

WALVERDEN WATER FLOOD ALLEVIATION SCHEME, NELSON, PENDLE, LANCASHIRE

Archaeological Watching Brief

Oxford Archaeology North



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SUMMARY

In December 2005, a series of exploratory groundworks were undertaken as part of the Environment Agency's development proposals for the Walverden Water Flood Alleviation Scheme, Nelson, Lancashire. Following communication between the Environment Agency and Lancashire County Archaeology Service (LCAS), LCAS requested that, in order to better inform any planning permission sought by the Environment Agency, that a programme of archaeological monitoring and recording should be undertaken during any groundworks along the route of the Walverden Water and Hendon Brook, which, in several locations, flows through areas of archaeological interest. Following submission of a project design to meet the requirements of LCAS, Oxford Archaeology North (OA North) were commissioned by the Environment Agency to undertake a watching brief between the 19th and 21st December 2005 on six exploratory geological test pits within three different locations along the Walverden Water and the Hendon Brook. These locations comprised Brook Street (SD 86425 37594), Glenfield Park (SD 87429 38120) and Marsden Park (87240 38102); boreholes were also sunk along the route of the culvert at Leeds Road, but the limited visibility afforded by these groundworks negated the requirement for archaeological monitoring. The groundworks were enacted by Norwest Holst, while the overall project was managed by Jacobs Babtie, on behalf of the Environment Agency.

No archaeological horizons were encountered within any of the excavated test pits. Those excavated through redeposited silt within the probably early nineteenth century Brook Street culvert revealed the concrete foundations of a redbrick wall that appeared to have been built within the culvert, and which may have replaced the original stone wall.

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ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Jo Green, Mike Maddocks and Philip Catherall of the Environment Agency for commissioning the project and Harvey Walsh of Jacobs Babtie for co-ordinating the work. OA North are also grateful to Mike Bridgeman, Ben Swallow, Nick Jewell and Mark Toye of Norwest Holst for their assistance on site and for providing information for the locations of the test pits and on the local geology.

The watching brief was undertaken by Stephen Clarke, who also wrote the report. The drawings were compiled by Christina Clarke. The project was managed by Stephen Rowland who also edited the report, together with Alan Lupton.

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1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 The Environment Agency (EA) is currently in the process of developing a Project Appraisal Report on the feasibility of a scheme of flood risk management works on the Walverden Water, and its tributary, the Hendon Brook, in Nelson, Lancashire (Fig 1). Although no formal planning application has been made for this scheme, Lancashire County Archaeology Service (LCAS) were consulted by EA regarding plans for the undertaking of a programme of exploratory geotechnical groundworks along the route of the Walverden Water and the Hendon Brook. An earlier desk-based assessment on the whole of the Walverden Water corridor, undertaken by Oxford Archaeology North (OA North), under their former guise as Lancaster University Archaeology Unit (LUAU 1995), had indicated the potential for archaeological material within the locations of the proposed groundworks. Accordingly, LCAS requested that an archaeological watching brief should be maintained during the excavation of any test pits associated with the specified groundworks, in order to record the presence or absence of any archaeological features. Following submission of a project design (Appendix 1) to meet LCAS requirements, OA North were commissioned by EA to undertake the watching brief.
- 1.1.2 The watching brief, which was co-ordinated by Jacobs Babtie on behalf of EA, was undertaken between 19th and 21st December 2005. The monitored groundworks were enacted by Norwest Holst in three areas along the routes of the Walverden Water and Hendon Brook (Fig 2), comprising Brook Street (SD 86425 37594), Glenfield Park (SD 87429 38120) and Marsden Park (87240 38102). Two service inspection pits were excavated at each location, with those at Brook Street dug by hand, the rest by mechanical excavator. Boreholes were also sunk along the route of the culverted Walverden Water at Leeds Road (SD 86158 37945), but the limited visibility afforded by these groundworks negated the requirement for archaeological monitoring. This report sets out the results of the watching brief in the form of a short document.

2. METHODOLOGY

2.1 **PROJECT DESIGN**

2.1.1 The LCAS-approved project design (*Appendix 1*) was adhered to in full and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 WATCHING BRIEF

- 2.2.1 Every effort was made to maintain close liaison between OA North staff and the site contractors, Norwest Holst, during the watching brief. The programme of field observation involved the examination and accurate recording of the location, extent and nature of any horizons exposed during the groundworks. Due consideration was given to the possible archaeological origin of each horizon and upcast spoil was carefully examined for the presence of any artefacts.
- 2.2.2 The recording, on OA North *pro-forma* sheets, comprised a full description and preliminary classification of horizons and structures revealed, and their accurate location in plan. Where appropriate, scaled sections were drawn. In addition, a photographic record in colour slide and monochrome formats was compiled.

2.3 ARCHIVE

2.3.1 A full project archive of the work undertaken has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive, along with a copy of the final report on the archaeological works, will be deposited in the Lancashire County Record Office in Preston. A copy of the report, including an index to the project archive, will be forwarded to the Lancashire Sites and Monuments Record, Preston.

3. BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

3.1.1 Nelson is a medium-sized town lying within the Pendle district of central western Lancashire, close to Burnley and the West Yorkshire county border (Fig 1). The Walverden Water flows *c* 2km north-westwards across Nelson from Walverden reservoir, to the south-east of the town, through to Pendle Water, to the north-west of Nelson. Brook Street lies to the centre of Nelson, just to the south of the main A682 Leeds Road and the railway station; Glenfield Park lies 0.75km to the north-east of Brook Street, while Marsden Park is approximately 200m north of Glenfield Park, close to the eastern edge of the town.

3.2 GEOLOGY

3.2.1 The solid geology of the Nelson area comprises mainly Lower Westphalian coal measures with overlying drift deposits of till and fluvial deposits, which occur in valley bottoms in particular (Countryside Commission 1998). The soils within the area of the present groundworks are classified as 'urban' by the Soil Survey of England and Wales (Ordnance Survey 1983).

3.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.3.1 *Introduction:* it is not the intention of this report to repeat detailed information readily available in other documents: a more complete historical background of the whole Walverden Water corridor can be found within the LUAU desk-based assessment of the area, undertaken in 1995 (LUAU 1995).
- 3.3.2 *Pre-Industrial:* although Mesolithic, Neolithic and Bronze Age activity is known within the wider area around Nelson, there is no evidence for such remains within the present proposed development site; Castercliffe Iron Age hillfort is the nearest prehistoric monument (LUAU 1995). Similarly, there is no evidence for Roman occupation within or around the present development area, but there are a number of coin hoards from nearby sites such as Castercliffe, Mytholmroyd, Casleshaw, Slack and Neton Kyme (*ibid*). Although the township of Marsden, within which the present proposed development area lies, is mentioned as early as 1177 and is sub-divided, by the route of the Walverden Water, into Great and Little Marsden in the later fifteenth century, it would appear to have remained a place of little consequence until the industrial revolution (*ibid*).
- 3.3.3 Documentary sources would suggest the presence of a number of medieval mills along the route of the Walverden Water itself. These include a mill on the site of the present Scholefield Mill, at the south-eastern end of Brunswick Street, about 800m south of Brook Street. The Bradley Mill, which lies on the Walverden Water at the eastern end of Cooper Street, about 600m north of Brook Street, would appear to have been extant until 1893 and is also thought to have medieval origins (LUAU 1995).

- Post-Industrial: the town of Nelson owes its origins to the industrial 3.3.4 revolution and, prior to 1835, did not exist. Within sixteen years of the sale for development of an empty block of land around a turnpike junction within the small township of Marsden, Nelson, named after a nearby inn, had acquired four cotton mills and 6000 inhabitants by 1851 (Crosby 1998). During the desk-based assessment (LUAU 1995), a number of post-medieval sites, including mills (and associated features such as ponds, sluices and races), cotton mills, foundries, cobbled stream beds and weirs were identified as lying within and around the course of the Walverden Water. In the Brook Street area, the culvert runs beneath the site of the Walverden Cotton Shed and also that of the Brook Street (now Primrose) Mill, again both shown on the 1891 OS map (ibid). Within the Leeds Road area, there remain a number of stretches of nineteenth century culverting, including cobbled bedding. Other important sites along the course of the Walverden Water include the Vale Street cotton shed and the Valley Mill, both dating to before 1891 and which straddle the Walverden Water culvert; St George's Hostel and an associated bridge, dating to the early twentieth century; and, in several places, the old course of the Walverden water before it was culverted (*ibid*).
- 3.3.5 Although over 1km to the north-west of Brook Street, the presence of site of a limekiln on Charles Street and shown on the 1777 map of George Hartley's properties, demonstrates the utilisation of the underlying limestone bedrock from the early industrial period, a feature which may have had much earlier predecessors scattered around the local landscape. The area of the Hendon Brook, including Marsden and Glenfield Parks, was not covered by the 1995 LUAU desk-based assessment, and the archaeological potential of this area is, therefore, unknown. There are, however, a cluster of, albeit undated, mills shown on the current Ordnance Survey map immediately to the north-west of Glenfield Park.

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4. RESULTS

4.1 BROOK STREET

- 4.1.1 *Introduction:* both of the Brook Street test pits, TP 101 and TP 102, were hand-excavated into an overgrown area which had developed within, the culvert against, the south-western face of a north-west/south-east aligned brick-built wall. This feature formed the north-eastern wall of the culvert and bounded, the south-western edge of a small carpark (Fig 2; Plate 1). The brick construction of this wall contrasted with the taller, stone-built wall on the opposite side of the culvert, which ran along the edge of Brook Street, and it is possible that this brick wall replaced an original stone-built culvert wall. Both test pits were located close together to the north of Brook Street's intersection with Chapel House Road and to the south of the Primrose Mill footbridge.
- 4.1.2 **Test Pit 101:** TP101 was aligned north-west/south-east and measured 0.85m x 0.5m with a maximum depth of 0.75m. The stratigraphy within the test pit comprised a 0.75m deep layer of blackish-brown friable sandy-clay gritty soil with inclusions of bricks and small-to-medium sub-rounded stones. Below this layer of seemingly re-deposited soil was the concrete base of the brick-built wall. This base extended 0.6m from the edge of the wall, rendering further excavation impossible. No archaeological features were revealed and no artefacts were found
- 4.1.3 **Test Pit 102:** TP 102 was excavated just to the south-east of, and on the same alignment as TP 101. TP 102 measured 0.75m x 0.5m, and was excavated to a maximum depth of 0.7m. The exposed stratigraphy comprised a mid-brown sandy-clay soil with 10% inclusions of small-to-medium sub-rounded stones and broken brick, contaminated with waste oil (Plate 2). As in TP 101, the concrete base of the adjoining brick wall was revealed at 0.7m depth, precluding further excavation. No archaeological features were revealed and no artefacts were found.

4.2 GLENFIELD PARK

- 4.2.1 *Introduction:* the Hendon Brook runs overland through Glenfield Park for approximately 150m on an east/west alignment, before dipping below the modern ground surface within the western part of the park. The test pits in this area, TP 108 and TP 109, were both excavated by a mechanical excavator using a toothed bucket on steeply rising ground either side of the banks of the Hendon Brook (Plate 3).
- 4.2.2 **Test Pit 108:** TP 108 was excavated 3m south of the brook on a northwest/south-east alignment and measured 1.8m x 1.1m with a maximum depth of 1.2m. The revealed stratigraphy consisted of a layer of topsoil comprising blackish-brown friable sandy-silty-clay, 0.1m in depth. The underlying subsoil, 1.1m thick, consisted of a sandy-gravelly-clay with inclusions of 40% small-to-medium sub-angular limestone pebbles for the first 0.3m but, beyond this depth, became increasingly dominated by weathered millstone grit. The

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4.2.3 *Test Pit 109:* TP109 was excavated to the north of the brook on a north-west/south-east alignment and measured 0.85m x 0.5m with a maximum depth of 0.75m. The section revealed a 0.5m deep mid-brown topsoil of friable sandy-clay over a subsoil of orange-brown firm clay with 10% inclusions of small sub-angular stones. No archaeological features were revealed.

4.3 MARSDEN PARK

- 4.3.1 *Introduction:* the Hendon Brook runs for approximately 150m across Marsden Park on a rough east/west alignment. Test Pits 112 and 113 were excavated into steeply-rising wooded ground by a mechanical excavator using a 0.8m wide toothless ditching bucket (Plate 5).
- 4.3.2 *Test Pit 112:* TP112 was on a north-west/south-east alignment, measured 1.8m x 1m and was dug to a maximum depth of 0.8m, 2.5m north of the brook bank. The exposed section revealed a blackish-brown friable loamy soil with 20% inclusions of small sub-angular stones and the occasional medium-to-large limestone boulder. Below this layer was the millstone grit bedrock. No archaeological features were revealed.
- 4.3.3 **Test Pit 113:** TP113 was on a north-west/south-east alignment 20m west of Test Pit 112, measured 1.5m x 1m and was dug to a maximum depth of 2m. The section revealed a blackish-brown friable loamy soil 0.05m in depth. Below this topsoil was a layer of firm yellowish-brown sandy-clay with the occasional small sub-rounded stone. The millstone grit bedrock was exposed at a depth of 2m and no archaeological features were encountered.

5. DISCUSSION

5.1 CONCLUSION

- 5.1.1 The concrete foundations contacted by the test pits excavated within the Brook Street Culvert are unlikely to be original features of what would appear to be an early twentieth century culvert: the material is of the wrong type (brick and concrete rather than stone) and, more importantly, the original foundations of the culvert wall should lie beneath the base of the culvert, much deeper than those that were exposed during the watching brief. The identification of the culvert as early twentieth century in this area relates mainly to the lack of the streambed cobbling which is so characteristic of the nineteenth century culvert in the Leeds Road area. This may suggest that areas of the culvert, particularly its walls, have already been affected by later developments. It is possible that only the south-western side of the culvert, along which Brook Street runs, was provided with a wall and, at the time of construction, there was less need for such a structure on the less-heavily used north-eastern side of the culvert. Given the circumstances, it is likely that change to the culvert profile caused by the insertion of this later brick wall was influential in the build-up of deposits in this area. However, there is also a good chance that the original base of the culvert survives intact beneath the more recent concrete footing.
- The negative results from the trial pits excavated within Glenfield and 5.1.2 Marsden Parks are perhaps, given the limited nature of the groundworks, unsurprising. The identified industrial remains within this general area lie some way from the test pit locations. Given that Glenfield and Marsden Parks lie outside the bounds of any known earlier settlement, any historical utilisation of this area is likely to relate to agricultural activity. The steeplysloping nature of the local topography would have precluded arable exploitation and any associated deposition of night soil for fertilizer. Instead, these areas are more likely to have been used for grazing cattle, which require large amounts of water and for which the brook provides a convenient natural field boundary. Such usage is unlikely to leave much in the way of archaeological remains.

5.2 **IMPACT AND RECOMMENDATIONS**

- 5.2.1 A full assessment of the impact on the archaeological resource of any groundworks associated with the Walverden Water Flood Alleviation Scheme is made impractical at present, due to the limited nature of the most recent exploratory groundworks and by the fact that the location and extent of the development has yet to be decided. On the basis of the present evidence, it would appear that groundworks within Marsden and Glenfield Parks are unlikely to impact on any known archaeological remains within the area.
- 5.2.2 Further groundworks within the Walverden Water culvert along Brook Street and particularly Leeds Road, are likely to impact upon the nineteenth and early twentieth century fabric of this structure. It is, therefore, recommended

that prior to any destructive works at these locations, a targeted programme of photographic recording should be undertaken, supported, where appropriate, by basic (ie, without recording individual stones) measured plans and sections of the culvert itself.

6. **BIBLIOGRAPHY**

6.1 **PRIMARY SOURCES**

Ordnance Survey, 1983 Soil Survey of England and Wales

Ordnance Survey, 1990 1;10,000 map, Nelson and Marsden

A Survey with Maps of Land Owned by George Hartley, of Bradley in Marsden, 1777, Plans 4 and 8

6.2 SECONDARY SOURCES

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

Crosby, A, 1998 A History of Lancashire (Philimore, London)

English Heritage, 1991 Management of Archaeological Projects, 2nd edn, London

LUAU, 1995 Walverden Water, Nelson, Pendle, Lancashire, Desk-Based Assessment (unpubl rep)

APPENDIX 1: PROJECT DESIGN

WALVERDEN WATER FLOOD ALLEVIATION SCHEME, NELSON, PENDLE LANCASHIRE

ARCHAEOLOGICAL WATCHING BRIEF: PROJECT DESIGN

Oxford Archaeology North



December 2005

The Environment Agency

OA North Job No: L9642 NGR: SD 86250 37750

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 As part of the Walverden Water Flood Alleviation Scheme, Jacobs Babtie (henceforth, the Client), on behalf of the Environment Agency, have requested that Oxford Archaeology North submit proposals and costs for the undertaking of a watching brief during groundworks ahead of any development. The groundworks will be undertaken by Norwest Holst and will comprise the excavation of service inspections pits (SIPs) and soakaways at several locations. A single SIP will be excavated at the Brook Street culvert (NGR SD 86250 37750), two SIPs and two soakaways will be excavated by the Hendon Brook culvert, Marsden Park (SD 87750 38250) and two more SIPs and soakaways will be excavated at the Glenfield Park Trash Screen (SD 86570 37390). A series of boreholes will also be made during the groundworks, but will not be the subject of any watching brief. The following project design has been compiled by Oxford Archaeology North (OA North) in response to a verbal communication with Lancashire County Archaeology Service (LCAS). Walverden Water flows *c*2km north-westwards across Nelson from Walverden reservoir, to the south-east of the town, through to the Pendle Water, to the north-west of Nelson.

1.2 ARCHAEOLOGICAL BACKGROUND

1.2.1 A desk-based assessment was undertaken of the entire corridor of the Walverden water in 1995 by OA North under their former guise as Lancaster University Archaeology Unit (LUAU). A full historical background to the development area can be found in that document. Although Mesolithic, Neolithic and Bronze Age activity is known within the wider area of the development site, Castercliffe Iron Age hillfort is the nearest prehistoric monument. Although there is no evidence for Roman occupation around the development area, there are a number of coin hoards from nearby sites such as Castercliffe, Mytholmroyd, Casleshaw, Slack and Neton Kyme. Although the township of Marsden is mentioned as early as 1177 and is subdivided into Great and Little Marsden by the Walverden Water in the later fifteenth century, it would appear to have remained a place of little consequence. The town of Nelson owes its origins to the industrial revolution and, prior to 1835, did not exist. Within sixteen years of the sale for development of an empty block of land around a turnpike junction within the small township of Marsden, Nelson, named after a nearby inn, had acquired four cotton mills and 6000 inhabitants by 1851 (Crosby 1998). A number of post-medieval sites, including mills (and associated features such as ponds, sluices and races),cotton mills, foundries, cobbled stream beds and weirs were identified during the desk-based assessment (LUAU 1995). Those closest to the SIPs in Glenfield Park include the Vale Street cotton shed and the Valley Mill, both dating to before 1891 and which straddle the Walverden Water culvert; St George's Hostel and an associated bridge, dating to the early twentieth century; and, in several places, the old course of the Walverden water before it was culverted. In the Brook Street area, the culvert runs beneath the site of the Walverden Cotton Shed and also that of the Brook Street (now Primrose) Mill, again both shown on the 1891 OS map.

1.2 **OXFORD ARCHAEOLOGY NORTH**

- 1.2.1 Oxford Archaeology North (OA North) has considerable experience of undertaking watching briefs of all periods, having conducted a great number of small and large scale projects during the past 25 years. Fieldwork has taken place within the planning process and construction programmes, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.
- 1.2.2 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.

2. OBJECTIVES

- 2.1 The following programme has been designed in accordance with the Lancashire County Archaeology Service document entitled *General Conditions for Appropriate Archaeological Contractors in Lancashire*.
- 2.2 **Watching Brief:** in order to determine the presence, date, quality and state of preservation of archaeological features on the site, a permanent presence archaeological watching brief will be maintained during the excavation of SIPs and soakaways. Boreholing will not be monitored (*Section 1.1.1*).
- 2.3 **Report and Archive:** a report will be produced for the Client within about eight weeks of completion of the fieldwork. The report will aim to summarise the results of the watching brief within the context of existing knowledge about the site and its surroundings. These results will provide the basis for any recommendations for further work, should this prove appropriate. A site archive will be produced to English Heritage guidelines (MAP 2) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. WORK PROGRAMME

- 3.1 In line with the objectives and stages of the archaeological works stated above, the following work programme is submitted:
- 3.2 *Watching Brief:* to be maintained during any ground disturbing activities relating to excavation of SIPs and soakaways (see *Sections 1.1.1 and 2.2*)
- 3.3 *Report and Archive:* production of a suitably illustrated report and properly ordered archive.

4. METHODOLOGY

4.1 WATCHING BRIEF

- 4.1.1 A programme of field observation will accurately and systematically examine and record the location, extent, and character of any surviving archaeological features, horizons and/or deposits revealed during the course of ground disturbance, along with any artefacts, identified during observation.
- 4.1.2 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Features will be planned accurately at appropriate scales and annotated on to a large-scale plan. A photographic record of archaeological features and general working shots, utilising monochrome print and colour slide will be undertaken simultaneously.
- 4.1.3 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more measured sections will be produced, regardless of the presence of archaeology.
- 4.1.4 Putative archaeological features and/or deposits identified during groundworks, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels, depending on the subsoil conditions and, where appropriate, sections will be studied and drawn. Any such features will be sample excavated (ie. 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).
- 4.1.5 It is assumed that OA North will have the authority to stop the works for a sufficient time period to enable the recording of important deposits. It may also be necessary to call in

additional archaeological support if a find of particular importance is identified or a high density of archaeology is discovered, but this would only be called into effect in agreement with the Client and LCAS and will require a variation to costing.

- 4.1.6 *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 Department of Constitutional Affairs (DCA) 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, and if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act, 1981.
- 4.1.7 *Recording:* all information identified in the course of the watching brief works will be recorded stratigraphically, with sufficient pictorial record (plans, sections and both black and white and colour photographs or contact prints) to identify and illustrate individual features as well as the nature of the demolition work. Primary records will be available for inspection at all times.
- 4.1.8 Results of the field investigation will be recorded using a paper system, adapted from that used by the English Heritage Centre for Archaeology. The 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). Levels will be tied into the Ordnance Datum. 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.
- 4.1.9 **Treatment of finds:** excavated soil will be searched as practicable for finds. The presence and nature of finds definitely dating to the nineteenth and twentieth centuries will be noted but they will not otherwise be retained. All other finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed, as appropriate, in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines. Except where noted above, 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.
- 4.1.10 *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.
- 4.1.11 *Contingency plan:* in the event of significant archaeological features or human remains being encountered during the watching brief, discussions will take place with the Planning Archaeologist, as to the extent of further works to be carried out, and in agreement with the Client. All further works would be subject to a variation to this project design.

5. REPORT

- 5.1 The results of the data gathered in *Section 4.1* above, will be collated and submitted in report format, illustrated with the relevant photographs and drawings. Where appropriate, the report will attempt to relate any findings to the known history and archaeology of the site, and to its local setting.
- 5.2 One bound and one unbound copy of the report will be submitted to the Client, and one bound copy and another in digital format will be submitted to LCAS and to the Lancashire Sites and Monuments Record together with an archive CD-ROM. Any subsequent work arising from this survey will be subject to separate consideration in liaison with LCAS and the Client.
- 5.3 The final report will include a copy of this project design, the relevant LCAS brief, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above, and will include details of the final deposition of

the project archive. Illustrations will include a location map, trench location plan and plans and sections of trenches drawn at an appropriate scale.

5.3 A brief summary of the fieldwork will be prepared and submitted to the Council for British Archaeology North West Archaeology North West within 12 months of the completion of the project.

6. ARCHIVE

- 6.1 The results of the watching brief will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The fully indexed project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include all the original records and drawings along with fully labelled and indexed slides and contact prints. It will include summary processing and analysis of any features and finds recovered during fieldwork, in accordance with UKIC guidelines. 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, and arrangement to this effect will be made with the museum curator prior to the commencement of the project.
- 6.2 All finds will be treated in accordance with OA North standard practice, which follows current IFA guidelines and will be deposited, along with a copy of the report and of the original site records, with Lancaster City Museum.

7. HEALTH AND SAFETY

- 7.1 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.
- 7.2 The client would be asked to determine the nature of any utility services to the properties and site prior to any fieldwork being carried out.
- 7.3 OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

8. CONFIDENTIALITY

- 8.1 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.
- 8.2 Any proposed variations to the project design will be agreed with LCAS in co-ordination with the Client. OA North will arrange a preliminary meeting, if required, and LCAS will be informed of the commencement of the project in writing.

9. WORK PROGRAMME

- 9.1 The following programme is proposed:
- 9.2 *Watching Brief:* the duration of the watching brief will be dependent upon the progress of the contractor.

9.3 *Archive/Report:* the report and archive will be produced following the completion of all the fieldwork. The final report will be submitted within about eight weeks of completion of the fieldwork and the archive deposited within six months. If desired, an interim statement could be produced within ten days of completion of the fieldwork.

10. STAFFING

- 10.1 The project will be managed by **Stephen Rowland** (OA North Project Manager) to whom all correspondence should be addressed.
- 10.2 The watching brief will be undertaken by an OA North Supervisor, suitably experienced in fieldwork techniques. Present timetabling constraints preclude detailing at this stage exactly who will be undertaking this element of the project.
- 10.3 The archaeological work will be monitored by LCAS, which will be arranged accordingly.

ILLUSTRATIONS

LIST OF FIGURES

Figure 1: Location map

Figure 2: Test Pit location plan

LIST OF PLATES

Plate 1: The Brook Street Culvert facing south, location of TP101 and TP102

Plate 2: South-west-facing section of TP102

Plate 3: Glenfield Park facing south, location of TP108 and TP109, TP109 in foreground

Plate 4: North-facing section of TP109

Plate 5: Marsden Park, location of TP112 and TP113

Plate 6: South-west-facing section of TP113



Figure 1: Location Map





Plate 1: The Brook Street Culvert facing south, location of TP101 and TP102



Plate 2: South-west-facing section of TP102



Plate 3: Glenfield Park facing south, location of TP108 and TP109, TP109 in foreground



Plate 4: North-facing section of TP109



Plate 5: Marsden Park, location of TP112 and TP113



Plate 6: South-west-facing section of TP113