

BOOTHAM ENGINEERING
LAWRENCE STREET, YORK

A SCHEME OF ARCHAEOLOGICAL
EVALUATION

BY

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FOR

WAINHOMES PLC

Preamble

The site is currently used as an operating engineering works. Proposals exist to redevelop the site for residential purposes. It lies within the Area of Archaeological Significance as defined by York City Council. The following scheme of works represents a first phase of ground evaluation to determine the archaeological potential of the site and provide the basis for further evaluation, if required, and a scheme of mitigation.

1. Planning Background

It is proposed to develop the site for residential use. Discussions have been held with all the relevant planning authority representatives and the following represents an initial phase of archaeological investigation to assist in preparation of a scheme of archaeological mitigation.

2. The History of the Current Site

The site is located at SE 6160 5150. It is currently in use as an operating engineering works.

The site lies close to the eastern boundary of medieval York in an area that was largely open fields until the 18th century¹.

By 1852 when the first OS map was produced it consisted of a series of enclosures and gardens; see Plan 1. At this time the front of the site was occupied by a close, part of which falls within the site boundary, and the drive leading to a house to the north. This house and grounds appear to make up the remainder of the site. Though no levels are shown it seems reasonable to assume that the ground at this time fell away to the north towards Osbaldwick Beck. A pond, which looks ornamental in its form², occupied this northern part of the site and a small close called Willow Garth. Clearly this northern third of the site was always poorly drained.

The site remained virtually unchanged between 1852 and 1892 with the exception of the pond and Willows Close, neither of which is mapped by the Ordnance Survey. This may be because work had already begun on preparing this area for clay extraction by the Hull Road Brickworks. By 1909 the whole of the northern third of the site had been quarried away. There had

¹ It occurs on the very edge of a number of 17th and 18th century maps, where it is depicted as undeveloped fields.

² This may have its origin as a clay pit dating to the medieval period or earlier.

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also been some residential development of the former close adjacent to Lawrence Street between 1852 and 1892.

The next major change to the site occurred sometime after 1945 when it was developed as a large industrial bakery. This appears to have involved a considerable amount of dumping over the middle third of the site to create a level area for the construction of the bakery buildings and service areas. The material used to raise the level was probably imported.

3. Archaeology of the Immediate Vicinity

The identification of the current site as one of potential archaeological importance is based upon indirect evidence. The site lies astride a Roman road leading east from Roman Eboracum towards the fort and coastal site of Petuaria, Brough on Humber. This has been observed to the west of the present site in the gardens of 127 and 131 Lawrence Street³. Here it was in excess of 7.5 metres wide, though its total width could not be observed. Its highest point was approximately 50cm below the garden surface and its various construction levels/surfaces extended down to about 1.2m BGL⁴, which presumably represents the pre-Roman ground surface.

The road was extremely well preserved with a number of clearly defined surfaces, and construction and repair horizons. The side ditches were not observed, though these would certainly have been present alongside a well-made and well-maintained road such as this.

This substantial Roman road was sealed by another surfaced track that was much wider, possibly about 20 metres. No dating evidence was produced but it is reasonable to assume that it was the medieval successor of the Roman road and the antecedent of the modern Lawrence Street. This was located at about 30 cm BGL in the garden of 127.

Unfortunately neither investigation examined the areas to either side of the road so it is impossible to say if there was any form of roadside settlement or cemetery. All the approach roads to Eboracum were lined with extensive formal cemeteries and it would be surprising if this were not the case along the road from Petuaria. The section from 127 Lawrence Street suggests that

³ Results from a and observation of a service trench carried out in 1974 and 1975 by York Archaeological Trust.

⁴ The published account does not record the OD level.

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there may have been some post Roman and medieval development alongside the road and this may also have extended into the area of the current site.

Immediately opposite the site to the south of Lawrence Street was the Hospital of St. Nicholas. This was founded in 1142 as a Leper Hospital and the church served as a parish church from at least 1280. The hospital was dissolved in 1547 but the church was retained. It was badly damaged in the Civil War in 1644 and allowed to decay. It was cleared away sometime in the 18th century. There is no indication that the hospital or its holdings extended north of Lawrence Street.

A small number of burials were noted in building works associated with the offices of Wainhomes. These were undated and have been assumed to be associated with the medieval hospital; however, the City Archaeologist has questioned this interpretation and suggested that there is also a possibility that they may be Roman in date.

4. The Archaeological Potential of the Current Site

There was probably an antecedent to the Roman road approaching York from the east and this may lie within or close to the site. These early thoroughfares are difficult to identify unless they have some form of associated settlement or field system. They are only likely to be recognised during an archaeological investigation of the site.

The evidence strongly suggests that a section of the Roman and post Roman roads running between York and the Humber will survive within the site, close to Lawrence Street. These deposits are likely to be very well preserved in the areas that have escaped development since the mid 19th century or have been sealed beneath dumping.

If there was either a cemetery or other any other form of development alongside the Roman road, this is likely to be well preserved. There is also evidence to suggest that the medieval track will also survive in a relatively good condition; since this appears to seal the Roman deposits it will increase the possibility of good preservation of the earlier deposits.

The significant archaeological deposits at the front of the site may therefore be within 30cm of the current surface and in some areas be as much as 1 metre in depth.

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It is impossible to say how far north into the site any archaeological deposits might extend. If there was Roman roadside settlement the built up area is unlikely to have stretched back more than fifty metres from the road; beyond this there would have been a system of enclosed fields. If a roadside cemetery existed this may extend back no more than twenty or thirty metres in its formal state, but could then occur in a more random fashion over much larger areas. It would probably include both inhumations and cremations and span the whole period of Roman occupation.

If burials occur they are likely to be cut into the natural subsoil. The potential for good preservation probably increases closer to the Roman road and the medieval trackway; the front third of the site perhaps. Ploughing in the post Roman period may have damaged burials further north into the site but this erosion would have stopped when the area was converted into a domestic residence. The levelling up of the site to prepare for the construction of the industrial unit may have increased the protection of any archaeological deposits.

5. The Development

The development will include the construction of service roads, a series of individual housing blocks, an area of car parking and all the related services. Contamination resulting from the infilling of the former clay pits, site preparation works in the 1950s and use as an engineering works will require substantial remediation works.

6. The Scheme of Archaeological Investigation

6.1. Site Investigation – Ground Investigation

The object of the investigation will be to establish the nature, extent, degree of preservation, and date of any archaeological features or deposits within the proposed development area. Excavation will be limited to achieving these objectives. It will consist of a series of trenches described as **A** and **B** on Fig 2.

Trench A has been positioned to examine the projected line of the Roman roads, medieval tracks and land immediately adjacent to these that might contain evidence of roadside activity.

Subject to necessary safety considerations, a maximum area of 56 x 2 metres will be opened for archaeological investigation. After removal of the turf,

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topsoil and overburden will be removed, by machine, from the whole area down to the highest surviving archaeological features and deposits or to the top of the natural subsoil, whichever is the higher. Within this area topsoil and modern (20th century) deposits will be removed mechanically using a machine with a broad, smooth bladed ditching bucket. The removal of this overburden will be done as an archaeological operation, under strict archaeological supervision. The overburden will be removed down to the top of the natural, or top of in-situ archaeological deposits, whichever is the higher. Thereafter the archaeological features and deposits will be examined by hand according to a sampling procedure as outlined below. The areas subject to detailed archaeological examination will be defined on site.

Trench B has been positioned to define the projected line of the Roman roads and medieval trackways. Subject to constraints imposed by live services, the standing buildings and other questions of public safety, an area of 26 x 2 metres will be archaeologically examined.

Within this area, after removal of the turf, topsoil and modern (20th century) deposits will be removed mechanically using a machine with a broad, smooth bladed ditching bucket. The removal of this overburden will be done as an archaeological operation, under strict archaeological supervision. The overburden will be removed down to the top of the natural, or top of in-situ archaeological deposits, whichever is the higher. Thereafter the archaeological features and deposits will be examined by hand according to a sampling procedure as outlined below. The areas subject to detailed archaeological examination will be defined on site.

6.2 Sampling of Archaeological Features and Deposits

Where substantial or significant deposits or features are identified they will be treated as follows:

Excavation of any potential pre-modern features will be hand sampled to a degree that will achieve the objective of determining their chronology, and the function of the site and its various components. Sampling and recording strategies will take account of and reflect any potentially multi-phased nature of the occupation.

Given the constrained nature of the areas available for examination at least 20% of the deposits within linear features such as boundary ditches or drainage features associated with domestic, agricultural, industrial or funerary enclosures, or fields, or thoroughfares, will be removed and

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examined. The deposits at the junctions of, or interruptions in, linear features such as boundary ditches, house enclosures etc. will be totally removed over a sufficient area to determine the nature of the relationship between the components.

Other cut features such as postholes, pits, or isolated trenches will be normally half sectioned to determine and record their form. The exception will be potential sunken-floored buildings, wall settings, bell pits, kilns, burials, storage pits or other identifiable domestic, industrial, or funerary structures or buildings. Any example of a domestic, industrial, agricultural or funerary structure or building such as huts, barns, kilns, gateways, causeways, working hollows, floor levels, and hearths will be excavated to a degree whereby its nature, form, chronology, function and relationships can be determined. If necessary this will involve 100% examination of the visible feature.

If burials are identified the coroner will be informed immediately and a Home Office Licence acquired. The remains will be totally excavated and carefully removed according to the instructions issued by the Home Office.

Built structures such as walls will be sampled to a degree whereby their extents, nature, form, chronology, function and relationship to other features or deposits can be determined.

All excavated features will be recorded textually, graphically and photographically. The record system will be an integrated one.

Sampling for environmental purposes will allow for the collection of bulk samples from each area subject to specialist advice; see below 6.4.

Every reasonable effort will be made to preserve the archaeological integrity of the sites against unrecorded damage or loss during excavation. This will apply to working techniques and site security.

Appropriate safety standards will be maintained during the archaeological site works.

The work will be professionally monitored on a regular basis.

6.3. Site Recording

A site grid will be established and corrected to the British National Grid. Site co-ordinates will be recorded and reported in National Grid format.

The sites will be accurately tied into to a detailed local topographical survey.

The sites will be recorded using an approved standard system of context and other record forms or an on-site computer based system or an amalgam of both. Any form-based system will be transferred to a computer-based system. Planning of features will be at scales of 1:10, 1:20 or 1:100; sections will be recorded at a scale of 1:10.

All finds will be recorded before they are removed from the sites and an inventory maintained on site of the nature and location of all artefactual or ecofactual material and environmental or other samples.

A series of indexes, capable of interrogation, will be maintained for all site records along with a working site matrix.

Appropriate treatment and storage methods will be employed on site to ensure that the finds and site records are maintained in the optimum conditions. These arrangements will be discussed and agreed with the proposed recipient museum before site works commence. An accession number will be obtained from the proposed recipient museum and used as part of the site recording scheme.

The archaeological works will be professionally monitored, and audited, on a regular basis. See below for specific arrangements.

6.4. Specialist Advice

Specialist consultancy services will be secured, as necessary, to advise on any Prehistoric, Roman, Anglian and medieval material from the site, scientific dating techniques, environmental matters, and the conservation of artefacts.

6.5. Site Archive

After completion of the field investigation all records will be indexed, ordered, quantified and checked for consistency.

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Context, finds, sample and other paper-based records will be transferred to an integrated computer based system. The system will be capable of maintaining an audit track of all records and finds in the system, including those being analysed by external specialists. It will also be able to produce data files that can be handled by a relational database.

The drawn record will be digitised in an appropriate format that will permit the output of standard DXF files.

The archival record will include all material relating to the sites and their excavation including correspondence, written, drawn and computerized records. The site archive will be curated to allow transfer to an approved and appropriate museum on completion of any publication programme.

If additional site investigation is to be undertaken further analytical work on the results of the evaluation will be postponed until the additional site work has been completed.

If no further site investigation is to take place, then:

As part of the preparation for the Post Excavation Assessment, the artefactual, ecofactual and samples will be quantified and described. In addition the stratigraphic matrices and a site summary will be prepared.

6.6. Post Excavation Assessment

The Post Excavation Assessment will summarise the results of the evaluation, the results of specialists' work and quantify the archive.

It will assess the success of the evaluation in meeting the terms and objectives of the specification.

It will identify any additional research objectives that could reasonably be met from the archive.

It will describe the programme of post excavation work required to meet and publish the research objectives, including any additions to the objectives identified during the assessment.

It will contain adequate detail and discussion to permit critical examination by the monitors, other specialists and academic referees.

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It will be provided in a written form and include a proposal and timetable for completion of the archive to MAP 2 standards, deposition of the completed archive and submission for publication of a final report.

6.7. Post Excavation Processing

The results of the excavation will be processed and researched according to an agreed programme identified by the approved Post Excavation Assessment.

A full artefactual, ecofactual, written, graphical, photographic and computerized archive will be prepared to approved standards as agreed with the recipient museum.

Assessment and analysis of unpublished information and the results of related work in the immediate area will be included in the post excavation programme for incorporation in any final site report.

The final report will include a full account of the excavation and the outcome of research into those results and associated data. It will be subject to external academic refereeing.

6.8. Transfer and Deposition of the Archive

The transfer and deposition of the complete archive of the sites will be in accordance with current guidelines, subject to confirmation by the owner.

Copies of selected textual, graphical, digitized and photographic material will be deposited with the local SMR and the National Monument Record.

6.9. Publication

The results of the excavations will be published in an appropriate national or local academic journal (or journals) dependent upon the results of the work.

6.10. Monitoring

The Local Planning Authority (LPA) will wish, through its archaeological advisers, to be involved in the process of site monitoring. Facilities will therefore be afforded to their nominated archaeological representative to be directly involved in the discussions on such matters as they arise during the course of the archaeological works.

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Professional archaeological monitoring will be maintained during the course of the excavation, assessment, post excavation, publication and other related works until final transfer of the completed site archive into the care of an agreed and approved museum. This monitoring will be undertaken in conjunction with a designated representative of the local SMR.

Wainhomes plc or its nominated representative will undertake audits of both the excavation and post excavation processes and report their results.

Regular monitoring meetings will be held by Wainhomes plc, their nominated representative, and the archaeological contractor in order to provide an opportunity to review progress of site works and any post excavation programme. Representatives of the LPA and recipient museum will be formally invited to attend and contribute to the meetings.

An initial meeting will be held on the first day of the site works and at regular intervals during the course of the excavation. A meeting will be held on or close to the final day of site working. Subsequent meetings will include at least one to examine the results and proposals of the Post Excavation Assessment, and at least one other to monitor progress on the archiving and publication.

Additional spot checks by Wainhomes plc, the CNR, or designated representatives of the LPA will take place after due notice has been served on the Archaeological Contractor.

7. Conclusion

The site may contain significant archaeological deposits, in particular along the Lawrence Street frontage. The objective of the evaluation will be to establish the potential of these deposits and develop an appropriate mitigation strategy.

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Related Information

Maps Consulted

Yorke 1618 by Franz Hogenberg.

The Ichonography and Ground Plan of ye City of Yorke 1694 by Benedict Horsley.

A plan of the City of York 1736 by Francis Drake.

OS 1852

OS 1892

OS 1909

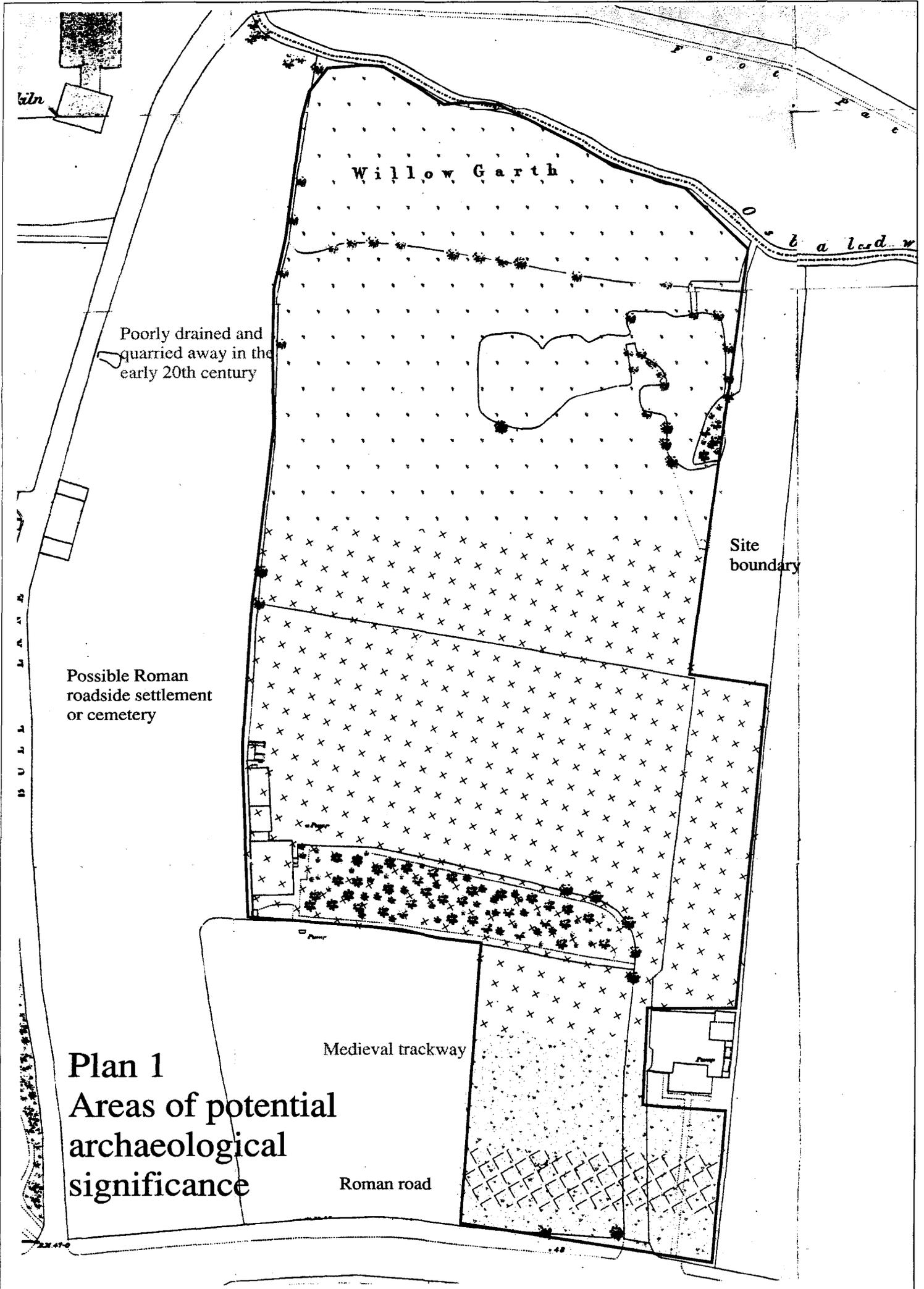
OS 1936

OS 1963

Published Information

D Stocker.	1981	Interim Vol. 7. No. 3.
D Brinklow et al.	1986	Coney Street, Aldwark and Clementhorpe, Minor Sites and Roman Roads.
B Wilson & F Mee.	1998	The Medieval Parish Churches of York.

Mike Griffiths for Mike Griffiths and Associates on behalf of Wainhomes plc



Willow Garth

Poorly drained and quarried away in the early 20th century

Site boundary

Possible Roman roadside settlement or cemetery

Medieval trackway

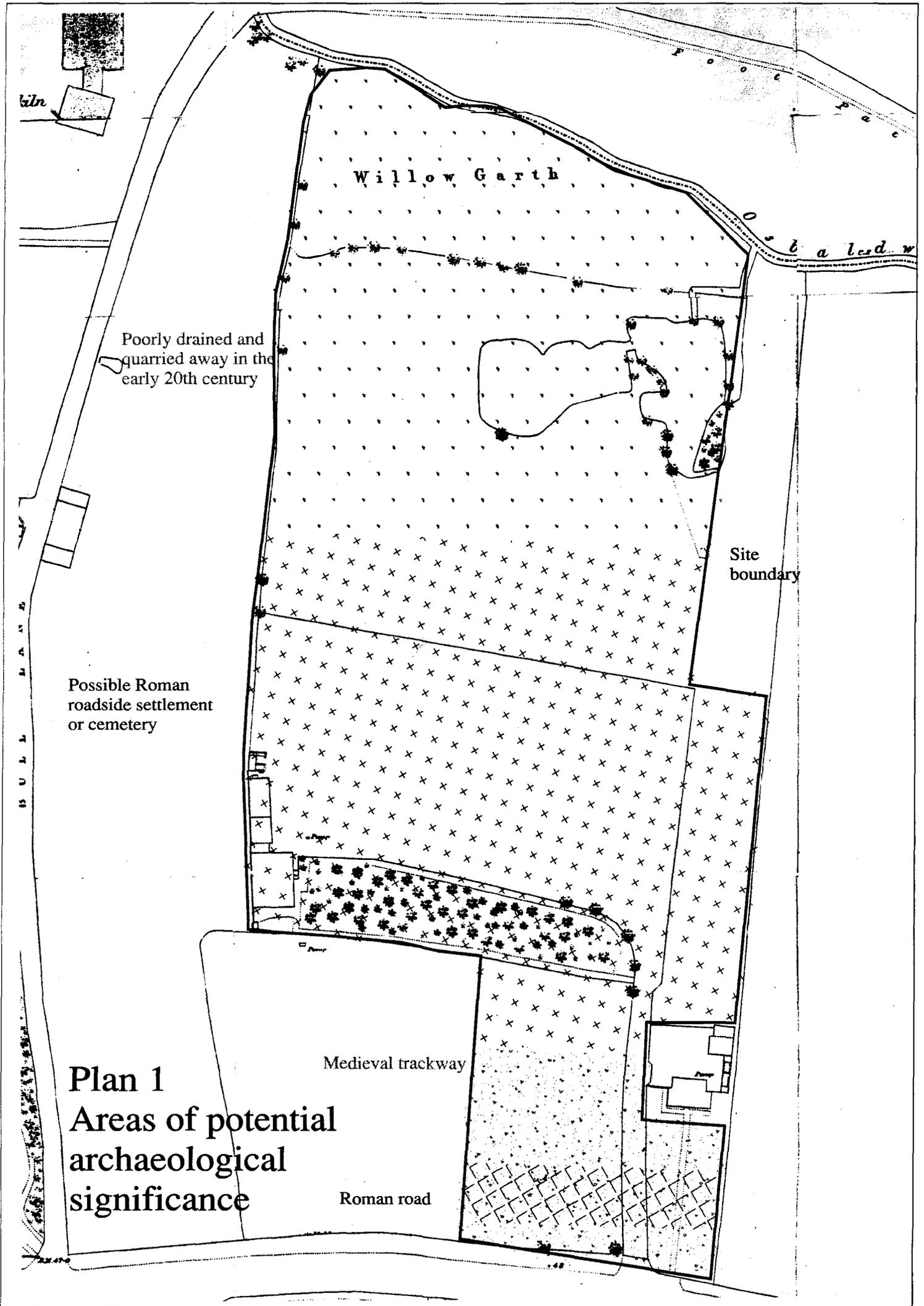
Roman road

Plan 1
Areas of potential archaeological significance

bulldozer

B
U
L
D
O
Z
E
R

road



Plan 1
Areas of potential
archaeological
significance