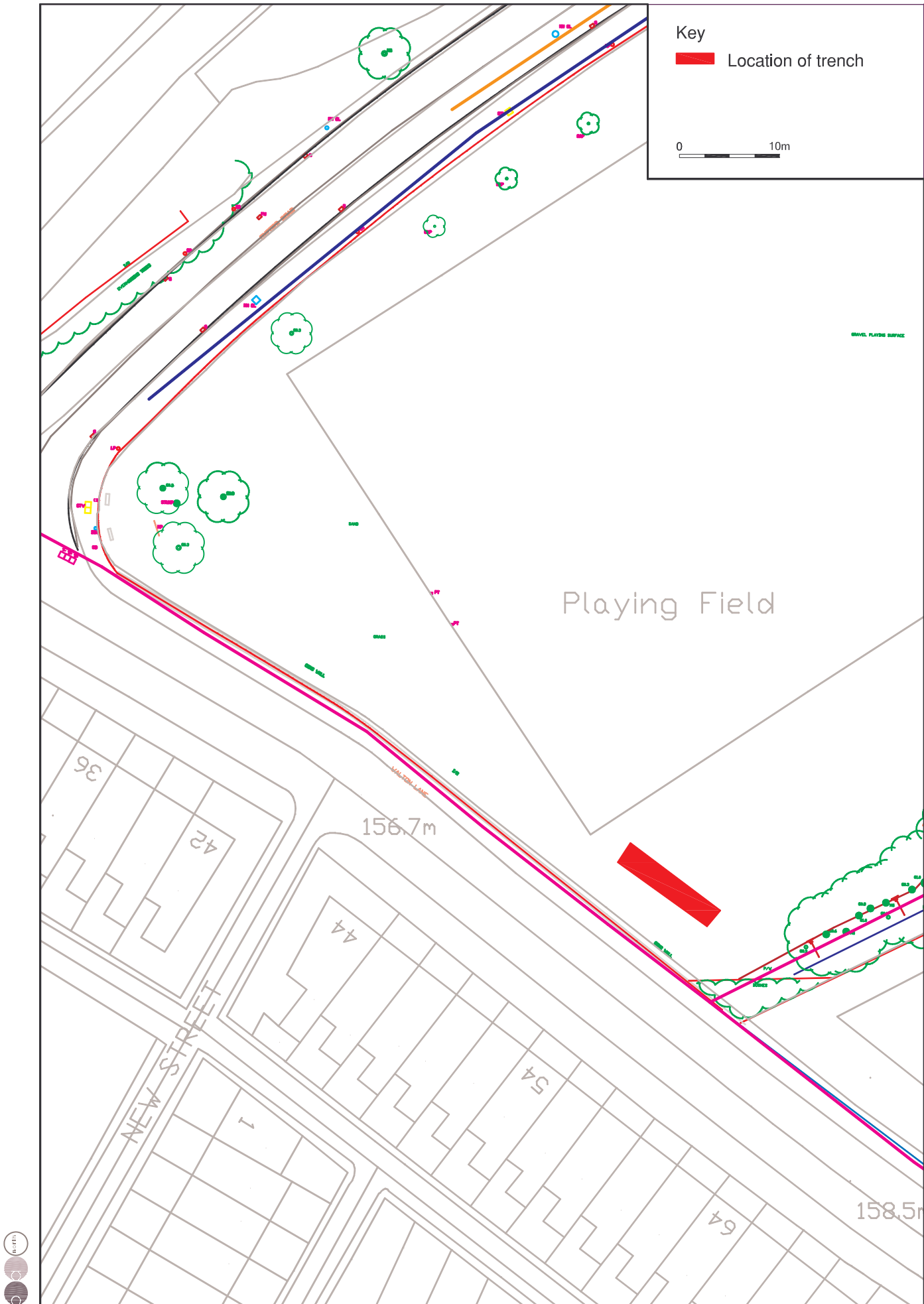


Figure 2: Trench location plan



Figure 3: Extract from First Edition Ordnance Survey Map, 1848, 1:10560, showing White Yates

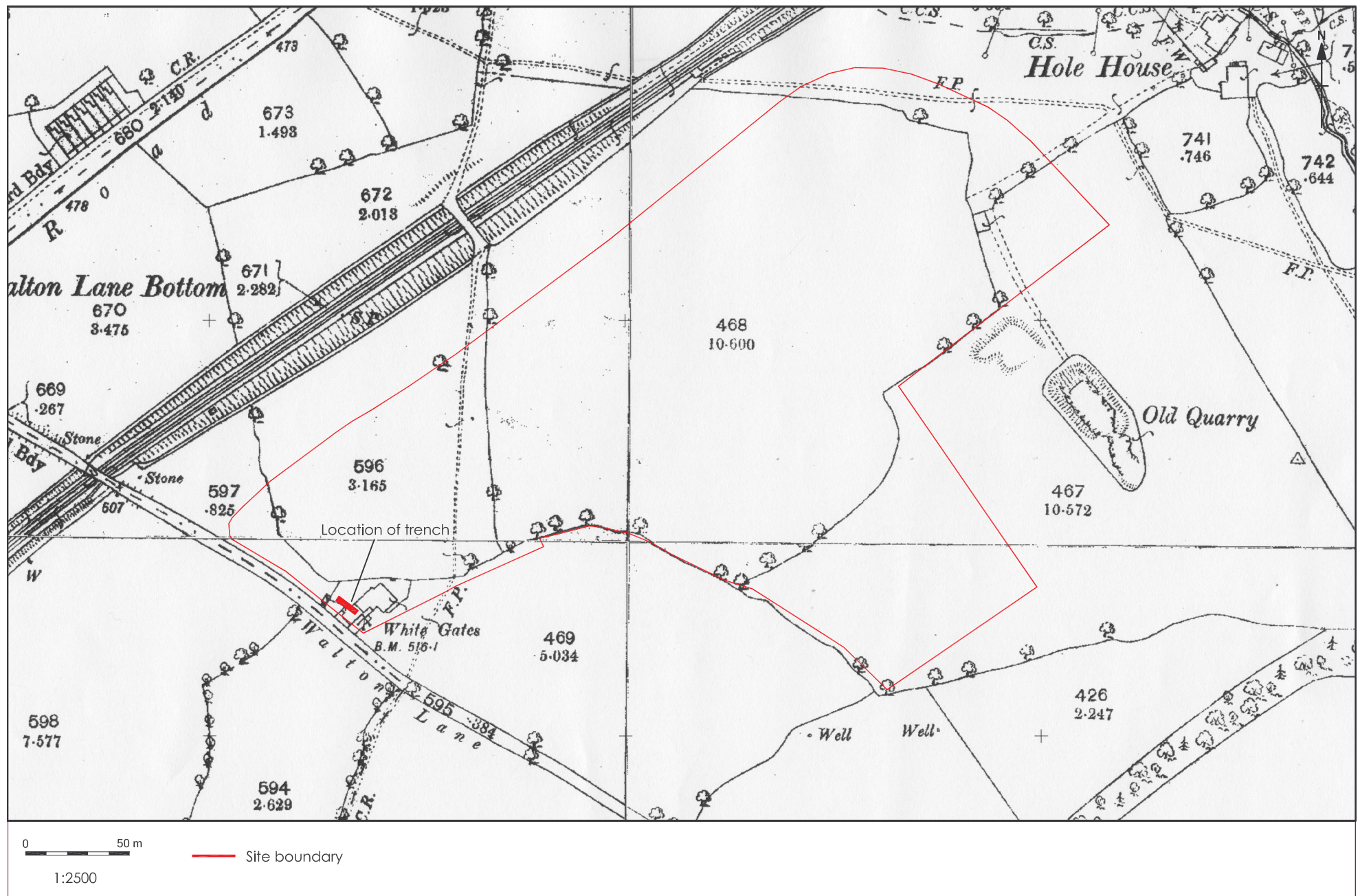


Figure 4: Extract from First Edition Ordnance Survey Map, 1893, 1:2500, showing White Yates



Plate 1: View of trench facing south-east



Plate 2: South-west facing section of trench



Plate 3: South-east end of trench showing cess pit *103*

APPENDIX 1: PROJECT BRIEF

APPENDIX 2: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 Catalyst Education Ltd, acting on behalf of Lancashire County Council, have submitted a planning application (ref: 12/06/0354) for the demolition of Gawthorpe High School, Burnley Road, Padiham, Lancashire (NGR centred SD 803 335). The proposals are to construct a new community college (Shuttleworth). The Local Planning Authority (LPA), Burnley Borough District Council, have been advised by Lancashire County Archaeology Service (LCAS) that there is the potential for archaeological remains to be impacted upon by the proposed works, and that a programme of archaeological evaluation be undertaken to assess the requirements for any additional work prior to the redevelopment.
- 1.1.2 The site is bound to the north-west by the boundary for Gawthorpe Hall, which is Grade II listed on English Heritage's Register of Parks and Gardens of Historic Special Interest. Gawthorpe Hall was built between 1600 and 1605 for the Shuttleworth family, who by then had been at Gawthorpe for over 200 years. Between 1850 and 1852 the Hall was restored "in a sympathetic Elizabethan style" for Sir James Shuttleworth, by leading architect Sir Charles Barry, who also designed the Houses of Parliament. The Shuttleworth family owned Gawthorpe until 1970, when the house and grounds were given to the National Trust, but it is now leased to Lancashire County Council.
- 1.1.3 The proposals for redevelopment show a road and turning circle, forming a drop-off zone, which are to be situated on the site of structures associated with the former Gawthorpe Colliery (SMR PRN 6800). The colliery was observed on the Ordnance Survey 1st Edition map of 1844.
- 1.1.4 Bovis Lend Lease (hereafter the 'client'), acting on behalf of Catalyst Education Ltd, requested LCAS prepare a formal brief for the required archaeological work. Accordingly, Bovis Lend Lease have invited Oxford Archaeology North (OA North) to submit proposals for a limited evaluation, to include the excavation of a trial trench. The following project design has been prepared and should be read in accordance with the brief issued by LCAS.

2. OBJECTIVES

- 2.1 The assessment aims to evaluate archaeological deposits associated with the former Gawthorpe Colliery that may be threatened by the proposed development, in order to determine their presence, extent, nature and significance. To this end, the following evaluation programme has been designed. The results will provide the LPA with the necessary information to determine the outcome of the planning application, as to whether further mitigation works are required prior to, or during, the development. The required stages to achieve these ends are as follows:
- 2.2 **SMR Visit:** to obtain an overview of the background information regarding the archaeological and historical context of the site, which will form the knowledge base for the evaluation trenching.
- 2.3 **Archaeological Evaluation:** to implement a programme of trial trenching examining one trench measuring 10m x 2m within the proposed turning area and drop-off zone.
- 2.4 **Report and Archive:** the archaeological investigation will culminate with a written report, which will aim to assess the significance of the data generated by this programme within a local and regional context. It will present the results of the evaluation and would make an assessment of the archaeological potential of the area.

3. METHOD STATEMENT

3.1 INTRODUCTION

- 3.1.1 The following work programme is submitted in line with the objectives summarised above.

3.2 **SMR VISIT**

- 3.2.1 The first stage of the archaeological investigation will involve consultation of the Lancashire Sites and Monuments Record (SMR) in Preston and a review of sources held in the OA North library. The information will provide the basis of archaeological and historical knowledge for the site supervisor, and only relevant material will be incorporated into the final evaluation report.

3.3 **EVALUATION**

- 3.3.1 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 and provide information concerning the threatened available area.
- 3.3.2 **Trench configuration:** the evaluation is required to examine one trench measuring 2m in width (the approximate width of a typical excavator bucket) and 10m in length. The location of this trench will be situated within the proposed drop-off zone and turning circle for buses and coaches, and will be agreed with LCAS prior to the fieldwork commencing.
- 3.3.3 A contingency is available for additional trenching measuring up to 10m². This is dependant on the initial evaluation trenching results, and its use will be decided by LCAS.
- 3.3.4 Trenches will be located by use of GPS equipment, which is accurate to +/- 0.25m, or Total Station. The site grid is to be accurately recorded with respect to the National Grid. Altitude information will be established with respect to Ordnance Survey Datum.
- 3.3.5 **Methodology:** the topsoil will be removed by machine (fitted with a toothless ditching bucket) under archaeological supervision, and will be removed in successive spits of a maximum 0.2m thickness to the surface of the first significant archaeological deposit (pre nineteenth century). This deposit will then be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features.
- 3.3.6 Any concrete surfaces that require breaking out, will be done so under OA North supervision, with a breaking arm mounted on the mechanical excavator. A limited amount of time could be accommodated for this work in the schedule. However, should the concrete surfaces be extensive, heavily reinforced or very thick this is likely to take much longer than anticipated and may be subject to a small variation in the costing to cover any additional plant hire or staff expenses.
- 3.3.7 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 or will be subject to a variation.
- 3.3.8 All features of archaeological interest will be investigated and recorded unless otherwise agreed by the LCAS. However, they will not be entirely removed, unless unavoidable, in an attempt to preserve such deposits *in situ*. A 50% sample of any features identified is expected to be half-sectioned and the depths of archaeological deposits assessed. Modern artefacts are to be noted but not retained.
- 3.3.9 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*.
- 3.3.10 **Scanning of spoil heaps:** the spoil will be scanned by a member of the OA North field team using a metal detector for non-ferrous metal artefacts.
- 3.3.11 **Recording:** 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.

- 3.3.12 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.
- 3.3.13 Plans must include OD spot heights for all principal strata and any features.
- 3.3.14 The stratigraphy of each trench will be recorded even when there are no archaeological deposits identified. In such cases, at least one long section of each trench will be recorded. All sections will contain heights OD.
- 3.3.15 **Reinstatement:** based on current information supplied by the client it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled so that the topsoil is laid on the top, and the ground will be roughly graded with the machine. Should there be a requirement by the client other than that stated this may involve recosting.
- 3.3.16 **Fencing/hoarding requirements:** it is assumed that the client will advise on the arrangements/requirements for the site to be protected from public access. The trench should be opened and backfilled on the same day, ensuring that there is no deep excavation open overnight. However, should heras fencing or similar be required by the client during the daytime excavation this has been costed as a contingency item.
- 3.3.17 **Environmental Sampling:** deposits will be sampled and assessed for their potential for palaeoenvironmental analysis. 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). It may be necessary for OA North's environmental manager to attend site to discuss the sampling strategy, depending on the deposits, and request advice from English Heritage's Regional Science Advisor.
- 3.3.18 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. This will be undertaken in accordance with English Heritage Guidelines (2002).
- 3.3.19 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. It will also consider the potential for the dating of peat deposits and requirements for any radiocarbon and archaeomagnetic dating.
- 3.3.20 The costs for the palaeoecological assessment are defined as a contingency and will be called into effect if suitable deposits are identified.
- 3.3.21 **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.
- 3.3.22 **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. LCAS 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. The cost of removal or treatment will be agreed with the client and costed as a variation.
- 3.3.23 **Treatment of finds:** all identified finds and artefacts will be retained, excluding modern material, 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.

- 3.3.24 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. They will be assessed in terms of the potential for further investigation and preservation needs.
- 3.3.25 Only those finds that are of a quality worthy of display will be fully conserved, but metalwork and coinage from stratified contexts may be X-rayed. Any conservation requirements will be discussed with the client and costed as a variation.
- 3.3.26 **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, which may require costing as a variation in discussion with the client.
- 3.3.27 **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 charged in agreement with the client.
- 3.3.28 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.
- 3.3.29 **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 plant traffic to the site.
- 3.4 **REPORT AND ARCHIVE**
- 3.4.1 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client. A digital copy of the report will be supplied as a pdf on CD ROM to the SMR held by LCAS within eight weeks following the completion of the fieldwork. However, this may need to be revised in agreement with LCAS should any specialist reports be outstanding. The report will include;
- a site location plan related to the national grid
 - a front cover to include the planning application number and the NGR
 - the dates on which the fieldwork was undertaken
 - a concise, non-technical summary of the results
 - an explanation to any agreed variations to the brief, including any justification for any analyses not undertaken
 - a description of the methodology employed, work undertaken and results obtained
 - an historical and archaeological background
 - plans and sections at an appropriate scale showing the location and position of deposits and finds located
 - a list of and dates for any finds recovered and a description and interpretation of the deposits identified. This artefact analysis will include illustration of finds crucial to dating and interpretation
 - a description of any environmental or other specialist work undertaken and the results obtained
 - a copy of this project design and the LCAS project brief, and indications of any agreed departure from the details
 - the report will also include a complete bibliography of sources from which data has been derived.
- 3.4.2 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and

should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

- 3.4.3 **Archive:** 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). The project archive will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context.
- 3.4.4 The deposition of a properly ordered and indexed project archive in an appropriate repository is essential and archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Lancashire SMR (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the Lancashire Record Office in Preston.
- 3.4.5 All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists. The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner the Museum of Lancashire. LCAS will be notified of the arrangements made.

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 to LCAS, at the time of notification of commencement, and on request to all other interested parties.
- 4.2 Full regard will, of course, be given to all constraints (services etc) during the evaluation as well as to all Health and Safety considerations. As a matter of course the Unit uses a U-Scan device prior to any excavation to test for services, however, this is **only an approximate location tool**. Any drawings or knowledge of live cables or services that may pose a risk to OA North staff during evaluation **must be made known to the project manager** of OA North before site work. This will ensure the risk is dealt with appropriately.
- 4.3 Any known contamination issues or any specific health and safety requirements on site should be made known to OA North by the client or main contractor on site to ensure all procedures can be met.
- 4.4 Should areas of previously unknown contamination be encountered on site the works will be halted and a revision of the risk assessment carried out. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.

5 OTHER MATTERS

5.1 PROJECT MONITORING

- 5.1.1 Whilst the work is undertaken for the client, LCAS will be kept fully informed of the work and its results, and will be notified at least one week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with LCAS in consultation with the client.
- 5.1.2 The Museum of Lancashire's officer, Edmund Southworth, will also be notified of the start date of the fieldwork in writing.

5.2 WORK TIMETABLE

- 5.2.1 **SMR Visit:** one day will be required to undertake this element.
- 5.2.2 **Evaluation Trenching:** approximately one day will be required to complete this element.
- 5.2.3 **Report:** the report and archive will be produced following the completion of all the fieldwork. The final report will be available within four weeks of completion of the fieldwork, and the archive deposited within six months.

5.3 INSURANCE

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

6. STAFFING

- 6.1 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.
- 6.2 The evaluation will be supervised by either an OA North project officer or supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.
- 6.3 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 finds manager). 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.
- 6.4 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.

REFERENCES

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

English Heritage, 2002 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*,

SCAUM (Standing Conference of Archaeological Unit Managers), 1997 *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 3: CONTEXT LIST

Context	Description	Interpretation
101	Fill of 103 . A light to mid-grey sandy silt cess, 0.30m thick.	Cess
102	Fill of 103 . A mid-grey sandy-silt cess, a minimum of 0.96m thick.	Cess
103	Sub-rectangular pit, measuring a minimum of 1.12m in length by 1.5m wide and a minimum of 1.2m deep. The feature had straight vertical sides, but was not completely excavated due to health and safety constraints.	Cess pit
104	A very dark grey fine sand-silty-clay, with less than 1% small sub-rounded stone inclusions, 0.20m thick.	Topsoil
105	A mid-orangey grey clay, with lenses of mid-grey clay, containing less than 1% small stone inclusions, 0.46 thick. Redeposited clay till.	Levelling layer
106	A very dark grey coarses sand silty clay with one 1% to 10% small sub-rounded and sub-angular stone inclusions, 0.62m thick. Imported sediment used to level area.	Levelling layer
107	A dark orange grey clay.	Glacial till
108	Fill of 103 . A dark orange grey clay, 0.10m thick.	Redeposited glacial till.

APPENDIX 4: FINDS CATALOGUE

Ctxt = context number; Cat = Category

Ctxt	Material	Cat	No.	Description	Date
101	Ceramic	Vessel	1	Self-glazed redware base, large storage	Late nineteenth century-twentieth century
101	Ceramic	Vessel	7	Joining fragments grey stoneware jar	Late nineteenth century-twentieth century
101	Glass	Vessel	1	Colourless bottle, screw thread	Twentieth century
101	Wood	Worked?	1		Not datable
102	Aluminium offcut		1	Small fragment of aluminium sheet. Probably an offcut	Twentieth century
102	Iron	Nail	1	Drawn wire nail	Late nineteenth century-twentieth century
102	Wood		1	Wood covered with corrosion products	Not datable
104	Ceramic	Vessel	1	Very hard-fired thick body fragment of black-glazed redware holloware (?cup)	?Nineteenth century
104	Ceramic	Vessel	2	Two joining fragments of black-glazed redware holloware (?cup)	?Nineteenth century
104	Copper	Buckle	1	Round-sectioned link, possibly an opened-up buckle. No sign of a central bar	Not datable
104	Glass	Vessel	3	Body fragments, colourless bottle (one vessel)	Twentieth century
104	Glass	Window	1	Colourless sheet glass	Twentieth century
104	Glass	Window	1	Slightly greenish sheet glass	Late nineteenth century-twentieth century
106	Ceramic	Brick	1	Brick, moulded and with well-marked frog	Late nineteenth century
106	Ceramic	Brick	1	Brick, moulded and with well-marked frog. One end pointed. Not voussoir	Late nineteenth century
106	Ceramic	Vessel	1	Body fragment garden ware	Late nineteenth century-twentieth century
106	Ceramic	Vessel	1	Blue feathered-edge whiteware plate	Late eighteenth century-mid nineteenth century
106	Ceramic	Vessel	2	Blue and white underglaze, transfer-printed plate	Late nineteenth century-twentieth century
106	Glass	Window	1	Colourless sheet glass	Twentieth century
106	Stone	Sheet	1	Small fragment cement/asbestos sheet	Twentieth century