

**Written Scheme of Investigation for a
Programme of Archaeological Work**

Land at Wakefield Road, Athersley

Barnsley, South Yorkshire



April 2021

Client	Harworth Estates Ltd	
Site name	Land West of Wakefield Road, Barnsley	
Report type	Written Scheme of Investigation	
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Prepared by	Helena Kelly, BSc, MCIfA	
	Heritage Archaeology Harborough Innovation Centre Airfield Business Park, Leicester Rd, Market Harborough LE16 7WB	
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Summary

Heritage Archaeology was commissioned by Harworth Estates Ltd to provide a written scheme of investigation for a programme of archaeological work for a proposed housing development site at Wakefield Road, Barnsley. Consultation with South Yorkshire Archaeology Service has confirmed that a trenched evaluation is required to investigate and characterise potential archaeology at the site. Known heritage assets within the development site relate to former 19th coal workings, part of the East Gawber Hall Colliery. The programme of work will be undertaken to determine the presence/ absence of archaeology within the site, and the character of any present archaeology.

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1 Introduction

- 1.1. Outline planning consent (with all matters reserved apart from the access) has been granted for the development of up to 232 dwellings, with associated open space, road and drainage infrastructure. Heritage Archaeology Ltd has been appointed to provide a written scheme of investigation for a programme of archaeological works, required as a condition of outline consent.
- 1.2. This WSI relates to the outline application referred to above (reference 2017/1451) and to a subsequent application seeking planning permission for engineering works (related to land contamination at the site) and partial drilling and grouting of the site. The proposals also seek the discharge of condition 12 (land contamination) of planning application ref: 2017/1451.

Site location

- 1.3. The site is located at land to the west of Wakefield Road, Athersley, Barnsley, South Yorkshire, S71 1NX, national grid reference (NGR) SE34790881. The relevant HER is held by South Yorkshire Archaeology Service (SYAS).

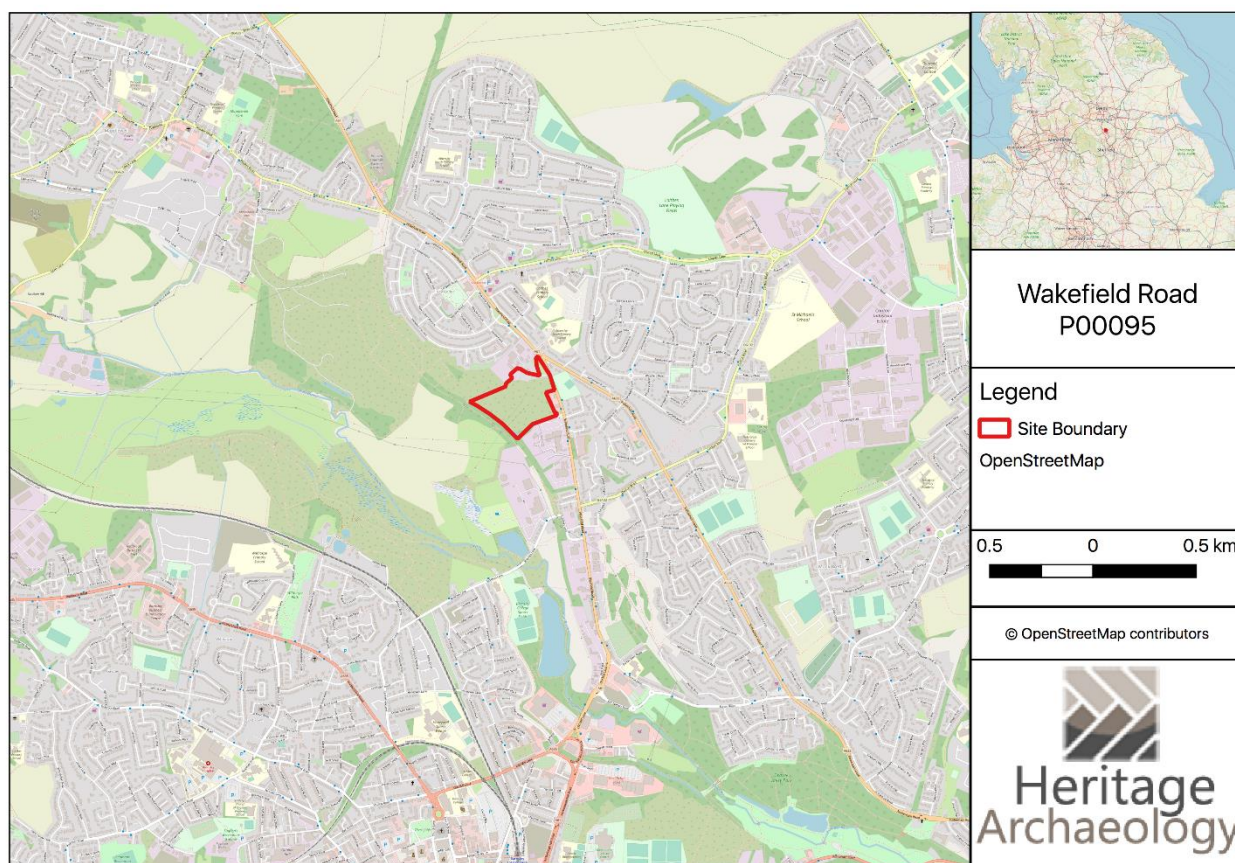


Figure 1: Site location (shows 2017/1451 application red line boundary)

Planning background

- 1.4. A full planning application, reference 2017/1451, was submitted to Barnsley Metropolitan Borough Council in 2017. That application has been approved with conditions; Condition 24 relates to archaeology:

24. Prior to the submission of any reserved matters application, an archaeological evaluation of the application area shall be undertaken in accordance with a written scheme of investigation that has been submitted to and approved in writing by the local planning authority. Drawing upon the results of this field evaluation stage, a mitigation strategy for any further archaeological works and/or preservation in situ shall be submitted as part of the reserved matters application. The scheme shall then be implemented in accordance with the approved details.

Reason: To ensure that the site is archaeologically evaluated in accordance with an approved scheme and that sufficient information on any archaeological remains exists to help determine any reserved matters and in accordance with CSP 30.

- 1.5. A desk-based assessment prepared by TEP (TEP, 2017) proposed that a staged approach to mitigation be taken forward, comprising a targeted archaeological investigation of areas that included the former extent of the East Gawber Hall Colliery pithead, followed by a proportionate programme of archaeological recording through excavation, and making a record of the 'important' hedgerow within the site prior to or during its removal.
- 1.6. SYAS will be consulted on the programme of archaeological work proposed by this Written Scheme of Investigation, to ensure that the following programme of work addresses their consultation advice.

Aims and objectives

- 1.7. The following method for a programme of archaeological investigation (archaeological trenched evaluation, post excavation assessment, analysis, publication and archiving) is commensurate to the results of the desk-based assessment.
- 1.8. The programme of work specifically aims to further characterise the archaeological deposits associated with the East Gawber Hall Colliery identified within the area of the proposed ground disturbance. This approach is in accordance with paragraph 199 of the National Planning Policy Framework (NPPF).
- 1.9. The research objectives of the developing South Yorkshire Archaeological Research Framework will be taken into account in determining an appropriate and proportionate archaeological programme of work. The archaeological work at this site could particularly contribute to further understanding of coal extraction sites in South Yorkshire; to understanding the layout, use, development and eventual closure of these sites; and to understanding links between the coal mining and social infrastructure of Barnsley and South Yorkshire.

2 Operational matters

Regulatory requirements

The National Planning Policy Framework (NPPF), 2019

- 2.1. Paragraph 199 states that "*local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible*".
- 2.2. The condition attached to planning consent, and this corresponding WSI, conform with this policy provision of the NPPF.

Barnsley's Local Plan, adopted January 2019

- 2.3. Policy HE1 The Historic Environment, states that "*we will positively encourage developments which will help in the management, conservation, understanding and enjoyment of Barnsley's historic environment, especially for those assets which are at risk This will be achieved by:- ...*

d. By ensuring that proposals affecting an archaeological site of less than national importance or sites with no statutory protection conserve those elements which contribute to its significance in line with the importance of the remains. In those cases where development affecting such sites is acceptable in principle, mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, an understanding of the evidence to be lost must be gained in line with the provisions of Policy HE6.

- 2.4. This policy supersedes Policy CSP30 of the previous plan.
- 2.5. Policy HE6 Archaeology states that "*applications for development on sites where archaeological remains may be present must be accompanied by an appropriate archaeological assessment (including a field evaluation if necessary) that must include the following:*
 - *Information identifying the likely location and extent of the remains, and the nature of the remains;*
 - *An assessment of the significance of the remains; and*
 - *Consideration of how the remains would be affected by the proposed development.*

Where preservations of the remains are not justified, permission will be conditional upon:-

- *Archaeological recording of the evidence (including evidence that might be destroyed),*
- *Whether buried remains or part of a standing structure or building; Analysis of the information gathered; Interpretation of the results gained;*
- *Public dissemination of the results; and*
- *Deposition of the resulting archive with an appropriate museum or archive service.*

Best practice and guidance

2.6. The guidance most relevant to this WSI is provided in:

- Chartered Institute for Archaeologists 2020, Standard and Guidance for; Archaeological Field Evaluation, Archaeological Excavation, Archaeological Watching Brief and the Collection, Documentation and Research of Archaeological Materials and for commissioning work on, or providing consultancy advice on, archaeology and the historic environment,
- Historic England, 2015 Management of Research Projects in the Historic Environment (MoRPHE).
- English Heritage, 2011, Environmental Archaeology, A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)
- Historic Environment Good Practice Advice in Planning 2, Managing significance in decision-taking in the historic environment, Historic England, 2015

2.7. Historic England, in GPA2 (pages 11-13), provides advice on the content of Written Schemes of Investigation, archaeological conditions, reporting, publication and archiving, and unexpected discoveries during work.

Monitoring

2.8. The implementation of the works outlined in this WSI will be monitored by SYAS, advisers to the local planning authority, Barnsley Metropolitan Borough Council. SYAS will be kept up to date with progress during all phases of the archaeological works.

2.9. All archaeological fieldwork will be undertaken by a suitably qualified organisation, working under the direction of a full Member of the Chartered Institute for Archaeologists, or equivalently qualified project director.

Programme

2.10. It is anticipated that the works will happen in accordance with the following programme:

- April/ May 2021 - submit WSI for approval by SYAS
- TBC – programme of archaeological trenched evaluation
- +8 -12 weeks - report
- +6 months - deposition of archive

Organisation and Key Personnel

2.11. The archaeological works will be undertaken by a suitably qualified archaeological contractor and will be managed by Helena Kelly, MCIfA. The archaeological contractor will be a Registered Archaeological Organisation with the CIfA or hold similar quality assurance accreditations and equivalent technical qualifications and experience.

2.12. The appointed archaeological organisation would provide a list of appropriately qualified technical specialists for approval by SYAS prior to works commencing.

Health and Safety

2.13. All work on site would be undertaken strictly in accordance with the project health and safety plan and task specific risk assessments. All companies working on the project will adhere to the client's required quality, health, safety and environment controls.

2.14. Access routes to working areas would be specified by the client and access would only be permitted to those routes and the area of the fieldwork.

2.15. All site staff, including subcontractors and visitors, will prove that they have attended a site induction and have the necessary competencies (e.g. CITB training for machine operators) and any other necessary health and safety qualifications.

3 Archaeological and historic context

- 3.1. A desk-based assessment was undertaken for the outline planning application area by TEP, *TEP, 2017 Historic Environment Desk-based Assessment and Impact Assessment, Wakefield Road, Athersley, unpublished report (document reference 6401.001)*.
- 3.2. The TEP report outlines that no prehistoric or Roman activity is recorded on or near to the proposed development site. Barnsley is a documented medieval settlement. There is evidence for coal mining in the area from the 14th century although there is no evidence to suggest that any pre-Industrial coal mining was taking place on or near to the proposed development site. The site is likely to have been in agricultural use during the medieval and post medieval period. Barnsley developed rapidly in the later post medieval period as a result of industrialisation and the first recorded development within the site dates to this period. The East Gawber Hall Colliery was sited partially within the development site. It appears to have been related to other nearby coal workings; Primrose Main Colliery, Gawber Colliery and Wharnccliffe Carlton Colliery, as associated infrastructure is depicted on historic mapping linking these sites. The East Gawber Hall Colliery opened in 1856 and was closed by 1922.
- 3.3. A scheduled monument lies approximately 75m south west of the proposed development site; the East Gawber Hall Colliery Fanhouse (National Heritage List for England reference 1017748). The scheduling description includes that "*The brick fanhouse belonged to the East Gawber Hall colliery which stood to the north on the other side of a disused railway. The colliery opened in 1856 and was closed before 1922. It has since been demolished. For much of its lifetime it had the same ownership as the nearby Wharnccliffe Carlton colliery, to which the fanhouse has sometimes been attributed. The building originally housed a Guibal fan, a steam-powered device commonly used for mine ventilation in the late 19th century, and dating in this case to the 1880s. The fan is thought to have been installed in 1875-80 at the time the colliery shaft was sunk, and to have been approximately 10m in diameter. Fans of this type were enclosed: stale air was drawn from the mine shaft through an inlet passage, and expelled through a chimney-like outlet or evasee. The evasee is the site's most prominent survival, standing to 10m, with a brick wall projecting south west from its north west wall....*"
- 3.4. The proposed development site includes an area depicted on historic mapping as including buildings and railway sidings associated with the East Gawber Hall Colliery. No colliery infrastructure is shown on the first edition Ordnance Survey mapping (1854-55). The second edition (1892, 1:2,500) shows the colliery buildings. By 1906 these have been partially removed, and by 1931 further structures have been removed and the remaining buildings are annotated as 'engineering works'. All of the original buildings appear to have been removed by the 1970s or 1980s.
- 3.5. A phase II Geo-environmental Report has been provided with the 2017 application. This included an intrusive ground investigation based on trial pits and window sample borehole investigation. The report notes that two shafts associated with the East Gawber Hall Colliery are shown on historic mapping in the northern part of the site. It also notes a high risk of shallow workings on the site which are likely to be within the three coal seams on site. Nine

mine entries (five shafts and four adits) are recorded on or within 20m of the site, all in the west or north west of the site, or beyond the north west site boundary (of which two are believed to be within the site). The test pits identified topsoil or made ground overlying the Penning Middle Coal Measures Formation. No features relating to the documented mine shafts or adits were recorded but due to the depth of made ground encountered (greater than 2.5m below ground level), the geo-environmental report recommends that further technical investigation is required to determine the presence or absence of mine entries within the site.

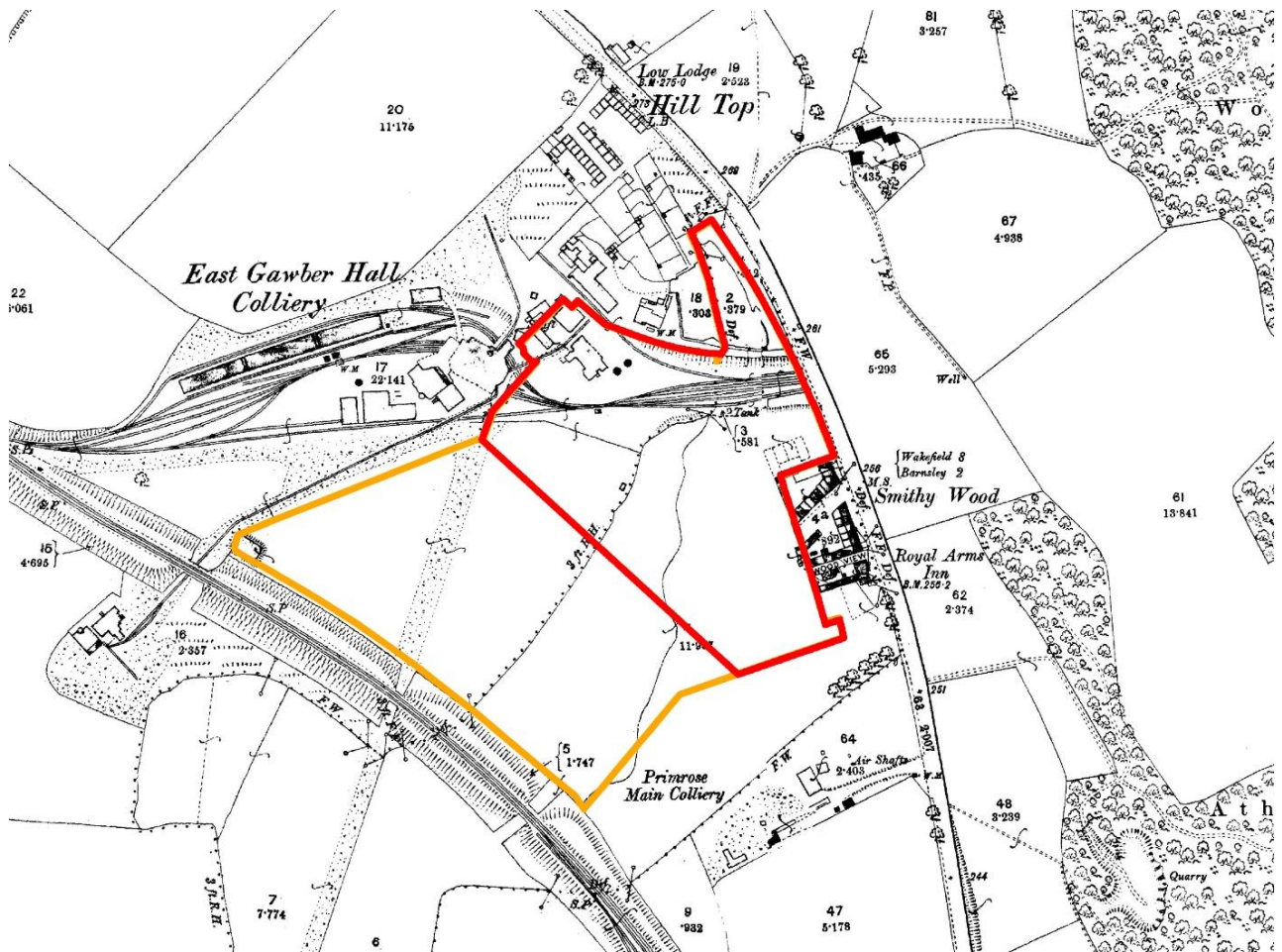


Figure 2: Ordnance Survey County Series Yorkshire, 1:2,500 1892 (Landmark Historical Map)

4 The programme of archaeological work

Trenched evaluation

- 4.1. The trenching will target the area of potential archaeological interest relating to East Gawber Hall Colliery, where the documented remains fall within the application area red line boundary. Trench locations are sited to avoid areas of former shafts and adits shown on the constraints plan (Figure 3, below), as these require specialised investigation. Also overhead and underground services plotted on the constraints plan are avoided.
- 4.2. Five 30m x 2m trenches are proposed, designed to adequately sample the archaeological potential of the site in order to define a sampling strategy for future mitigation in relation to the any present archaeology. The precise dimension and location of the proposed trenches will be confirmed on site and in consultation with SYAS. Indicative trench locations are shown on Figures 3 and 4, below.
- 4.3. The trenches will be mechanically excavated using a machine fitted with a toothless ditching bucket. Under instruction from the designated supervising archaeologist, the machine will operate in 'spits', removing only an appropriate amount of overburden with each action. The supervising archaeologist will give the command to stop should archaeological deposits or structures become visible. At each soil horizon change, the supervising archaeologist will indicate to the machine driver that each stratum should be stored separately.
- 4.4. Upon reaching the archaeological horizon or the natural horizon, whichever is encountered first, machine excavation will stop. Should the trenches require excavation to depths in excess of approximately 1.5m to reach archaeological horizons, the trench may require stepping or shoring, or investigation by machine sondage, rather than features being cleaned by hand. This would be confirmed in consultation with the client and SYAS.
- 4.5. The archaeological evaluation will provide an accurate record of any archaeological and palaeo-environmental finds, features, artefacts or ecofacts identified. If any such finds or features are identified, subsequent excavations will be undertaken by hand. Sampling strategies will be in accordance with the archaeological sub-contractor fieldwork manual and the requirements of SYAS.
- 4.6. A pre-excavation photo will be taken of the clean trenches. The archaeological contractor will make appropriate pre-and post-excavation site records. All finds and features will be accurately located and planned accurately at appropriate scales.

Further mitigation

- 4.7. Following completion of the trenched evaluation described above, the results will be discussed with SYAS and a programme of archaeological recording agreed, that is proportionate to the significance of any heritage assets identified, and the predicted impact on them. The extent of any necessary excavation, and sampling strategies will be agreed in consultation and confirmed through the provision of an updated WSI

- 4.8. The subsequent phase of work will include (or comprise) making a record of the historic hedgerow within the site. The record will comprise the archaeological recording of a transect across the hedgerow/ former boundary line to make a record of any associated archaeological evidence for its date of construction, construction technique and any evidence for its use and re-use following its original construction.

General

Finds

- 4.9. All finds or environmental samples recovered during the archaeological works will be assessed and reported on by external specialists. A list of specialists for the project will be provided by the archaeological contractor when required. All finds will be treated in accordance with current best practice as set out in Chartered Institute for Archaeologists and Historic England guidance.

Human Remains

- 4.10. If human remains are encountered during the evaluation, they will be left in situ and the coroner notified. If it is deemed appropriate to excavate human remains, this will be done in accordance with appropriate Historic England and Chartered Institute for Archaeologists guidance (e.g. CIfA Technical Paper 13 Excavation and Post-excavation Treatment of Cremated and Inhumed remains). Excavation, removal from site, analysis and final placing will all be subject to the requirements of the appropriate Ministry of Justice licence.

Treasure

- 4.11. If any artefacts are encountered that would constitute 'treasure' as defined by The Treasure Act, 1996, they will be reported to the local Coroner and relevant Finds Liaison Officer. Any artefacts deemed to be Treasure would be excavated on the day they are discovered and removed to a secure site. If this is impractical then appropriate security would be provided until full excavation and removal can occur.

Paleo-environmental sampling and analysis

- 4.12. Paleo-environmental assessment aims to identify areas suitable for the survival of evidence of past environments. These most commonly occur in the form of subsurface peat layers but can also include all waterlogged deposits. The identification of any suitable areas will take place during the archaeological works. Should any such deposits exist within the area of impact, samples will be taken by a suitably qualified specialist sub-contractor.
- 4.13. Having assessed the potential for analysis a project design would be produced to provide a detailed proposal for analysis (including, for example, C14 dating, loss-on-ignition to measure organic carbon content, humification and mass specific magnetic susceptibility) of any present selected samples. If necessary and appropriate the advice of the Historic England Science Advisor will be sought.

5 Reporting

- 5.1. A programme of reporting will be undertaken, to commence on completion of each phase of fieldwork. It will be proportionate to the findings of the fieldwork, and it may be that a single phase of assessment, analysis and reporting is enough in the event of non-complex findings. In the event of complex findings requiring specialist input, the 'MAP2' assessment and analysis approach would be adopted, with a post-excavation assessment report produced within six months of the completion of fieldwork, and a post excavation analysis report, a publication report, and site archive prepared within two years of the completion of fieldwork.
- 5.2. The post-excavation report will include detailed desk-based analysis of the relationship between the pithead and fanhouse, and a photographic record of the fanhouse, in addition to the assessment and analysis of the results of the evaluation and any subsequent excavation. Any findings will be discussed in terms of their contribution to understanding the wider coal mining history of East Gawber Hall Colliery.
- 5.3. In the event of negative, or non-complex findings, separate reports will be produced detailing the results of each phase of fieldwork within eight weeks of the end of the fieldwork and archived within six months. The reports will include;
 - a front cover to include the NGR, and HER reference number
 - a concise, non-technical summary of the results,
 - the circumstances of the project and the dates on which the fieldwork was undertaken,
 - description of the methodology, including the sources consulted,
 - the historical background of the development area,
 - results of the fieldwork
 - a statement, where appropriate, of the archaeological implications of the impact,
 - a copy of this project design, and indications of any agreed departure from that design,
 - the report will also include a complete bibliography of sources from which data has been derived, and a list of any further sources identified but not consulted,
 - a site location plan related to the national grid,
 - appropriate plans showing the location and position of features or sites located,
 - plans and sections showing the positions of deposits and finds,
 - illustrative photographs as appropriate,
 - plan showing the positions of where the survey photographs were taken,
 - coordinates (latitude/longitude) of relevant sites if archaeological remains have been discovered.

6 Archive

- 6.1. The report will be submitted to the client, and to South Yorkshire Historic Environment Record within six months of the completion of the trenching.
- 6.2. An archive of the results of the archaeological work will be produced, in accordance with CIfA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA 2020). The archive will contain all site records and materials recovered.
- 6.3. Details of the work will be entered on the OASIS database within 12 months of the completion of the project.
- 6.4. Opportunities for public engagement and possible wider dissemination of the results of the fieldwork will be determined in consultation with South Yorkshire Archaeology Service, commensurate to the findings on site.

7 Glossary and abbreviations

Time periods used are as follows:

- Palaeolithic: 1,000,000 - 10,000 BC
- Mesolithic: 10,000 – 4,000 BC
- Neolithic: 4,000 – 2,200 BC
- Bronze Age: 2,600 - 700 BC
- Iron Age: 800 BC – AD 43
- Roman: 43 – 410
- Medieval: 1066 – 1540
- Post Medieval: 1540 - 1901
- Modern: 1901 - present

Abbreviations used are as follows:

- CIfA – Chartered Institute for Archaeologist
- HER – Historic Environment Record
- NDHA – Non-designated heritage asset
- NGR – National Grid Reference
- NPPF – National Planning Policy Framework
- SYAS – South Yorkshire Archaeology Service

8 References

CIfA, 2020, Code of Conduct. Chartered Institute for Archaeologists

CIfA, 2020, Standard and Guidance for Archaeological Field Evaluation Chartered Institute for Archaeologists

CIfA, 2020, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives. Chartered Institute for Archaeologists

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

English Heritage, 2011, Environmental Archaeology, A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)

Historic England, 2015, Management of Research Projects in the Historic Environment (MoRPHE)

Rodgers Leask Environmental, 2017, Land off Wakefield Road, Athersley, Phase 2 Geo-Environmental Report, unpublished report reference 17176-RLE-17-00-RP-O-0003

Roskams, S, and Whyman, M, May 2007, Yorkshire Archaeological Research Framework: research agenda; a report prepared for the Yorkshire Archaeological Research Framework

Forum and for English Heritage *Department of Archaeology, University of York,*
(unpublished report, project number 2936 RFRA

TEP, 2017, Wakefield Road, Athersley, Historic Environment Desk Based Assessment,
Unpublished report

National Planning Policy Framework, 2019

Websites

www.pastscape.co.uk

Old-maps.co.uk

<http://www.british-history.ac.uk>

Figure 4: Historic mapping (OS 1892 1:2,500) showing indicative trench locations

