

PRN 3460



Gosforth Waste Water Treatment Works, Cumbria

Archaeological Desk-based Assessment and Watching Brief

Oxford Archaeology North



December 2003

United Utilities Ltd

Issue No: 2003-4/182

OAN Job No: L9283

NGR: 307530-503150

Document Title: GOSFORTH WASTE WATER TREATMENT WORKS,
CUMBRIA

Document Type: Archaeological Desk-Based Assessment and Watching
Brief

Client Name: United Utilities Ltd

Issue Number: 2003-4/182

OA Job Number: L9283


National Grid Reference:

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Document File Location Alison/projects/L9283/report

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SUMMARY

Oxford Archaeology North (OA North) was commissioned by United Utilities Ltd to undertake an archaeological watching brief to oversee the excavation of two manhole pits at Gosforth Waste Water Treatment Works (NY 307530 503150). This was carried out over two days in August 2003, and consisted of a topsoil strip and excavation to a depth of no more than 1.1m. Time constraints for the client did not allow for a full desk-based assessment to be undertaken prior to these works taking place; as a result the desk-based element of this report was written after the development of the site had occurred. This being the case it was felt unnecessary to include an impact and recommendations chapter for the current stage of works. The site does have archaeological potential and it is highly recommended that any further works on the site be subject to a full archaeological evaluation and/or watching brief prior to the commencement of construction.

The area under investigation was very limited and previously disturbed, at least in part, by earlier works on the site. In this instance, the two manhole pits that were excavated under close archaeological supervision contained only a small quantity of modern detritus. No finds, features or deposits of archaeological importance were uncovered during the course these works.

ACKNOWLEDGEMENTS

OA North would like to thank United Utilities Ltd for commissioning the watching brief.

The watching brief was undertaken by David Tonks and David Hodgson. The report was compiled by Arran Ferguson with illustrations by Emma Carter. The project was managed and edited by Alison Plummer.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Works to improve the waste water treatment plant at Gosforth (Fig 1) are to be carried out by United Utilities Ltd. There are recorded archaeological remains directly on the site of the works, which are entirely within the Lake District National Park. As the desk-based assessment was not commissioned early enough to accommodate the developers time schedule for the construction phase of the development, and as the area under development was limited to a small area (no more than 8 square metres), a watching brief was implemented prior to the completion of the desk-based assessment. As it was known that the possibility was high that some archaeological deposits of interest may be disturbed or exposed by the development a brief for the works was produced for the client and all groundworks were supervised by an experienced archaeologist. This report comprises the results of both the desk-based assessment and the watching brief.
- 1.1.2 OA North was approached by United Utilities Ltd to undertake the work. Following submission and formal acceptance of a project design (*Appendix 2*) by the Lake District National Park (LDNP) archaeologist, the watching brief was carried out in August 2003. The desk-based assessment was written concurrently and the results of both make up the body of this report.

1.2 SITE LOCATION AND GEOMORPHOLOGY

- 1.2.1 The waste water treatment works is located on the southern edge of Gosforth, east of the A595. The manhole pits were located in the south-east corner of the treatment plant adjacent to the existing settling beds.
- 1.2.2 Gosforth is located on the western edge of the Cumbrian High Fells, on the West Cumbria Coastal Plain. The geology of the area is of typical argillic brown earths.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 **Prehistory:** Cumbria has few confirmed archaeological sites dating to the post-glacial period, indeed until recently habitation this far north at that time was considered highly unlikely (Rollinson 1996, 14). Sites have, however, been identified in the south of the county (Young 2002), demonstrating that the area was perhaps not as uninhabitable as previously thought, although such sites have not been discovered as far north as the study area. Evidence for hunter-gatherer sites of the Mesolithic period is, by contrast, well represented, with numerous sites known along the coast from St Bees to Walney Island. These tend to be late Mesolithic, and consist of flint and tuff scatters dating as late as the fourth millennium BC (Cherry and Cherry 2002). Similar evidence further inland is less well known, despite large quantities of similar material having been found on the limestone uplands of eastern Cumbria (*ibid*). There appears

to be a degree of continuity between the end of the Mesolithic and the start of the Neolithic; flint artefacts typically belonging to the early Neolithic are essentially indistinguishable from the late Mesolithic (*ibid*). The Neolithic is, however, a time of significant social changes with the introduction of ceramics, large funerary and ritual monuments, more intensive agricultural practices and the large-scale production of polished stone axes. These are found throughout Cumbria, and were traded across Britain and into Europe (Rollinson 1967). Only one recorded prehistoric find is recorded from the site, a collection of three rubbing stones and a polished stone axe of the 'Cumbrian Club' type, recovered in 1937 during the construction of the waste water treatment works (Fig 2, Site 4).

- 1.3.2 Later prehistoric sites are recorded across Cumbria, although they are only just beginning to be understood. Extensive settlement remains have been examined through intensive aerial survey across the Solway plain to the north and in the Lake District where large field systems and agriculturally improved areas have been identified in the uplands.
- 1.3.3 **Roman:** the closest Roman forts to the study area are the forts at Ravenglass to the south and at Moresby to the north (Shotton 1993, 44). There are no Roman roads recorded running between these two forts; however, the road south from Papcastle appears to finish on the River Ehen to the north of the study area (*ibid*). The discovery of the Braystones coin hoard downstream from this stretch of road on the Ehen may indicate that the route continued farther than was previously thought.
- 1.3.4 **Early Medieval:** there is little physical evidence for habitation or activity in the centuries following the Roman period. Historians are forced to rely on fragments of records and place-name evidence (Rollinson 1996, 33), and as a result the record is far from clear. Cumbria probably formed part of the British kingdom of Rheged, recorded in Welsh poetry and other accounts (*ibid*), for which reliable evidence is scarce. In turn, Rheged was eclipsed by the more powerful kingdom of Strathclyde in the north, at a time when the early Christian church was beginning to have a major impact on northern Britain (*ibid*, 34).
- 1.3.5 By the seventh century the power of the kingdom of Strathclyde was beginning to wane as the Northumbrian Anglian kingdom became the dominant force in the area (*ibid*). In time, they too were ousted by a new power, the Vikings; the Danes at first arriving in the eastern part of Britain, and the Norwegian Vikings landing later, principally during the ninth century, in the west via Ireland. All of these groups had a great impact on the social landscape of Cumbria, but few left any particularly evident physical traces. The Vikings in particular had a great effect on the language and place-names. The present church in Gosforth incorporates two pre-Norman wheel-headed crosses within its stone make-up and a third is standing, complete, in the churchyard. The cross is one of the best examples of its type and is unique in its use of both of Scandinavian and Christian iconography. The High Cross is dated to the 9th/10th centuries A.D. Two hog-back tombstones, located in the churchyard, are also dated to the 9th-10th century and may indicate the

importance of the site as an ecclesiastical centre at this time (Rollinson, 1996, 38-39).

- 1.3.6 **Medieval:** following the Norman Conquest the north of England was a relatively unstable place, badly affected by cross-border conflict and constant rebellions against the new rulership (Rollinson 1996, 43-4). This ended in 1092 when William II retook Carlisle and drove out the Scots, bringing a relative peace and creating a new fortified border defended by loyal barons (*op cit*, 44-5). The priory of St Bees was founded in the early twelfth century (Wilson 1905, 179). It was wealthy in comparison with the other monastic houses in the country (*op cit*, 180). The removal of the constant threat of war at least brought some stability. It was not to last, however, and the next 200 years saw several further rebellions, feuds and raids from Scotland, culminating in the numerous attacks led by Robert the Bruce in the first half of the fourteenth century. This, combined with outbreaks of the plague devastated vast areas (Gosforth lost 115 of its 600 inhabitants in 1599) (Rollinson 1996, 50). A network of fortresses was built, but it was not enough to keep the Scots at bay.
- 1.3.7 It was not until the fifteenth century that some form of peace returned and truces were signed (*op cit*, 55). The border remained an issue of contention but the following centuries were characterised mainly by growth and stability. This was severely upset by the Dissolution of the monasteries, which seriously damaged many aspects of the social and economic fabric of the north of England (*op cit*, 57). Some agricultural development took place during this time, but it was through industry that Cumberland began to make its wealth (*op cit*, 60).
- 1.3.8 **Post-medieval:** during the seventeenth century the Lowther family had a huge influence on the development of the area, particularly in and around Whitehaven (Collier 1991, 26-7). Sir Christopher Lowther turned Whitehaven's fishing harbour into a serious port, initially for the export of salt to Ireland (*op cit*, 26). Later his son, Sir John, exploited the rich coal resource of the area, also exporting it to Ireland (*ibid*). With coal being the main export to Ireland, the main import became tobacco from Virginia, and this meant it was difficult to find return cargoes (*ibid*). Sir John attempted to stimulate the linen and woollen industries as well as the tanneries to produce goods to export to America (*op cit*, 27).
- 1.3.9 During the eighteenth century the West Cumbrian coal industry continued to expand, with the Lowther family controlling around 90% of the coal in the area (*op cit*, 36). Whitehaven continued to develop as a port. As before, coal was exported to Ireland, and tobacco imported from America (*ibid*). From Whitehaven, tobacco was re-exported to Holland, France and various other European countries (*ibid*). In spite of the emphasis towards industrialisation, in particular the exploitation of iron and coal reserves (Wood 1988), the area around Gosforth probably remained relatively rural, more so as there is no naturally occurring deposits of coal in the area around the study area.

1.3.10 Industry continued to be the dominating social and economic factor of the area during the nineteenth century. The massive expansion in mining led to new transport routes being created, in particular the railways. The Whitehaven and Furness Junction Railway was completed in 1850 (Furness Railway Trust 2003). The majority of the main lines had been established by the mid-nineteenth century, principally for the export of coal and iron.

2. METHODOLOGY

2.1 DESK-BASED ASSESSMENT

- 2.1.1 Existing archaeological information was obtained from the Lake District National Park Authority in Kendal, which retains a copy of the Lake District Sites and Monuments Record for the extent of the National Park. Historic maps were obtained from the Whitehaven Public Records Office. Cartographic material was also provided by the Whitehaven Public Records Office in the form of the first edition Ordnance Survey map of 1865 (Sheet 78/6 Fig 3). Aerial photographs for the area were also consulted, but were of such a scale as to be of little use for archaeological purposes.
- 2.1.2 Secondary sources were obtained from OA North and the Whitehaven Public Records Office. A list of the documents and sources consulted is given in the bibliography.

2.2 WATCHING BRIEF

- 2.2.1 The work undertaken followed the method statement detailed in the project design (*Appendix 2*) and complied with current legislation and accepted best practice, including the Code of Conduct and the relevant professional standards of the Institute of Field Archaeologists (IFA).
- 2.2.2 The programme of fieldwork was designed to accurately record the location, extent and character of any surviving archaeological remains. This comprised close archaeological observation of all groundworks, the examination of all stratigraphic horizons exposed and the accurate recording of all archaeological finds, features or deposits exposed during the course of ground works.
- 2.2.3 The recording system comprised a full description of all stratigraphy exposed on OA North *pro-forma* sheets and their accurate location in plan. In addition a photographic record in colour slide and black and white formats was compiled.

2.3 ARCHIVE

- 2.3.1 A full, professional archive has been compiled in accordance with the project design (*Appendix 2*) and current IFA and English Heritage guidelines (English Heritage 1991). The archive will be deposited with the Cumbria Sites and Monuments Records and a copy of the report will be sent to the Cumbria Record Office.

3. RESULTS

3.1 RESULTS OF DESK-BASED ASSESSMENT

3.1.1 All information concerning archaeological sites in the vicinity of the development site have been collated into a gazetteer (*Appendix 3*), which provides details of their location, origin and character. Locations are given as eight figure National Grid References where possible. A summary description of each site is provided in conjunction with a reference to the source of the information (SMR, cartographic and documentary), and an assessment has been given of the interpretation and archaeological potential of the site. The sites have been marked on a digital map (Fig 3).

3.2 RESULTS OF WATCHING BRIEF

3.2.1 The groundworks consisted of two manhole pits and a connecting slot pipe trench. Manhole pit 1 (Fig 4, Plates 1 and 2) measured 3.3m x 3.3m x 0.70m in depth. Manhole pit 2 (Fig 4, Plate 3) measured 2.65m x 1.8m x 1.2m in depth and was connected to the first pit by a slot trench that was 2m wide and between 1.3m and 1.6m deep.

3.2.2 The groundworks were undertaken with a mechanical excavator using a toothed 1.6m wide excavating bucket, and were closely monitored by an experienced archaeologist.

3.2.3 Manhole pit 1 was located in an area that had previously been disturbed during the installation of an earlier manhole. Approximately $\frac{1}{4}$ of the pit was made up of reinstated backfill and pea gravel and no stray finds of an archaeological nature were noted within the context of this backfill. It was not possible to record the topsoil in this pit due to it having been heavily tracked over and reduced to a humic mud no more than 0.05m deep. This strata overlay a light brown sandy clay with frequent gravel inclusions cut in the south-facing section by a previously excavated manhole pit and filled by modern detritus and backfill. The west-facing section comprised the same upper strata of heavily tracked over topsoil overlying a thick layer of the same backfill associated with the previously excavated manhole pit. The natural, light brown sandy clay with frequent gravel inclusions remained consistent throughout the pit.

3.2.4 Manhole pit 2, located to the north-west of the first manhole pit, measured 2.65m x 1.8m and was 1.2m deep. The stratigraphy in this trench consisted of a series of layers of backfill consisting largely of rubble and coarse sand. No dating material was recovered from within these contexts, but it would appear these layers were deposited in recent times and relate to earlier works on the site.

3.2.5 Similar to the first manhole pit, the topsoil in section was denuded by heavy machinery, leaving only a thin deposit of mud and turf overlying 0.3m of firm, brown silty sand, which overlay 0.25m of firm mid brown silty sand with rare

small rounded stones. This layer overlay friable dark brown coarse sand with frequent inclusions of small angular and sub-rounded stones. The natural was not reached at this depth.

- 3.2.6 The pipe slot trench connecting the two manhole pits displayed the same stratigraphy as the second manhole pit, with three layers of reinstated fills all with inclusions of modern rubble detritus overlying a mid pinkish clayey sand.

4. DISCUSSION

4.1 DESK-BASED ASSESSMENT

- 4.1.1 **Introduction:** in total five sites were identified during the desk-based assessment, all of which were already recorded on the SMR (*Appendix 3 Fig 2*). One findspot was known from the area under construction, a stone axe and three rubbing stones. These may represent intentional deposition, and as such may indicate the possibility for further finds being extant in the study area.
- 4.1.2 **Prehistoric:** only one site was identified from the SMR for this period and relates to the site of the proposed works. A single polished stone axe and three rubbing stones were recovered from the development site in 1937 during the first phase of construction of the Gosforth sewage treatment plant.
- 4.1.3 **Early medieval:** the desk-based assessment identified two early medieval sites in the vicinity of the study area. Gosforth High Cross, located in the churchyard of St Mary's is still standing and securely dated to the 9th, 10th century. Two Hogback tombstones are also extant in the churchyard and are similarly dated to the 9th or 10th century. Within the stone make-up of the current church are the fragments of two further wheel-headed crosses.
- 4.1.4 **Medieval:** the church itself was rebuilt in 1789, but still retains traces of the earlier Norman masonry. Further renovations have occurred and the church, in its current form is predominantly of post-medieval construction.
- 4.1.5 **Post-medieval:** only one site of particular interest was identified by the desk-based assessment, this is the Gosforth saw pit, located to the west of the study area. The building is still standing and used for other purposes. The exact date of the building is unknown.

4.2 THE WATCHING BRIEF

- 4.2.1 As the removal of topsoil and subsequent deep trenching carried the possibility of disturbing subsurface archaeological remains, an archaeological watching brief was undertaken to oversee all groundworks.
- 4.2.2 During the course of works no finds features or deposits of an archaeological nature were encountered. Both manhole pits and the connecting pipe slot trench showed stratigraphic evidence for earlier ground disturbance, but this seems most likely the result of modern works on the site.
- 4.2.3 The likelihood remains that there may well be further deposits, artefacts and/or features of an archaeological nature within the study area and as such it is highly recommended that all further developments on site are subject to the same archaeological investigation and supervision as has occurred in this instance.

5. BIBLIOGRAPHY

5.1 PRIMARY AND CARTOGRAPHIC SOURCES

Ordnance Survey, 1865(a) *Cumberland Sheet 78*, 1st edn, 6" : 1 Mile

5.2 SECONDARY SOURCES

Cherry, J, and Cherry, PJ, 1973 Mesolithic habitation sites at St Bees, Cumberland, *Trans Cumberland Westmorland Antiq Arch Soc*, n ser, **73**, 47-66

Cherry, J, and Cherry, PJ, 1983 Prehistoric Habitation Sites in West Cumbria: Part I, The St. Bees Area and North to the Solway, *Trans Cumberland Westmorland Antiq Arch Soc*, n ser, **83**, 1-14

Cherry, J, and Cherry, PJ, 1984 Prehistoric Habitation Sites in West Cumbria: Part II, The Nethertown and Seascale Areas, *Trans Cumberland Westmorland Antiq Arch Soc*, n ser, **84**, 1-17

Cherry, J, and Cherry, PJ, 1987 Notes 1: Evidence for Prehistoric Habitation in Fields adjacent to the Northern Edge of the Tarn at Ehenside, *Trans Cumberland Westmorland Antiq Arch Soc*, n ser, **87**, 251-3

Cherry, J, and Cherry, PJ, 2002 Coastline and Upland in Cumbrian Prehistory – A Retrospective, *Trans Cumberland Westmorland Antiq Arch Soc*, 3rd ser, **2**, 1-19

Collier, S, 1991 Whitehaven 1660-1800. A new town of the late seventeenth century: a study of its buildings and urban development, London

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

Furness Railway Trust, The, 2003 *The Furness Railway Company*, <http://www.furnessrailwaytrust.org.uk/frco.htm>

Nicolson, J, & Burn, R 1777 *The History and Antiquities of the Counties of Westmorland and Cumberland*, London

Rollinson, W, 1967 *A History of Man in the Lake District*, London

Rollinson, W, 1996 *A History of Cumberland and Westmorland*, 2nd edn, Chichester

Shotter, DCA, 1992 Notes 4: Roman coin-finds from Cumbria, *Trans Cumberland Westmorland Antiq Arch Soc*, n ser, **92**, 276-9

Shotter, DCA, 1993 *Romans and Britons in North-West England*, Lancaster

Wilson, J (ed), 1905 The Victoria History of the County of Cumberland, 2, London

Young, R, 2002 *The Palaeolithic and Mesolithic Periods in Northern England: An Overview*, in *Past Present and Future, The Archaeology of Northern England*, Brooks, C, Daniels, R and Harding, A (eds), Architect Arch Soc Durham Northumberland Res Rep, 5, Durham

APPENDIX 1: PROJECT BRIEF



Lake District
National Park Authority

ARCHAEOLOGICAL WATCHING BRIEF

GOSFORTH WwTW

July 2003

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BRIEF FOR A PROGRAMME OF ARCHAEOLOGICAL WORKS AT GOSFORTH WwTW

SUMMARY

Works to improve the Waste Water Treatment Works at Gosforth are to be carried out by United Utilities. There are recorded archaeological remains directly on the site of the works, which are entirely within the Lake District National Park. Location plans for the work are enclosed with this brief.

It is possible that some archaeological deposits of interest may be disturbed or exposed by the development. In 1937 during sewage excavations a prehistoric stone axe and three rubbing stones were found. The Lake District National Park Authority (LDNPA) has therefore recommended that before the development commences, United Utilities should secure the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved by the National Park Planning Authority. This is in line with government advice as set out in the DoE Planning Policy Guidance on Archaeology and Planning (PPG 16). This brief sets out the requirements for that programme of archaeological works.

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake an archaeological assessment and watching brief for this development and to produce a report on that work.

1. BACKGROUND

- 1.1 The LDNPA has been consulted by United Utilities over works at Gosforth WwTW (see enclosed location map). The development is situated on a site of archaeological significance, recorded in the Lake District National Park Sites and Monuments Record.
- 1.2 In 1937 during sewage excavations a prehistoric stone axe and three rubbing stones were found (Lake District National Park Sites and Monuments Record No.1308).
- 1.3 The LDNPA Archaeologist has therefore advised United Utilities that a programme of archaeological recording is required during the course of the works. This recommendation is based on policies in the Joint LDNPA and Cumbria County Council Structure Plan, the LDNPA Local Plan and is also in line with government guidance given in Planning Policy Guidance Note 16 (Archaeology and Planning). It is also in line with advice contained in the Water Act 1991 Code of Practice on Conservation, Access and Recreation 2000 and Article 1 (5) of Circular 04/99.

2. SCOPE OF THE ARCHAEOLOGICAL WORKS

- 2.1 The development would severely damage or destroy any archaeological remains that may be present on site. The LDNPA has therefore recommended that United Utilities should secure the implementation of a

programme of archaeological work in accordance with a written scheme of investigation that has been submitted to and approved by the LDNPA.

- 2.2 The principle aim of the work is to identify any archaeological remains where ground disturbance takes place and to investigate and record any revealed archaeological remains or deposits.
- 2.3 The following work will be required:
- a) A desk based assessment must first be carried out, to include collation of all relevant material from the Lake District National Park Sites and Monuments Record (SMR) and examination of any available maps (printed and manuscript), aerial photographs and other relevant background material;
- b) An examination by an archaeologist of all parts of the development in order to identify any visible archaeological features that have not been recorded in the Lake District National Park SMR. This should include:
- Archaeological monitoring of all topsoil stripping and trench excavation;
 - Cleaning by hand of possible archaeological features;
 - Full excavation and recording of any archaeological remains identified within the trenches;
- 2.4 The archaeologists must have the authority to halt any earth moving activity if necessary to define and record areas of archaeological interest.

3. PROJECT DESIGN

- 3.1 Before the work commences a detailed proposal should be prepared by potential contractors and submitted to the LDNPA Archaeologist for approval on behalf of the Authority and United Utilities.
- 3.2 Proposals to meet this Brief should take the form of a detailed project design prepared in accordance with the recommendations of the *Management of Archaeological Projects 2nd Ed.* (1991) and must include:
- A description of the proposed methods of observation and recording system;
 - An explanation of the sampling strategy to be used. This should include sampling of appropriate materials for environmental and/or other scientific analysis. Special attention should be paid to any waterlogged deposits encountered.
 - A projected timetable for work on site including staff structure and numbers;
 - A projected timetable for all post excavation work (through to final publication of results), including staff numbers and specialist sub-contractors;

- Any significant variations to the proposal must be agreed by the LDNPA Archaeologist in advance.

4. SITE MONITORING

- 4.1 The LDNPA Archaeologist will be responsible for monitoring the archaeological work. A minimum of one week's notice of the commencement of fieldwork must be given to the LDNPA so that arrangements for monitoring can be made.

5. REPORTING REQUIREMENTS

- 5.1 The archaeological work should result in a report including a description of the methodology employed; plans and sections at an appropriate scale showing location and position of deposits and finds located; a list of and spot date for any finds recovered and a description and interpretation of the deposits identified.

- 5.2 The objective account of the archaeological evidence recovered should be clearly distinguished from the interpretation of those features. The methodology used should be critically reviewed.

- 5.3 **A site diary must be kept and incorporated in the report, to include a record of all time spent on site and all locations worked.**

- 5.4 **A summary report should be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork. If archaeological remains of significance are identified, one or more full reports should be published in a suitable journal or other publication and should include an account of any structures located and full details of significant finds, illustrated as appropriate.**

- 5.5 4 copies of the report should be deposited with the LDNPA on the understanding that it will be made available as a public document.

6. DEPOSITION OF ARCHIVE AND FINDS

- 6.1 The archaeological archive arising from the recording should be deposited in an appropriate local institution, in a format to be agreed with that institution. The LDNPA must be notified of the arrangements made. Any finds of archaeological interest should be appropriately conserved and deposited in an appropriate institution: any finds that cannot be so deposited should be fully analysed and published.

APPENDIX 2: PROJECT DESIGN

Oxford
Archaeology
North

August 2003

**GOSFORTH WwTW,
LAKE DISTRICT NATIONAL PARK,
ARCHAEOLOGICAL DESK-BASED ASSESSMENT
AND WATCHING BRIEF**

Proposals

The following project design is offered in response to a request from United Utilities, for an archaeological desk-based assessment of the proposed Wastewater Treatment Works at Gosforth, Cumbria, located in the Lake District National Park.

1. INTRODUCTION

- 1.1 United Utilities (hereafter the client) propose to improve the Waste Water Treatment Works at Gosforth, Cumbria. The site lies within the Lake District National Park, and there are known archaeological remains on the site. During sewerage excavations in 1937 a prehistoric stone axe and three rubbing stones were found (LDNP SMR No 1308).
- 1.2 As a result the LDNPA Archaeologist has issued a brief for a desk-based assessment and watching brief to be undertaken for the proposed development site. The following document represents a project design for this task.
- 1.3 Oxford Archaeology North (OA North) has considerable experience of the assessment and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 20 years. Evaluations and assessment have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency.
- 1.4 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 to provide an accurate archaeological assessment of the designated area within its broader context. The required stages to achieve these ends are as follows:
- 2.2 ***Desk-Based Assessment***
The first stage will involve a desk-top assessment of a 1km study area centred on the development area.
- 2.3 ***Watching Brief***
This will be maintained for all topsoil stripping activities associated with the development.
- 2.4 ***Assessment Report***
A written assessment report will assess the significance of the data generated by this programme within a local and regional context. The report will appraise the archaeological impact of the development proposal.

3. METHODS STATEMENT

- 3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.
- 3.2 **DESK-TOP ASSESSMENT**
- 3.2.1 The following outline assessment will be undertaken as appropriate, depending on the availability of source material.

- 3.2.2 **Documentary and cartographic Material:** this will rapidly appraise the data in the LDNPA Sites and Monument Record office. Cartographic sources held in the Whitehaven Record office will also be consulted. Early maps (printed and manuscript), and such primary documentation (tithe and estate plans etc.) as may be reasonably available will be inspected. Particular attention will be paid to field and place names recorded on early cartographic sources relating to estate and parish boundaries, field boundaries, woodlands and routes, as these often provide important evidence of archaeological activity and transformation of the historic landscape. All available published and unpublished documentary sources will also be examined and assessed. The relevant local studies library will be consulted as appropriate, as will the Lonsdale Estate records.
- 3.2.3 **Aerial Photography:** any relevant photographic material held by the LDNPA will be studied. This may indicate the range and survival of archaeological and structural features in the designated area no longer visible at ground level.
- 3.2.4 **Physical Environment:** a rapid desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken. This will not only set the archaeological features in context, but also serves to provide predictive data that will increase the efficiency of the field visit. Any engineering and/or borehole data relating to the site will also be examined.
- 3.3 **WATCHING BRIEF**
- 3.3.1 **Methodology:** a programme of field observation will accurately record the location, extent, and character of any surviving archaeological features and/or deposits within the topsoil stripping activities in the course of the proposed development works. A systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 3.3.2 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 provided by the Client. A photographic record will be undertaken simultaneously.
- 3.3.3 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more dimensioned sections will be produced.
- 3.3.4 Putative archaeological features and/or deposits identified by the machining process, 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).

- 3.3.5 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 the County Archaeology Service and will require a variation to costing. Also, should evidence of burials be identified, the 1857 Burial Act would apply and a Home Office Licence would be sought. This would involve all work ceasing until the proper authorities were happy for burials to be removed. In normal circumstances, field recording will also include a continual process of analysis, evaluation, and interpretation of the data, in order to establish the necessity for any further more detailed recording that may prove essential.
- 3.3.6 Full regard will, of course, be given to all constraints (services etc.), as well as to all Health and Safety regulations. 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 Unit Managers.

3.3 ASSESSMENT REPORT

- 3.3.1 **Archive:** the results of Stage 3.2 to 3.3 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 project archive represents the collation and indexing of all the data 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.
- 3.3.2 This archive can be provided in the English Heritage Centre for Archaeology Service format, both as a printed document and on computer disks as ASCII files (as appropriate), and a synthesis (in the form of the index to the archive and the report) will be deposited with the Cheshire Sites and Monuments Record office. OA North practice is to deposit the original record archive of projects (paper, magnetic, and plastic media) with the appropriate County Record Office, and, where appropriate the material archive (artefacts, ecofacts, and samples) with the County Museums Service. In this instance, the record archive will be sent to the Cheshire Record Office.
- 3.3.3 **Collation of data:** the data generated by 3.2 will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area. It will also serve as a guide to the archaeological potential of the area to be investigated, and the basis for the formulation of any detailed field programme and associated sampling strategy, should these be required in the future.

3.3.4 **Assessment Report:** two copies of a written synthetic report will be submitted to the Client, and four copies to the LDNPA. The final report will include:

- 1 a concise, non-technical summary of the project results
- 2 an introduction to the circumstances of the project and the aims and objectives of the study
- 3 a summary of the methodology and an indication of any departure from the agreed project design
- 4 a copy of the agreed project design
- 5 an outline of past and present land-use
- 6 a summary of the archaeological/historical background
- 7 a plan and gazetteer of areas of known or potential archaeological significance within the study area
- 8 an assessment of the likely archaeological implications of the proposed development
- 9 appropriate figures and plates
- 10 a full list of references to and bibliography of primary and secondary sources consulted and a list of any further sources identified but not consulted
- 11 an index of the project archive.

3.3.5 The report will be in the same basic format as this project design; a copy of the report can be provided on CD.

3.3.6 **Proposals:** recommendations for any further evaluation of the identified archaeological resource will, if required, be presented in the report.

3.3.7 **Confidentiality:** the assessment report is designed as a document for the specific use of the client, for the particular purpose as defined in the project brief and this project design, 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.

3.3.8 **Publication:** a summary report will be submitted to a suitable regional or national archaeological journal within twelve months of completion of the fieldwork.

4. OUTLINE RESOURCES

4.1 The project will be under the management of **Alison Plummer** (OA North Senior Project Manager) to whom all correspondence should be addressed.

4.2 Present timetabling constraints preclude detailing exactly who will be carrying out the desk-based assessment and watching brief, but all elements of the project are likely to be supervised by an OA North project supervisor

experienced in this type of project. All OA North supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

5. PROJECT MONITORING

- 5.1 The project will be monitored by the LDNPA Archaeologist, or his representative.

APPENDIX 3: GAZETTEER OF SITES

Site name High Cross in St Mary's Churchyard, Gosforth
Site number 01
NGR NY 7230 3570
SMR No 1272
Site type High Cross
Period Saxon/Anglian
Source OS index, 1913

Description

Located in the churchyard of St Mary's Church in Gosforth, the high cross is constructed of red sandstone with a shaft cylindrical at the base, but becoming tapered and rectangular in its upper part. It is 4.42m high, set into a three stepped base. The shaft is 1.02m in diameter at the base and elaborately decorated with Scandinavian and Christian iconography on all sides.

Site name Hogback Stones in St Mary's Church, Gosforth
Site number 02
NGR NY 7230 3570
SMR No 1272
Site type Hogback Stone
Period Early medieval
Source OS index, 1913

Description

Dated to the 9th or 10th century by Prof Stephens of Copenhagen. No description is given in the SMR index and neither are scheduled monuments.

Site name St Mary's Church
Site number 03
NGR NY 7230 3570
SMR No 1272
Site type Church
Period Medieval
Source OS index, 1913

Description

St Mary's church retains traces of Norman Masonry, but rebuilt in 1789 (onwards). It had the remains of two pre-Norman wheeled crosses in it's stonework. The building is not, as yet, a scheduled monument.

Site name Kell Bank, Gosforth Axe, Rubbing Stones Find
Site number 04
NGR NY 7530 3150
SMR No 1308
Site type Findspot
Period Prehistoric
Source OS index 1913

Description

A stone axe and three rubbing stones found together in 1937 during sewage excavations at Kell Bank Sewage Works, Gosforth. Now housed in the Borough Museum in Whitehaven. The axe was recorded as having been found 0.90m below peat. It is thin butted with ground off side strips. It is of the 'Cumbrian Club' type, 9in long x 3/8in thick and 2 1/2" across the cutting edge. The axe is made from flint volcanic ash or tuff.

Site name	Gosforth Saw Pit
Site number	05
NGR	NY 6700 3460
SMR No	12158
Site type	Saw Pit
Period	Post-medieval?
Source	OS first edition LXXVII

Description

Former saw pit at Gosforth, a building still stands, currently used for different purposes.

ILLUSTRATIONS

LIST OF FIGURES

Figure 1: Location Map

Figure 2: Gazetteer Sites

Figure 3: OS 6" to 1 mile, 1865

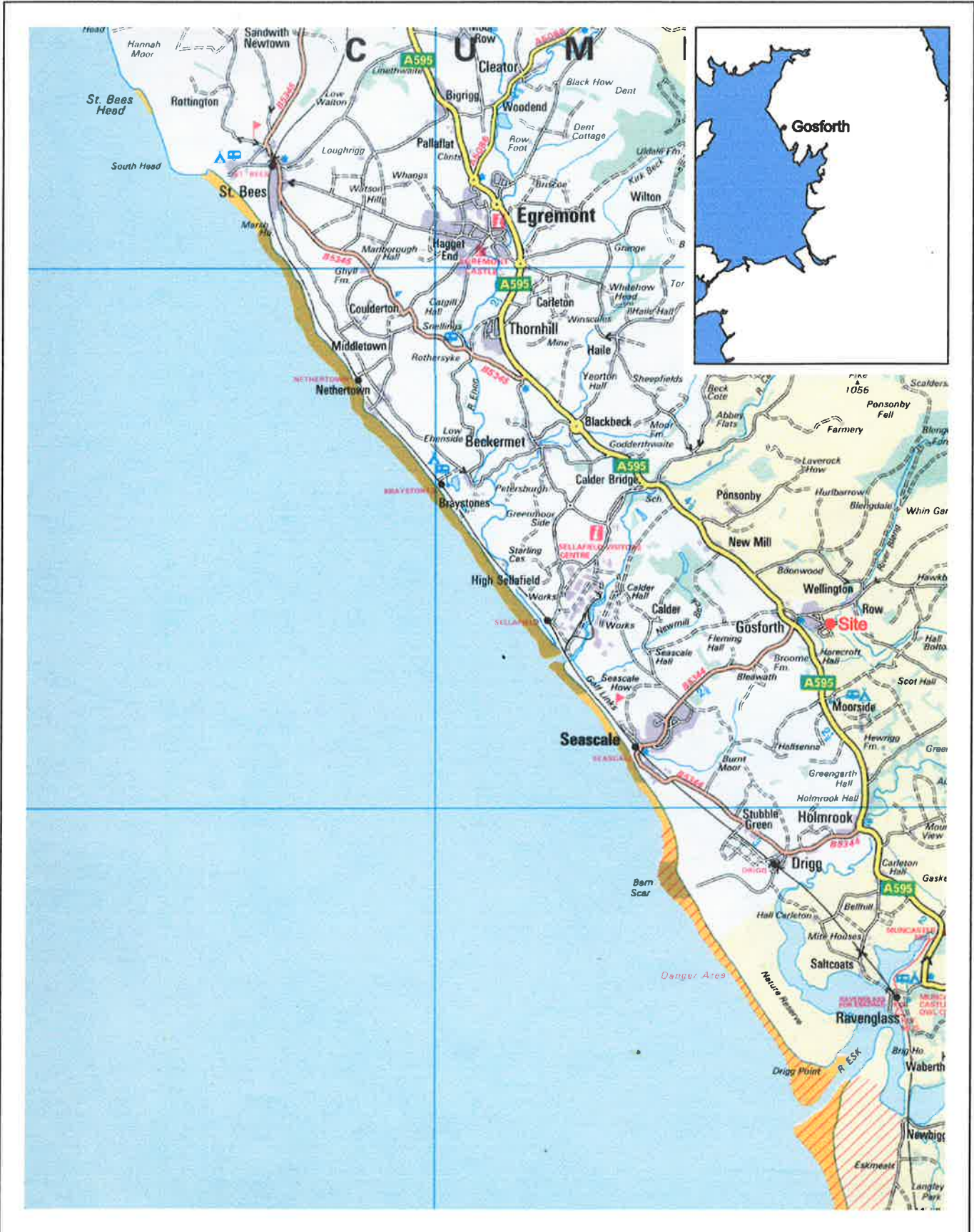
Figure 4: Manhole Pit Location Map

LIST OF PLATES

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Plate 2: Manhole pit 1, west facing section

Plate 3: Manhole pit 2, south west facing section

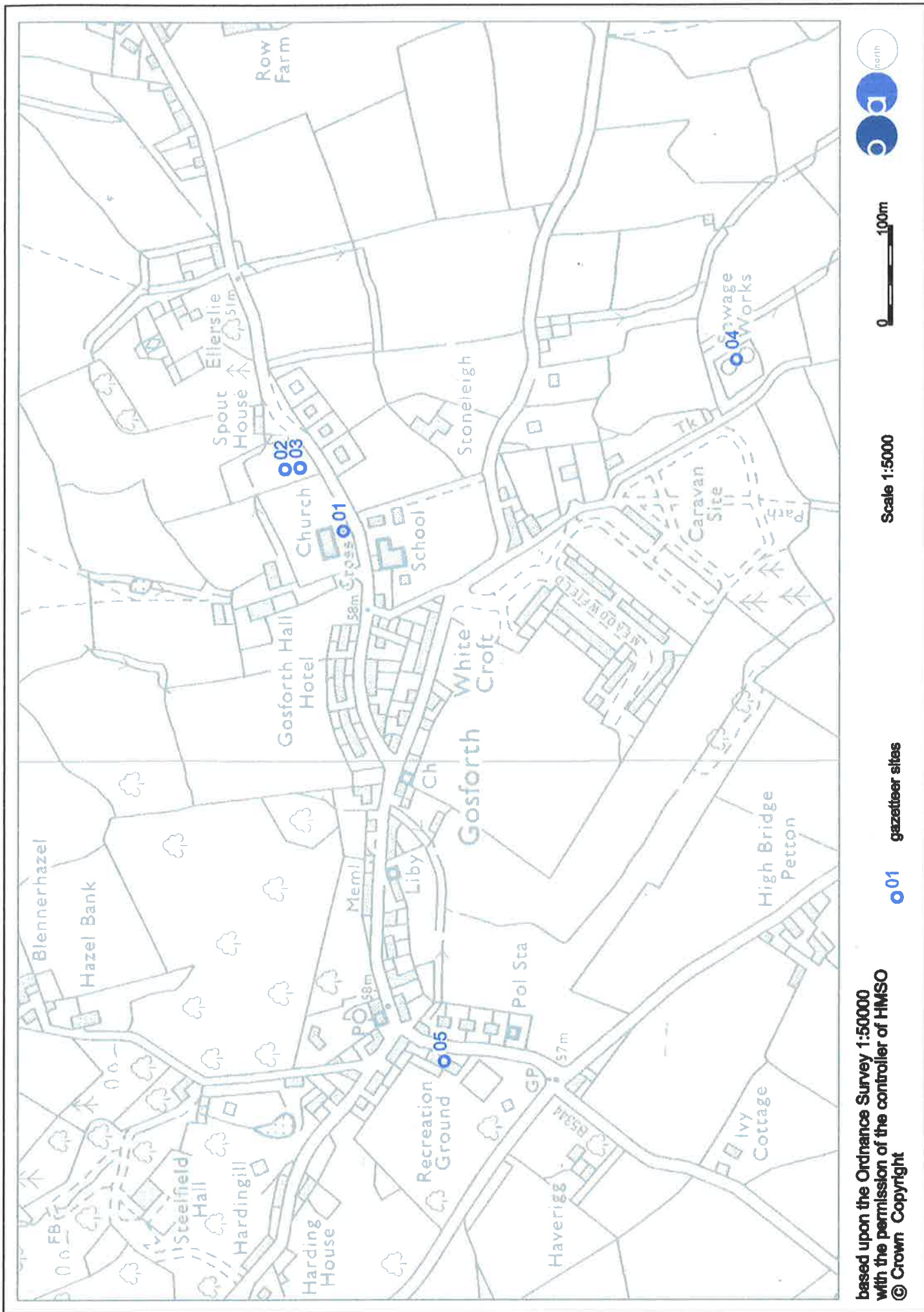


based upon the Ordnance Survey 1:100000
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0 5000
 metres

Figure 1: Location Map



based upon the Ordnance Survey 1:50000
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01 gazetiteer sites

Scale 1:5000

0 100m



Figure 2 : Gazetiteer sites

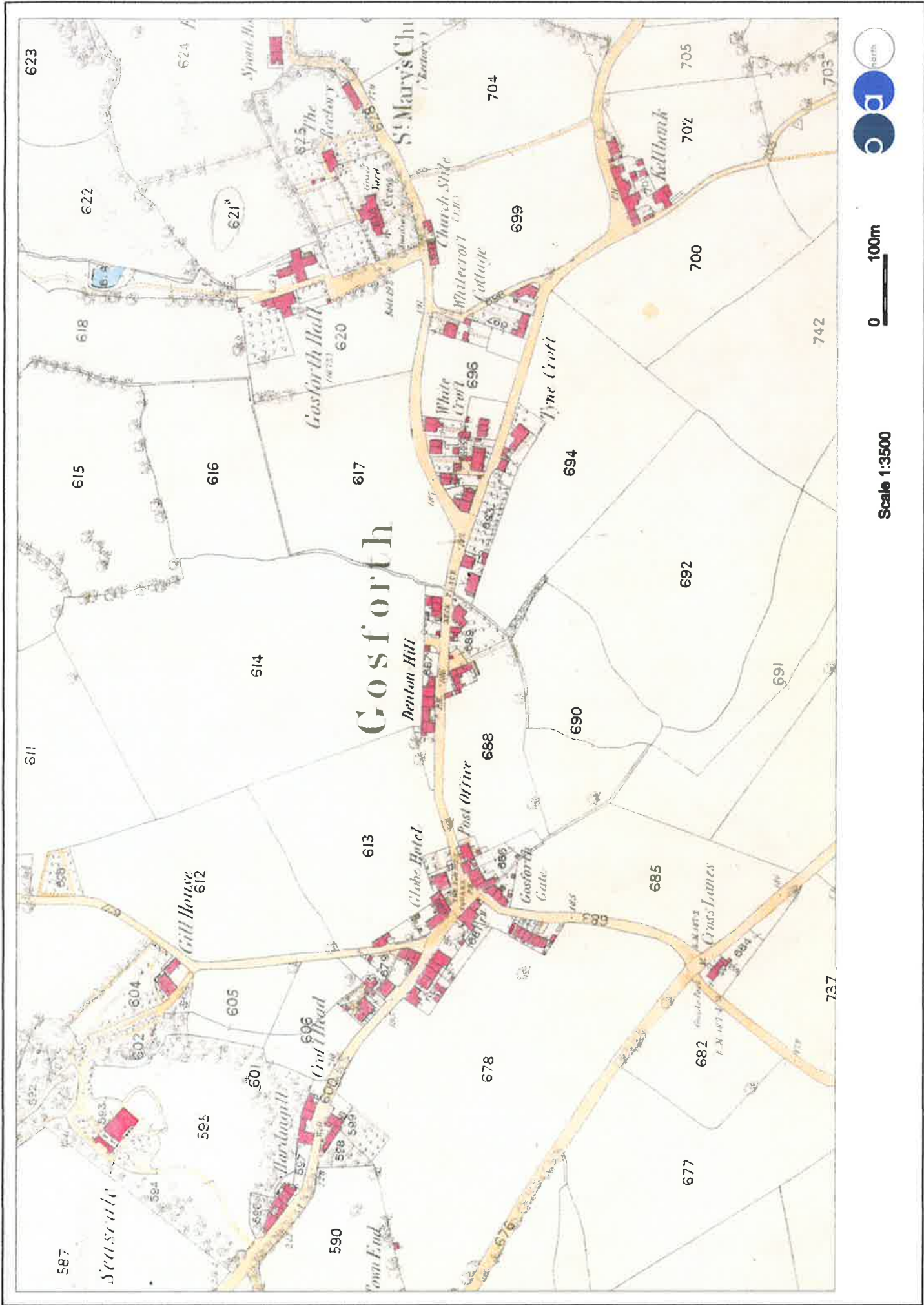


Figure 3 : OS, 6" to 1 mile, 1865

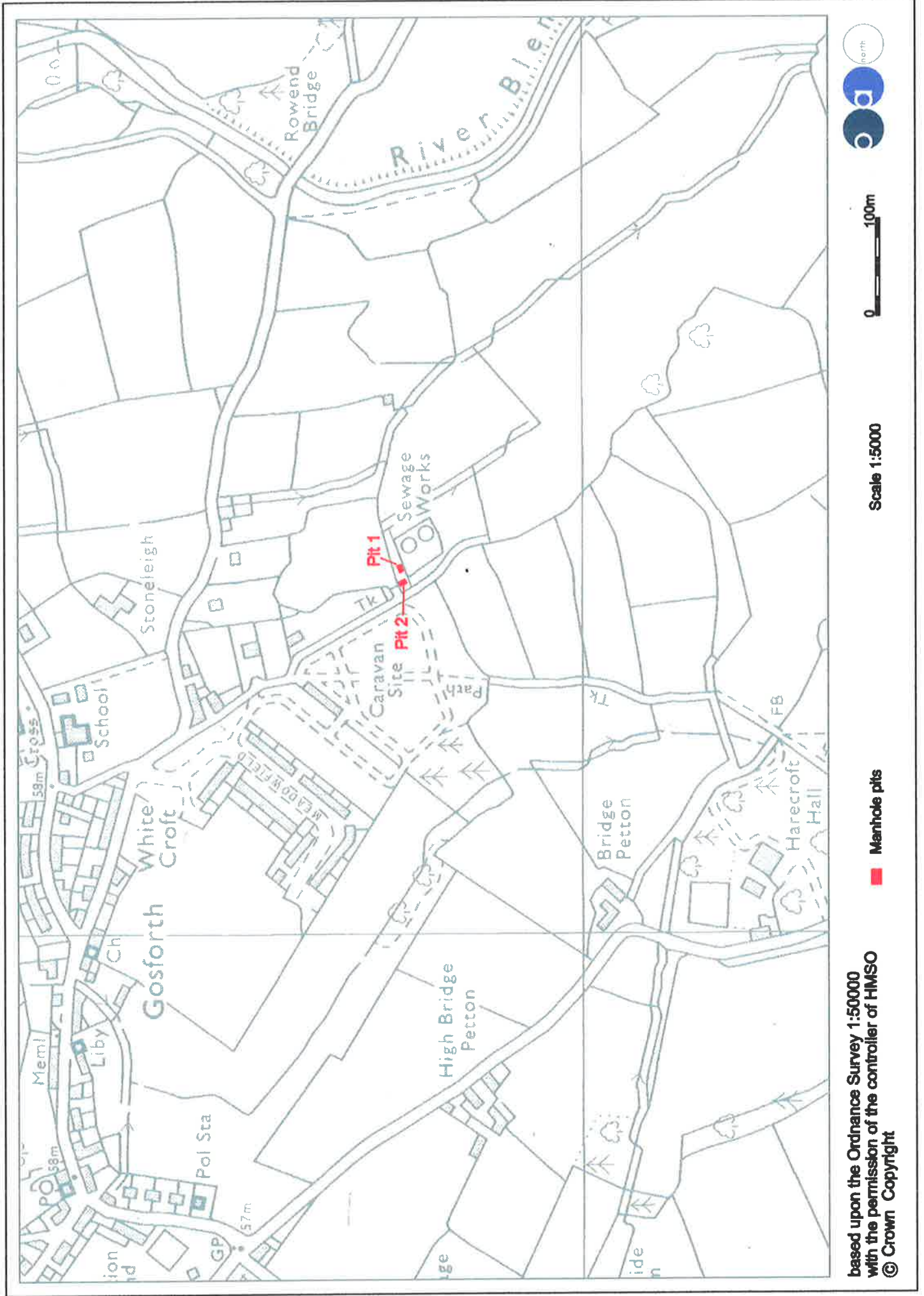


Figure 4 : Manhole pit location map



Plate 1: Manhole pit 1, south-facing section



Plate 2: Manhole pit 1, west-facing section



Plate 3: Manhole pit 2, south-west-facing section



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