



Hollis Croft, Sheffield

Written Scheme of Investigation for Archaeological Watching Brief and Trial Trenching

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1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology (WA) has been commissioned by Johnson Associated (UK) Ltd, on behalf of GL Europe RE2 Holdings Sarl, and Newmark Developments (Watkin Jones Group), to carry out a staged programme of archaeological work on land at Hollis Croft and White Croft, Sheffield, centred on National Grid Reference (NGR) 434990 387580, hereafter 'the Site' (Figure 1).

1.1.2 A mixed use development incorporating student accommodation (Planning Application No. 16/02910/FUL) has been approved for the Site subject to the fulfilment of certain planning conditions. Condition 7 of planning consent outlines the need for the production of a Written Scheme of Investigation (WSI) detailing a strategy for archaeological investigation of the Site:

No development, including any demolition and groundworks, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) that sets out a strategy for archaeological investigation and this has been approved in writing by the Local Planning Authority. The WSI shall include:

- *The programme and method of site investigation and recording.*
- *The requirement to seek preservation in situ of identified features of importance.*
- *The programme for post-investigation assessment.*
- *The provision to be made for analysis and reporting.*
- *The provision to be made for publication and dissemination of the results.*
- *The provision to be made for deposition of the archive created.*
- *Nomination of a competent person/persons or organisation to undertake the works.*
- *The timetable for completion of all site investigation and post investigation works.*

Thereafter the development shall only take place in accordance with the approved WSI and the development shall not be brought into use until the Local Planning Authority have confirmed in writing that the requirements of the WSI have been fulfilled or alternative timescales agreed.

Reason: To ensure that any archaeological remains present, whether buried or part of a standing building, are investigated and a proper understanding of their nature, date, extent and significance gained, before those remains are damaged or destroyed and that knowledge gained is then disseminated.

1.2 Scope of document

1.2.1 This Written Scheme of Investigation (WSI) outlines the strategy and methodology for carrying out an initial programme of Watching Brief and Trial Trenching. The Watching Brief will be undertaken during the removal of a concrete slab, followed by targeted Trial

Trenching evaluation. The archaeological work follows on from a desk-based Archaeological Assessment for the Site (APS 2016) and will inform the need for any additional archaeological mitigation in advance of construction.

- 1.2.2 In format and content this document conforms with current best practice and to the guidance outlined in *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015a) and the Chartered Institute for Archaeologists' (CIfA) *Standard and Guidance: archaeological watching brief and evaluation* (CIfA 2014b and c).
- 1.2.3 The WSI will be submitted to and approved by South Yorkshire Archaeology Service (SYAS), archaeological advisors to the planning authority, prior to fieldwork commencing. The need, or otherwise, for additional work following on from the trenching, will be determined by SYAS following the completion of the initial works. Any changes to the agreed project design found to be necessary will be discussed with, and agreed by, SYAS before implementation.

2 SITE DESCRIPTION

2.1 Location, topography and geology

- 2.1.1 The Site, covering an area of approximately 0.7 hectares (Figure 1), is bounded to the north by White Croft; to the west by a car park around St. Vincent's church, a derelict three-storey house (nos. 79-81) and a former chapel known as Croft House; to the south by Garden Street; and to the east by a car showroom and car park. All the previous industrial buildings on the Site have been demolished down to ground floor level.
- 2.1.2 The Site lies between 58 m and 60 m above ordnance Datum (aOD).
- 2.1.3 The underlying geology of the Site comprises members of the Pennine Lower Coal Measures – mudstone and siltstone, with superficial geology comprising alluvium, gravel, silt and sand (British Geology Survey: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

2.2 Archaeological and historical background

- 2.2.1 The following is a summary of the archaeological and historical background for the Site as outlined in the Archaeological Assessment (APS 2016).

Prehistoric to medieval

- 2.2.2 Evidence for prehistoric and Roman activity in Sheffield city centre is rare. It has been suggested that a Roman Road may follow the course of nearby Broad Lane, although another interpretation of the origins of Broad Lane is as a medieval driveway. There is no direct archaeological evidence to support either interpretation.
- 2.2.3 Sheffield was mentioned in the Domesday Survey of 1086 and the Site is located to the west of the medieval town in a large open field known as Town Field. The site of a former medieval cross is located approximately 250 m to the southeast.

Post-medieval

- 2.2.4 Town Field had been enclosed into smaller closes and crofts by 1637. As Sheffield expanded in the early 18th century new streets were laid out within Town Field and these reflected the patterns of the former open field strips. Hollis Croft is shown on a map of 1736 and was named after landowners known as the Trustees of the Hollis Hospital. The

area became known as The Crofts and was characterised by back to back housing arranged around central courtyards and industrial activity associated with metal trades such as cutlery manufacture. Hollis Croft was certainly the site of cutlery production by the time of Sketchley's directory of 1774 which included entries for a table-knife cutler, a scissor-maker and penknife manufacturers.

- 2.2.5 The earliest consulted map of the Site is Gosling's map of 1736 which shows three long narrow developed blocks divided by streets known as Hollis Charity Street (now Hollis Croft) and White Field (now White Croft). Garden Street had not been laid out at this time.
- 2.2.6 A detailed plan of the made in 1787-9 by Fairbank shows a series of courts with houses which incorporated probable small-scale industrial and/or commercial enterprises on the northern frontage of the street. A similar pattern is shown on the southern frontage of Hollis Croft, but here some of the industrial enterprises appear to be on a larger scale with a large plot consisting of buildings around a central courtyard owned by John Kenyon being the site of a saw and steel works. The premises directly to the west of this were a tool and steelworks owned by John Harrison. It is also recorded that Harrison built an impressive three-storey four-bayed mansion at the Hollis Croft end of his works in the 1780's (Belford, 2001, p110).
- 2.2.7 The typical working-class house in this part of Sheffield at this time had a single room on each of three floors and the same scenario can be postulated for the houses in the courts shown on the 1787-9 map. The main centre of household activity was the ground floor living room which contained the largest fireplace and which was used as a kitchen, scullery, dining room, living room, washroom and bathroom. A cellar below was used to store coal and meat and the floors above provided sleeping accommodation. The enclosed courtyards were in effect a semi-private space in which activities such as the use of privies and laundry were undertaken (Belford 2001, p111).
- 2.2.8 Industrial activities at this time ranged from a single journeyman undertaking piecework in a rented room to a relatively large steelworks and toolmaking firms such as those owned by Kenyon and Harrison. The best known trade in Sheffield was the cutlery industry which was in effect a collection of crafts ranging from forging through various types of grinding to buffing and finishing. Related industries included the manufacture of bone handles and buttons. Heavier trades that were attracted to the area included steelmaking and ferrous and non-ferrous founding. The basic layout of most of the larger industrial sites was broadly similar with the buildings grouped around a yard with an entrance archway wide enough to accommodate wheeled traffic (*ibid.*). This latter arrangement can be seen in the plan of Kenyon's saw and steelworks on the 1787-9 map.
- 2.2.9 Garden Street had been constructed by the time of a map of 1808. A large building shown on the northern frontage of this street is likely to be the still existing former chapel known as Croft House.
- 2.2.10 The 1853 Ordnance Survey 1:1,056 and 1890 1:500 Town Plans show both frontages of Hollis Croft (north and south) characterised by courts associated with domestic, commercial and industrial activity. Several trades are registered within these courts on White's Street Directory of 1884, namely shopkeepers, a victualler, a manufacturer of electroplated goods, a coal dealer and a razor scale presser. On the northern frontage the Diamond Work (files) was also located within one of the courts. On the southern frontage courts together with the Cock Public House are marked along with the Machine Knife Works and the large Globe Forge & Rolling Mills. The latter had taken the place of Harrison's and Kenyon's works shown on the 1787-9 map and the Hollis Croft Steel Works shown on the 1853 Town Plan. The 1853 plan shows two large circular structures,

possibly cementation furnaces, within the Hollis Croft Steel Works. The British Works (Electro Plate) and the Exchange Works (cutlery) were also located to the south of the Globe Forge & Rolling Mills fronting on to Garden Street. Other industrial enterprises located close to the Site included the Toledo, Argyle and Hollis Works (all cutlery works) and a smithy.

- 2.2.11 Little appears to have changed between 1890 and the Ordnance Survey map of 1905. The buildings within the Globe Forge & Rolling Mills, now belonging to Footprint Tools, are shown in more detail.
- 2.2.12 By the time of the Ordnance Survey map of 1935 the western courts on both sides of Hollis Croft had been demolished and replaced by larger industrial sheds associated with the use of the Site by Footprint Tools.
- 2.2.13 By 1954 all of the courts appear to have been demolished although a terrace of four buildings, possibly houses, remained on the southern frontage of Hollis Croft. A Rubber & Tyre Depot is identified to the south of the terrace. A Machine Knife Works is identified on the southern frontage of Hollis Croft extending onto Garden Street. The sites of two Tool Works and a Furniture Works are also marked on the Garden Street frontage.
- 2.2.14 The factory buildings present on Site until recent demolition had largely been built by the time of the 1964 OS map. Existing architect's plans reveal that areas of the Site have been reduced in level during construction of foundations in the mid-20th century, likely removing archaeological remains from at least some areas of the Site.

Listed buildings

- 2.2.15 The Archaeological Assessment outlines many listed buildings situated close to the Site. These include 48-50, 52, 54 and 56 Garden Street, examples of the small type of purpose-built 19th century urban works with domestic accommodation.

Geotechnical works

- 2.2.16 A borehole survey conducted on the Site was archaeologically inconclusive. Made ground deposits between 0.6 m and 2.5 m in depth were recorded. Shallow natural deposits were noted particularly to the south and east of the Site.

Previous archaeological works in the vicinity

- 2.2.1 Extensive archaeological investigations between White Croft and Solly Street directly to the north of the Site, established the presence of early 18th century pits and postholes representing a few buildings with yards and gardens. In the mid to late 18th century new houses were built along the street frontages with yards to the rear. By the later 18th century the presence of workshops was indicated by the presence of features such as an anvil base and a crucible furnace related to cutlery manufacture. These suggest the production of a single range of cutlery items by independent craftsmen. Some of the mid to late 18th century structures were retained throughout the existence of the courts while others were rebuilt or added to in the early to mid 19th century. A major phase of rebuilding between the 1830's and the 1850's saw a decrease in the number of small workshops in a domestic setting and an increase in factory-based cutlery production. The excavations also revealed the remains of an early 19th century steelworks with cementation and crucible furnaces (ArchHeritage 2014).
- 2.2.2 An archaeological appraisal of 79-81 Hollis Croft directly to the west of the Site concluded that 18th century buildings once stood on the Site. The Site was then occupied by the Toledo Works in 1890 which was still in existence by 1974 (ARCUS 2008a).



2.2.3 Archaeological mitigation works at 29-65 Garden Street, to the south of the Site, identified the remains 19th and 20th century domestic and industrial buildings arranged around several courtyards (ARCUS 2008b).

3 AIMS AND OBJECTIVES

3.1 Project aims

3.1.1 The aim of the Watching Brief is to identify and record any archaeological structures or deposits that may be disturbed or exposed during the removal of the existing concrete slab from the Site.

3.1.2 The aim of the Trial Trenching is to evaluate the presence or otherwise of archaeological remains on the Site, to inform formulation of a strategy to avoid or mitigate the impacts of the proposed development on any archaeological remains.

3.2 Project objectives

3.2.1 In furtherance of the project aim, the following objectives are defined:

- *To enhance understanding of the development of the Site and its associated buildings (mainly the 18th and 19th century phases) but also to have regard for potential earlier phases of activity on the Site;*
- *To determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the Site;*
- *To assess the artefactual and environmental potential of the archaeological deposits encountered;*
- *To inform formulation of a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;*
- *To prepare a report on the results of the work;*
- *To disseminate the results of the work in a manner in keeping with their significance, e.g. through publication in a suitable journal; and,*
- *To deposit the resulting Site archive with a suitable museum.*

3.3 Trench rationale

3.3.1 A more detailed rationale for the location of trenches (Figure 2) is as follows:

- *Trench A: Court off Hollis Croft (No. 11 on the 1890s OS Town Plan); a different layout of buildings is shown on the 1789 Fairbank plan of Hollis Croft from that shown on the 1850s OS map;*
- *Trench B: The Cock PH and court to rear, first shown on the 1789 Fairbank plan;*
- *Trench C: Harrison's Steel Works, as shown on the 1789 Fairbank plan of Hollis Croft; later the Machine Knife Works;*
- *Trench D: Extension of Harrison's Steel Works, shown on the 1850s OS map; later the Machine Knife Works;*
- *Trench E: Kenyon's Steel Works, as shown on the 1789 Fairbank plan of Hollis Croft, later Hollis Croft Steel Works and then the Globe Forge & Rolling Mills;*
- *Trench F: Cementation furnaces within Hollis Croft Steel Works, shown on the 1850s OS Town Plan map; one may relate to the original Kenyon Steel Works;*
- *Trench G: Exchange Works (Cutlery) – named on the 1890s Town Plan; most buildings are also shown on the 1850s OS map;*



- Trench H: Court off Hollis Croft (No. 1 on the 1890s Town Plan), first shown on the 1789 Fairbank plan;
- Trench I: Court/possible small works off Hollis Croft, first shown on the 1789 Fairbank plan (?No. 12 on the 1890s Town Plan);
- Trench J: Courts off Hollis Croft (Nos. 6 & 8 on the 1890s Town Plan), first shown on the 1789 Fairbank plan; and
- Trench K: Orange Branch PH (OS 1850s Town Plan) and court (No. 4 on the 1890s OS Town Plan).

4 METHDOLOGY

4.1 Health and safety

- 4.1.1 Wessex Archaeology will supply a copy of their Health and Safety Policy and a Risk Assessment to the Client/ Main Contractor before the commencement of any fieldwork. The Risk Assessment will have been read and understood by all staff attending the Site before any groundwork commences.
- 4.1.2 The Client/ Main Contractor will be responsible for the identification and protection of any above and below-ground services within the area of groundworks, and for informing Wessex Archaeology staff of their location.

4.2 General

- 4.2.1 All works will be carried out in accordance with current industry best practice and guidance (ClfA 2014a-c).
- 4.2.2 Archaeological works will initially comprise two stages: the first will be a Watching Brief monitoring the removal of the concrete slab; the second will be a Trial Trench evaluation.
- 4.2.3 Arrangements will be put in place with the Client in order for SYAS to monitor progress of the archaeological works during Site visits.

4.3 Watching brief

- 4.3.1 The Main Contractor will remove the existing concrete slab hard standing from Site with due regard to the possibility of buried archaeology preserved immediately beneath this layer. A suitably experienced member of Wessex Archaeology staff will attend Site at all times during this process to monitor and advise the Contractor. A mechanical breaker fitted to a 360° excavator will likely be used to break out the slab, before a suitable bucket is used to remove the loosened material. Every effort will be made to ensure the integrity of the archaeological resource as far as is reasonably practical during the breaking out of the concrete slab.
- 4.3.1 Any archaeology encountered during the removal of the concrete slab will be recorded and located using a GNSS ("GPS") device with an accuracy of ± 0.03 m.
- 4.3.2 Detailed excavation of any archaeology is not regarded as necessary at this stage. It may be necessary to call a temporary halt to groundworks to allow the cleaning and recording of any revealed archaeology.
- 4.3.3 The design of the Trial Trenching component of the work will be revised in light of the results of the Watching Brief. The results of the Watching Brief will be used to determine the number, dimensions and locations of the subsequent trenches. Any archaeology uncovered during the Watching Brief will be fenced off and left untouched by ground



workers and any other contractors at least until after the Trial Trenching has concluded. This may cause some areas of the Site to become inaccessible to vehicles and plant.

4.4 Trial trenching

- 4.4.1 The Site will be subjected to trial trenching following a scheme agreed between SYAS, the Client and Wessex Archaeology. The number of trenches, their dimensions and locations are to be confirmed following the results of the Watching Brief. However, eleven 10 m by 4 m trenches are initially proposed (Figure 2), the rationale for which is provided above.
- 4.4.2 The Site development is likely to be constructed in up to three phases (Sites 1 to 3, Figure 3) and the excavation of trenches may therefore be carried out in up to three separate phases (e.g. Trenches A and B – Site 1; Trenches I, J and K – Site 2 and then Trenches C, D, E, F, G and H – Site 3).
- 4.4.3 The location of each trench will be accurately set out using a GPS.
- 4.4.4 Overburden such as made ground will be removed using a suitable 180° or 360° excavator under the direct supervision of an experienced archaeologist. Where possible, a toothless ditching bucket will be used. Excavation will proceed to a depth sufficient to address the objectives of the evaluation. Health and Safety concerns will be paramount with no excavation exceeding a safe working depth, which may be 1.2 m or may be shallower depending on ground conditions. To meet the aims of the evaluation it may be necessary to step out one or more trenches. Mechanical excavation will cease at the first archaeological horizon, or when the absence of any such horizon has been adequately demonstrated. Spoil will be stored at the sides of trenches in a tidy and workmanlike manner.
- 4.4.5 Following the cleaning of the trenches any exposed archaeological features will be planned and hand excavated (mattock and shovel). Hand excavation will not exceed a safe working depth (provisionally a maximum of 1.2 m below ground level, though shallower if ground conditions demand).
- 4.4.6 All excavation and recording will be undertaken by qualified archaeologists employed by Wessex Archaeology. Any archaeological remains encountered will be recorded, and where necessary excavated in accordance with current industry best practice (ClfA 2014a-c). Features of whatever origin requiring clarification will be cleaned by hand and recorded in plan at an appropriate scale.
- 4.4.7 Each layer/feature identified will be sufficiently excavated to establish the date, nature, extent and condition of the archaeological remains. The percentage of any feature or group of features to be excavated will be dependent on a number of factors. These include the achievement of the aims and objectives, the significance or potential of the archaeological features/deposits, the stratigraphic record, health and safety considerations, and the requirements of SYAS. Archaeological remains are likely to chiefly comprise brick and other types of structures and significant linear and discrete features are not anticipated. However, should linear features be encountered, 10% of their length will initially be hand excavated subject to the factors outlined above. Pits will initially be subject to 50% excavation unless they are very large.
- 4.4.8 Following the completion of all hand excavation and the approval of the local planning archaeologist, the trenches will be backfilled. Trenches will only be backfilled following approval by SYAS.



4.4.9 It is envisaged that the hand excavation and the recording of the archaeological features will take approximately one week for Site 1 (Trenches A and B), one week for Site 2 (Trenches I-K) and two to three weeks for Site 3 (Trenches C-H). The timetable for this stage of works might be subject to revision in light of the number and complexity of the unearthed archaeological features.

4.5 Recording

4.5.1 All archaeological features and deposits encountered will be recorded using Wessex Archaeology pro forma recording sheets and a continuous unique numbering system. A stratigraphic matrix will be compiled to record the relationships between features and deposits. The plans will show the location of contexts observed and recorded in the course of the investigation. All trenches will be planned at 1:50, with individual features being planned at 1:20 where additional detail is required. One representative long section of each trench will be produced, at an appropriate scale. Sections and/or profiles of each feature sampled will be drawn at 1:10 or 1:20, depending on the size of the feature. All drawings will be made in pencil on permanent drafting film.

4.5.2 Archaeological features and deposits will be surveyed using a GPS and related to the Ordnance Survey national grid. The spot height of all principal features and levels will be calculated in metres relative to Ordnance Datum, correct to two decimal places. Plans, sections and elevations will be annotated with spot heights as appropriate.

4.5.3 A photographic record, utilising black and white negative film, supplemented by high resolution digital data capture, will be maintained during the course of the fieldwork and will include:

- The site prior to commencement of fieldwork;
- The site during work, showing specific stages of fieldwork;
- The layout of archaeological features within each trench;
- Individual features and their sections;
- Groups of features where their relationship is important.

4.6 Human remains

4.6.1 In the event of discovery of any human remains (articulated or disarticulated, cremated or unburnt), they will be left *in situ*, covered and protected. Following discussions with the Client and SYAS, the need for and appropriateness of their excavation/removal or sampling as part of the works will be determined. Where deemed appropriate human remains will be fully recorded, excavated and removed from the Site subject to compliance with the relevant Ministry of Justice Licence which will be obtained by Wessex Archaeology.

4.6.2 Should human remains require excavation, all excavation and post-excavation will be in accordance with Wessex Archaeology protocols, current guidance documents (e.g. McKinley 2013) and in line with the standards set out in ClfA Technical Paper 13 Excavation and post-excavation treatment of cremated and inhumed remains (McKinley and Roberts 1993. Appropriate specialist guidance/ Site visits will be undertaken if required. The final placing of human remains following analysis will be subject to the requirements of the Ministry of Justice Licence.



4.7 Treasure

- 4.7.1 In the event of discovery of artefacts covered or potentially covered by *Treasure Act 1996*, their excavation and removal will be undertaken following notification of the Client, Coroner and SYAS.

5 FINDS AND ENVIRONMENTAL

5.1 Finds

- 5.1.1 All artefacts from excavated contexts will be retained, except those from features or deposits of obviously modern date. Finds will be collected and treated in line with current national guidelines (English Heritage 2005; ClfA 2014c). A suitable metal detector will be used to enhance artefact recovery.
- 5.1.2 Any artefacts requiring conservation or specific storage conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and Neal 1998).
- 5.1.3 Where appropriate, samples may be taken and sieved to aid in artefact recovery. For both inhumations and cremation related deposits, the burial deposit will be sampled and processed following the specialist guidelines.
- 5.1.4 Metalwork from stratified contexts will be X-rayed and stored in a stable environment along with other fragile and delicate material. The X-raying of objects and other conservation needs will follow recommendations by Wessex Archaeology in-house conservation staff or other appropriate approved conservation centre.
- 5.1.5 All retained artefacts will, as a minimum, be washed, weighed, counted marked and identified. All artefacts recovered are the property of the landowner. They are to be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with national industry guidelines (English Heritage 2005; ClfA 2014c).

5.2 Industrial samples

- 5.2.1 Industrial activity relating to metalworking processes is likely to be present on the Site. If industrial activity of any scale is detected, industrial samples and process residues will also be collected following current guidance (Historic England 2015b) and in consultation with an appropriate specialist.

5.3 Environmental

- 5.3.1 Sampling will follow current Historic England (English Heritage 2011) and Wessex Archaeology guidelines.
- 5.3.2 Bulk environmental soil sample sizes will be as per the Historic England guidelines, with the option to review this following on Site discussion / preliminary processing of samples. Samples will be taken from well-sealed and dated or datable archaeological features for plant macro-fossils (charred and/or waterlogged and wood charcoal), small animal bones and small artefacts.
- 5.3.3 Where appropriate monolith and/or contiguous column samples will be taken. Monoliths will be taken from key and representative sequences on the Site. These will be examined in laboratory conditions by a geoarchaeologist to further elucidate the depositional history of the Site and enable sub-sampling for microfossils and radiocarbon samples as



appropriate. Particular attention will be paid to stabilisation horizons and buried land surfaces, with soil micromorphology considered.

- 5.3.4 Bulk environmental soil samples will be processed by flotation and scanned to assess the environmental potential of deposits, but will not be fully analysed. The residues and sieved fractions will be recorded and retained with the project archive. The monoliths will be subject to detailed description by the geoarchaeologist and sub-samples taken as appropriate for microfossils and radiocarbon dating, should suitable material exist. Samples may include those for pollen, diatoms, foraminifera, ostracods as deemed appropriate by the geoarchaeologist. These will be assessed, but not fully analysed at Wessex Archaeology and the pollen/ diatoms by our external specialist.
- 5.3.5 Suitable samples for radiocarbon dating will be subsampled from the processed and identified plant remains in the bulk samples or from well stratified remains from the monoliths as deemed appropriate.
- 5.3.6 Assessment analysis of charcoal from possible industrial contexts may provide useful data on both availability of species and their management and exploitation for fuel. This will be undertaken in tandem with assessment of slag and any other industrial by products that may be found.

6 REPORTING

6.1 Evaluation reports

- 6.1.1 A draft report on the first phase of Trial Trenching, incorporating the results of the initial Watching Brief, will be produced within two weeks of completion of the initial phase of trenching work to facilitate discussions with SYAS regarding the need or otherwise for mitigation in each phase. If no additional mitigation work is required, a final Trial Trenching report will be issued within three to eight weeks of fieldwork completion. Subsequent phases will be reported in a similar fashion.
- 6.1.2 Reports will be prepared in the standard Wessex Archaeology format and will address the aims of the fieldwork. As a minimum, the final reports will include the following elements:
- A non-technical summary including the basis for the work, its aims and results;
 - Project number, planning reference numbers, dates of fieldwork and National Grid Reference (to at least eight figures);
 - An account of the background to the project and circumstances of work;
 - Aims and purpose of the archaeological work;
 - The methodologies used;
 - An objective summary statement of results;
 - Full phased stratigraphic discussion of the archaeological features;
 - An interpretive discussion of the results, placing them in a local and regional context;
 - The results of assessments and/or analyses of artefacts, ecofacts and industrial remains carried out by suitable specialists;
 - Archaeological Site photographs including key features and working shots;
 - Supporting illustrations and plans, suitably captioned, at appropriate scales. To include as a minimum: a location map at not less than 1:25000 and a Site plan at not less than 1:500; copies of historic map extracts and historic photographs where relevant; a plan and section of each trench (if section is informative); detail plans/sections of archaeological features and structures as appropriate;
 - An overall (phased) site plan showing all archaeological features recorded



- A detailed context index;
- Supporting data – tabulated or in appendices; and
- Index to archive, details of archive location and accession number.

6.1.3 The need for any additional publication will be discussed with SYAS following the initial evaluation phase.

6.2 Distribution of reports

6.2.1 In addition to the provision of copies to the Client, a hard copy of the report will be submitted to SYAS for inclusion in the county Historic Environment Record.

6.3 Dissemination

6.3.1 An OASIS online record (<http://oasis.ac.uk/pages/wiki/Main>) will be initiated and key fields completed on Details, Location and Creators Forms. All appropriate parts of the OASIS online form will be completed for submission and this will include an uploaded .pdf version of the entire report (a paper copy will also be included with the archive). Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

6.3.2 Provision will be made for publicising the result of the work locally, e.g. by presenting a paper at South Yorkshire Archaeology Day, talking to local societies, etc. A summary (of appropriate length, to be discussed with SYAS) of the findings of the work, accompanied by appropriate illustrations, will be submitted to SYAS in an appropriate digital format for inclusion in the South Yorkshire Archaeology annual review.

7 THE ARCHIVE

7.1 Museum

7.1.1 The designated receiving museum will be Museums Sheffield. A completed and signed copy of the Project Initiation Form (PIF) will be forwarded to the Museum and SYAS at the commencement of the project.

7.2 Preparation of archive

7.2.1 The complete Site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by the appropriate Museum, and in general following nationally recommended guidelines (SMA 1995; Brown 2011; ADS 2013; ClfA 2014d).

7.2.2 All archive elements will be marked with the Site/accession code and a full index will be prepared.

7.2.3 The Site archive will be prepared for long-term storage in accordance with current guidelines (e.g. Walker 2001 *etc.*). It is proposed in principle that, subject to the wishes of the landowner, the entire archive (including the finds) will be donated to and deposited with Museums Sheffield. Provision has been made for the cost of long term storage in the post-fieldwork costs.

7.2.4 Until final deposition with the museum the archive will be stored at the offices of Wessex Archaeology Northern Region in Sheffield.



7.3 Discard policy

- 7.3.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal of Archaeological Collections* (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.
- 7.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993 and 1995; English Heritage 2011).

7.4 Security copy

- 7.4.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

8 PROJECT MANAGEMENT AND STAFFING

8.1 External quality standards

- 8.1.1 Wessex Archaeology is registered as an archaeological organisation with the Chartered Institute for Archaeologists. Wessex Archaeology fully endorses *the Code of Conduct and Regulations for professional conduct* of the Chartered Institute for Archaeologists.
- 8.1.2 All staff directly employed or sub-contracted by Wessex Archaeology will be of a standard approved by Wessex Archaeology, and archaeological staff will be employed in line with The Chartered Institute for Archaeologists codes of practice and will normally be members of the Chartered Institute for Archaeologists.

8.2 Personnel

- 8.2.1 The works will be directed and supervised by an experienced archaeologist from Wessex Archaeology's core staff, who will be on Site at all times for the length of archaeological fieldwork as required. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's Project Managers, Richard O'Neill BA MCIfA, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. Monitoring visits may also be undertaken by Wessex Archaeology's Health and Safety Manager where required. The appointed Project Manager and experienced archaeologists will be involved in all phases of the investigation through to its completion.
- 8.2.2 The analysis of any finds and environmental data will be undertaken by Wessex Archaeology core staff or external specialists, using Wessex Archaeology's standard *pro forma* recording system. The work will be carried out under the overall direction of the Project Manager.
- 8.2.3 Information on Wessex Archaeology and external finds and environmental specialists can be provided on request.

8.3 Training

- 8.3.1 All fieldwork staff are certified through the Construction Skills Certification Scheme (CSCS) or UK equivalent. Key staff also have qualifications in the use of CAT and Genny equipment through the National Plant Operators Recognitions Scheme (NPORS) and asbestos awareness training (UKATA).



9 HEALTH AND SAFETY

9.1 Summary

- 9.1.1 Health and Safety considerations will be of paramount importance in conducting all fieldwork. Safe working practices will override archaeological considerations at all times. Draft RAMS will be issued to the Client/ Main Contractor for the proposed work (Wessex Archaeology 2016b and c). The Risk Assessment will have been read, understood and signed by all staff attending the Site before any groundwork commences.
- 9.1.2 Wessex Archaeology will supply trained, competent and suitably qualified staff to perform the tasks and operate the equipment used on Site.
- 9.1.3 All work will be carried out in accordance with the *Health and Safety at Work Act 1974* and the *Management of Health and Safety Regulations 1999*, and all other applicable Health and Safety legislation, regulations and codes of practice in force at the time.
- 9.1.1 Wessex Archaeology staff will comply with the standard PPE requirements for working on construction sites (hard hat, steel toe capped boots, high visibility clothing) and any specific requirements of the Main Contractor.

9.2 Insurance

- 9.2.1 Wessex Archaeology has both Public Liability (£10,000,000) and Professional Indemnity Insurance (£5,000,000).

10 QUALITY ASSURANCE PROCEDURES

10.1 Internal quality standards

- 10.1.1 Wessex Archaeology is an ISO 9001 accredited organisation (certificate number FS 606559), confirming the operation of a Quality Management System which complies with the requirements of ISO 9001:2008 – covering professional archaeological and heritage advice and services. The award of the ISO 9001 certificate, independently audited by the British Standards Institution (BSI), demonstrates WA's commitment to providing quality heritage services to our clients. ISO (the International Organisation for Standardisation) is the most recognised standards body in the world, helping to drive excellence and continuous improvement within businesses.
- 10.1.2 Wessex Archaeology operates a computer-assisted Project Management system. Projects are assigned to individual managers who are responsible for the successful completion of all aspects of the project. This includes monitoring project progress and quality; control budgets from inception to completion; all aspects of Health and Safety. At all stages the manager will carefully assess and monitor performance of staff and adherence to objectives, timetables and budgets, while the manager's performance is monitored in turn by the Team Leader/Regional Manager. Team Leaders/Regional Managers
- 10.1.3 All work is monitored and checked whilst in progress on a regular basis by the Project Manager, and all reports and other documents are checked by the Team Leader/Technical Manager, or Regional Manager, before being issued. A series of guideline documents or manuals form the basis for all work. The Technical Managers in the Graphics, Finds & Analysis and GeoServices and IT Sections provide additional assistance and advice.



- 10.1.4 All staff are responsible for following Wessex Archaeology's quality standards but the overall adherence to and setting of these standards is the responsibility of the Executive Management Team in consultation with the Team Leaders/Regional Managers who also ensure projects are adequately programmed and resourced within Wessex Archaeology's portfolio of project commitments.

11 COPYRIGHT

11.1 Archive and report copyright

- 11.1.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The Client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the *Copyright and Related Rights Regulations 2003*.
- 11.1.2 Information relating to the project will be deposited with SYAS Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or Development Control within the planning process.

11.2 Third party data copyright

- 11.2.1 This document, the report and the project archive may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

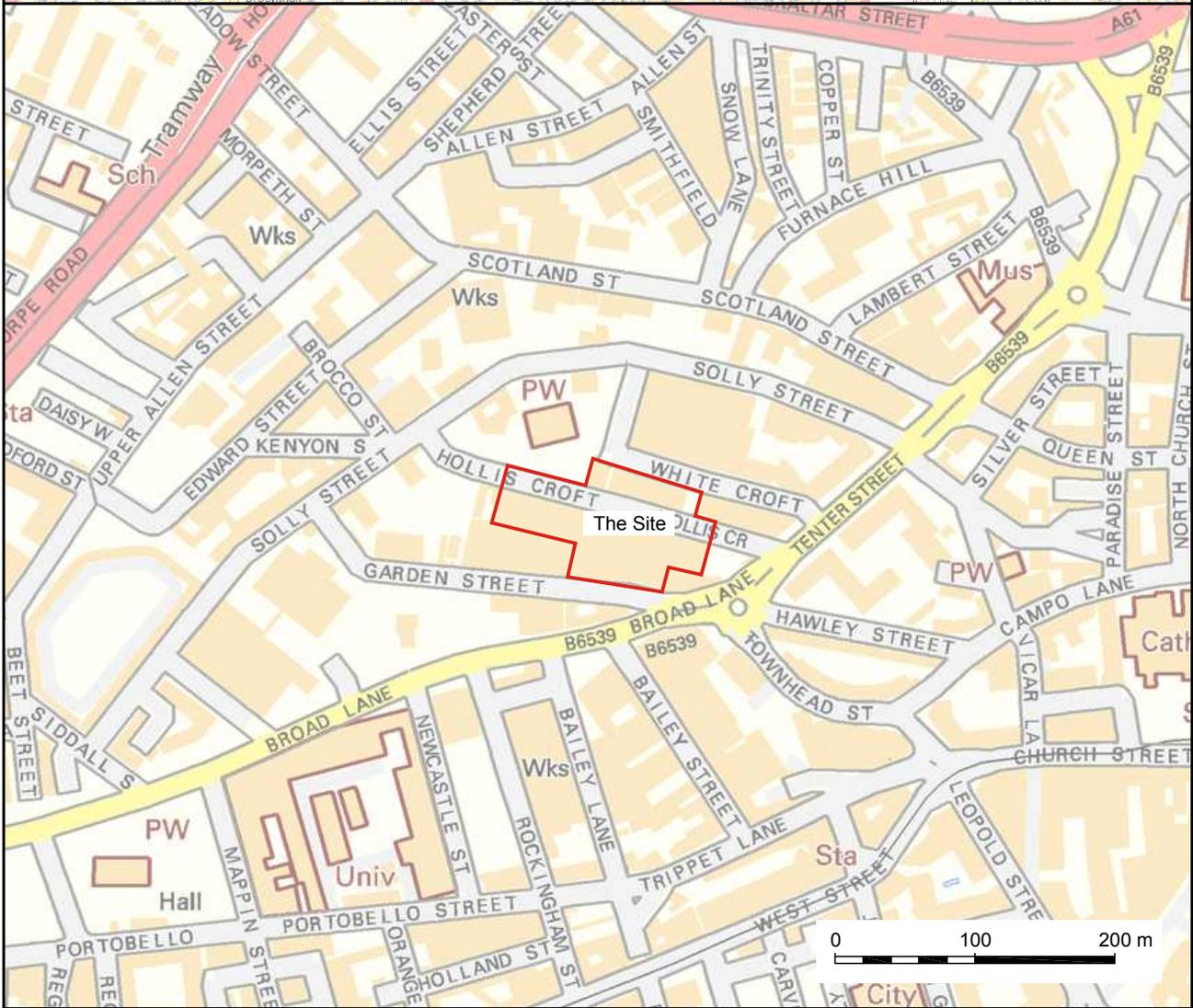
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	Date: 02/03/2017	Revision Number: 0
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Site location plan

Figure 1



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Site location with floor levels, overlay 1894 OS Map

Figure 2



- Site boundary
- Proposed trench



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Trench location overlay proposed site development

Figure 3