



YORK ARCHAEOLOGICAL TRUST



**BOX TREE HOUSE, 67 HIGH STREET,
HATFIELD, SOUTH YORKSHIRE**

BUILDING RECORDING REPORT

by Mark Johnson

REPORT NUMBER 2010/17



YORK ARCHAEOLOGICAL TRUST

York Archaeological Trust undertakes a wide range of urban and rural archaeological consultancies, surveys, evaluations, assessments and excavations for commercial, academic and charitable clients. It can manage projects, provide professional advice and monitor archaeological works to ensure high quality, cost effective archaeology. Its staff have a considerable depth and variety of professional experience and an international reputation for research, development and maximising the public, educational and commercial benefits of archaeology. Based in York its services are available throughout Britain and beyond.



© 2010 York Archaeological Trust for Excavation and Research Limited

Registered Office: 47 Aldwark, York, UK, YO1 7BX

Phone: +44 (0)1904 663000 Fax: +44 (0)1904 663024

Email: archaeology@yorkat.co.uk Internet: <http://www.yorkarchaeology.co.uk>

York Archaeological Trust is a Registered Charity No. 509060
A Company Limited by Guarantee Without Share Capital Registered in England No. 1430801

CONTENTS

	page
ABSTRACT	1
1. INTRODUCTION	1
2. METHODOLOGY	1
3. BACKGROUND	1
4. RESULTS	3
5. ACKNOWLEDGEMENTS	16
APPENDIX 1: PHOTOGRAPHIC LISTING.....	16
APPENDIX 2: BUILDING RECORDING SPECIFICATION	19

Figures

1. Site location	2
2. Works location	3
3. Elevations	14
4. Plans.....	15

Plates

Cover: View of site, looking N

1. S and E elevations of barn	5
2. N elevation of barn	6
3. Barn ground floor, western space, looking ENE	7
4. Barn ground floor, western space, looking WNW	8
5. Barn ground floor, looking NW	8
6. Barn first floor, looking W	9
7. Blocked vents to barn N wall interior.....	9
8. Detail of barn roof structure, looking W.....	11
9. Pigsties with store beyond, looking SE	13
10. Detail of western pigsties, looking SW	13

ABSTRACT

Historic building recording was carried out on a barn and store/pigsty complex on land to the rear of 67 High Street, Hatfield, South Yorkshire. The two storey barn, subsequently converted to livestock and storage usage is believed to date to the 18th century. Despite later alterations to doorways, windows and vents the shell and roof structure of the barn is largely original and of some local significance. The adjacent store/pigsty complex is far less imposing and large parts of this are of 20th century (including late 20th century) date.

1. INTRODUCTION

On 10th March 2010 York Archaeological Trust carried out a programme of historic building recording on a former barn and former pigsties located on land to the rear of 67 High Street, Hatfield, South Yorkshire. The recording was carried out as a condition of planning permission relating to the conversion of the barn to a domestic dwelling and the demolition of the pigsties (Planning reference 09/01570/FUL). All the recording work was carried out in accordance with a specification formulated by York Archaeological trust and approved by Mr Malcolm Thomas, Conservation Officer, of Doncaster Council (see Appendix 2). The recording work was commissioned by Mr and Mrs Swinburn.

2. METHODOLOGY

Recording was carried out by photography, written description and amendment of 'as existing' architectural drawings in digital format supplied by the client. Photography was by means of 35mm monochrome prints and colour digital images. Notes regarding descriptions were entered into a notebook whilst the amendments necessary to the plans and elevations were made on the basis of measurements made on site subsequently being used to alter the digital drawings. See Appendix 2 for details of specification.

3. BACKGROUND

No background research to this study has been commissioned. However, the examined structures were originally constructed as agricultural buildings just off the High Street on the eastern periphery of the settlement of Hatfield in what was, at that time, an almost entirely rural community. These buildings form surviving remnants of what was almost certainly a larger agricultural complex or farm. Some evidence for this comes from observations made by the current owner who informs us that ground-works adjacent to the recorded buildings

have revealed a number of walls/foundations of a brick type described as the same or similar to those of the extant barn.



Figure 1 Site location map

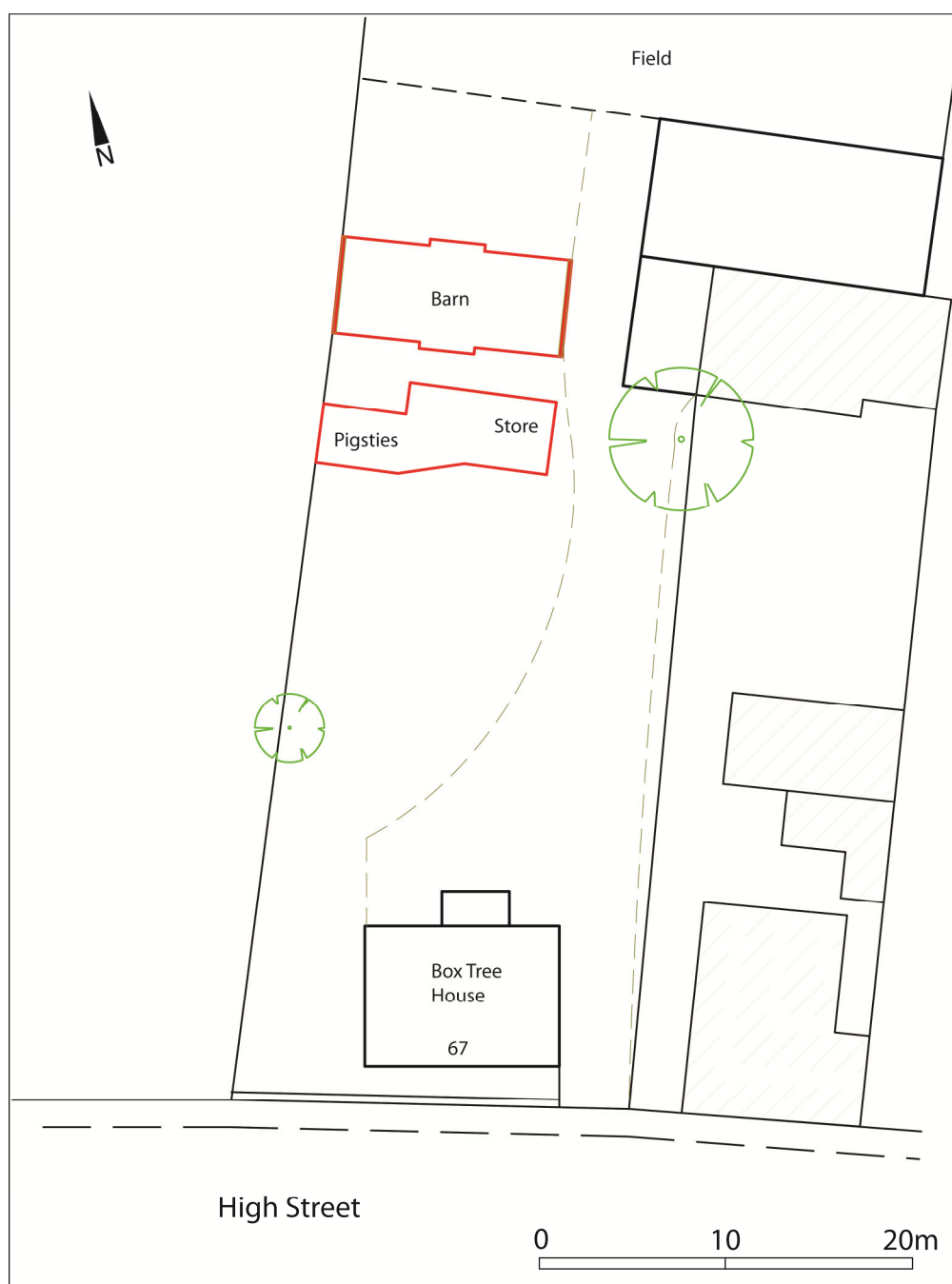


Figure 2 Works location map

4. RESULTS

4.1 THE BARN

The barn measures some 12.55m long (east – west), by 5.5m wide (north – south) and some 7.4m tall to the top of the gable. It is of two storey's, constructed of brick and has a roof of pan tiles. The bricks of which barn is built are handmade and range in size from 220-240mm x 105-112mm x 55-65mm and are unlikely to be of a date later than the 18th century.

Bonding of the bricks is by a creamy white coloured lime mortar. The external walls of the barn are in the region of 240-250mm thick, this increasing to around 350mm in the area of the central projections to the north and south elevations. Dentillated brickwork is evident at eaves level to north and south sides and tumbling to the gable ends. No rainwater gutters or down pipes were present though brackets for guttering were present to the south elevation.

4.1.1 SOUTH ELEVATION (PLATE 1)

The entrance to the barn is via a central doorway some 1.3m wide and set within a projection that extends from the ground to the eaves. This facade projection, which is mirrored by a similar feature to the north elevation, projects some 100mm from the barn walling to either side. There is some evidence for a former opening to the western side of this elevation in an area now occupied by a window; this takes the form of a blocking (with larger 19th century bricks) in excess of 1m wide. To the ground floor there is a double arrangement of windows at the western side, both of simple, non-opening wooden frames, probably of the later 19th century. The truncation of brickwork at the edges of the windows indicates that these are insertions. To the eastern side at ground level there is a further opening. This does not contain glass but has a grill of ironwork to the interior, whilst two pintles to the west side of the frame indicate that it formerly had a shutter. To the first floor there are two windows of 'Yorkshire' sliding sash type. Truncation of the brickwork to the edges of the frames points towards their being later insertions, again probably during the 19th century. Through-wall vents created by the omission of individual bricks was evident in two places, one to the eastern side of the ground floor, the other to the central projection at first floor level. Each was of recumbent diamond pattern and consisted of nine voids. It would be anticipated that a similar arrangement would have been present to the western side at ground floor level, this absence may relate to the putative blocked opening in this area.



Plate 1 South and east elevation of barn, looking NE. Note feed tube adjacent to scale

4.1.2 NORTH ELEVATION

Parts of this elevation were heavily overgrown with ivy which at a higher level prevented accurate inspection. The central doorway arrangement of the north elevation originally mirrored that of the south elevation, though was marginally wider. This doorway was blocked up with 19th century brickwork and had subsequently had a window inserted. The frame of this window suggests an earlier 20th century date. An area of straight jointing to the brickwork immediately east of the blocked doorway may relate to a former opening. To the western side at ground floor level a sliding sash window had been inserted as had two more at first floor level. Two tall ventilation slits, subsequently blocked were present at the eastern side, these were some 450mm tall by 90mm wide.



Plate 2 North elevation of barn, looking SW

4.1.3 EAST ELEVATION (PLATE 1)

Centrally located at the ground floor level was a doorway some 1.1m wide. The brickwork to either side of the doorway had been truncated indicating that this was an insertion, though whether this replaced an earlier narrower doorway could not be determined. There is evidence indicating the former presence of a first floor doorway/opening and this had been blocked up with 19th century bricks. Two windows were present to ground floor level, one to either side of the doorway. Whilst the frames appear likely to be replacements it is possible that openings here were originally present as the brickwork to the sides showed no sign of having been cut away. An inserted window was present to first floor level and occupied part of the lower portion of the blocked former doorway/opening. At a low level to the southern part of this elevation a blocked feeding pipe was present (see ground floor).

4.1.4 WEST ELEVATION

This elevation is only accessible via private land and could not be properly inspected other than by extremely oblique views. What was seen suggests that this facade is plain and that another building had formerly abutted this side.

4.1.5 GROUND FLOOR (PLATES 3, 4, 5)

The ground floor area is divided into two principal parts by a north south aligned wall of 19th century bricks. Some lime rendering was present in places. The larger of these areas is that to the west. This has a floor of brick, with mortar in places. In the north west corner area of this space a blocked doorway some 980mm wide was observed to the western wall. The 19th

century north-south inserted wall was seen to contain a small, low-level, square, blocked opening with a wooden frame little more than 500mm across, towards its northern end. The first floor flooring was seen to be supported by the 19th century wall and a large north – south beam located immediately to the west of the opposed doorways. This beam bore old slots for a former coggled joist arrangement. The existing joists are supported by the same beam via the means of stout battens nailed to the lower sides of the beam as well as by jointing.

The east side of the barn was comprised of two small spaces separated by a discontinuous brick wall of 19th century date. This wall butted up to the principal dividing wall of the barn which suggests that the creation of the two small spaces at this end may post-date original sub-division of the barn. The smallest of the two spaces (south-east corner of barn) had a floor of concrete and a ground level trough at the east end of the south wall which was fed via the external feeding pipe referred to above. 20th century shelving had been fitted to the western wall of this space. The slightly larger space at this end of the barn contained a ground level trough to the partition wall and also housed the 19th-20th century simple wooden flight of steps which provides access to the first floor.



Plate 3 *Barn ground floor, western space, looking ENE. Note blocked N doorway, slots in beam for coggled joists and inserted 19th century wall with small blocked opening*



Plate 4 Barn ground floor, western space, looking WNW.
Note blocked doorway near corner



Plate 5 Barn ground floor, larger of the two eastern spaces, looking NW.
Secondary usage for livestock and showing steps to first floor

4.1.6 FIRST FLOOR (PLATES 6, 7)

The flooring to this level is of wooden boards. Some lime rendering was seen to still adhere to the walls, the remainder being exposed brickwork. Two wooden nesting boxes for hens were present to the west wall, two to the south wall and one to the north wall whilst part of a framework supporting chicken wire was present around the top of the access point to the

ground floor. To the north wall two areas of through wall vents were observed, one to the east the other to the west; these had been blocked-up to the exterior side of this wall.



Plate 6 *General view of first floor, looking W*



Plate 7 *Blocked vents to E side of N wall below inserted window and adjacent to steps, note render to walls, looking NNE*

4.1.7 ROOF (PLATES 6, 8)

The roof structure of the barn is very largely original and of some interest. Two wall-plates extend fully along the north and south walls. The wall-plates support two roof trusses, one of which sits directly over the ground floor ceiling beam and the other over the suggested position of a former beam. The trusses are comprised of two principal rafters which are connected towards their bases by lap joints (simple butt joint involving no cut joint) to a tie-beam, the connection to the principal rafters and tie-beam being by single large iron bolts. Notches at the base of tie-beam and principal rafters facilitate the connection of both elements to the wall-plate. The upper ends of the principal rafters are connected by halved lap joints and at their apex support a square section ridge purlin. A low-level collar also links the principal rafters and these are connected by what appears to be an unusual form of notched lap joint, with these joints being additionally secured by two bolts to each side. The only assembly marks seen on the roof structure were related to the joints between principal rafters and collars. Large purlins extended between both trusses and from these to the end walls. The purlins, were of tenoned type, and tapered towards their jointed ends. They were secured by wooden pegs. The common rafters extended from the wall-plate and lapped over the purlins and ridge purlin.

The principal points of interest regarding this roof are the use of iron bolts and wooden pegs, the unusual joint connecting principal rafters to collars and the sole means of jointing between principal rafter and tie-beam being a single iron bolt. The contrast between the elaboration of the collar joint and the crudity of that of the tie-beam is stark. It is tempting to see the tie-beams as additional support added to a roof of common rafter type (i.e. with principal rafters and collar but no tie-beam), but not possible to verify such.



Plate 8 Detail of roof structure, looking W

4.1.8 DISCUSSION

Despite its small size the term barn is appropriate for this building as the processing and storage of agricultural produce was indeed its original function. In its original configuration the barn consisted of single completely open spaces to ground and first floors. The opposed doorways would have created a through draught ideal for housing a threshing floor between, whilst areas to the sides and to the first floor will have housed resultant produce that was kept in good condition via the ventilation slots within the walls. The existing large beam will have housed the cogged joists that supported the original first floor. A further beam was almost certainly originally present along the line of the main 19th century dividing wall. During the 19th century the barn underwent a transformation of use. The division of the ground floor created two small livestock areas at the east end, almost certainly, given the low-level troughs and feeding pipe, for pigs. The larger western space may have housed livestock or been used as a store. The original use of the first floor will have been storage of agricultural produce. Latterly this area was converted to a 'secure' hen loft. This is testified by the nesting boxes, chicken wire surround to the top of the stair access as well as various pieces of 20th century portable chicken paraphernalia.

4.2 PIGSTIES

The structures referred to as the pigsties are formed of a building and complex of walls that have 'evolved' as pigsties rather than been created as a purpose-built pig unit. The north-western part of this complex is formed of what presently serves as a store. Items currently stored in this building enabled only limited access to its interior. This structure is built of 19th century brick with a roof of pan tile. At some point in the past the southern side has been foreshortened and a large garage-type entrance been cut into its eastern elevation. Part of a blocked fireplace is centrally located on the northern wall and its chimney stack has been removed. This building incorporates at least two older elements. Firstly, the ridge piece of its common pitched roof is formed of a large re-used beam that has a regular pattern of slots cut into its underside. Secondly, the southern part of its western wall is built of what are probably 18th century bricks and these seem to have formed part of an earlier wall on the same axis. A modern conservatory-like structure of timber and glass has been added to the south side of this building in recent years.

A series of three roofed spaces between the western side of the store/conservatory and western boundary wall of the plot form the pigsties. The western two of these employed the boundary wall on their western side and had purpose built walls to their southern and eastern sides. The 'front' northern side of the sties was formed of a low-level wall thereby providing light and ventilation. A central north - south partition wall of brick divided this space into two sties. The mono-pitch roof of these sties was of corrugated asbestos-like material that sloped from north down to south. A third sty was formed by the roofing over of the space between the two sty unit and the structures at the eastern side and by the addition of a low-level wall to the northern side. Low level troughs were present within the sties.



Plate 9 *Pigsties with store beyond, looking SE*



Plate 10 *Detail of western pigsties, looking SW*

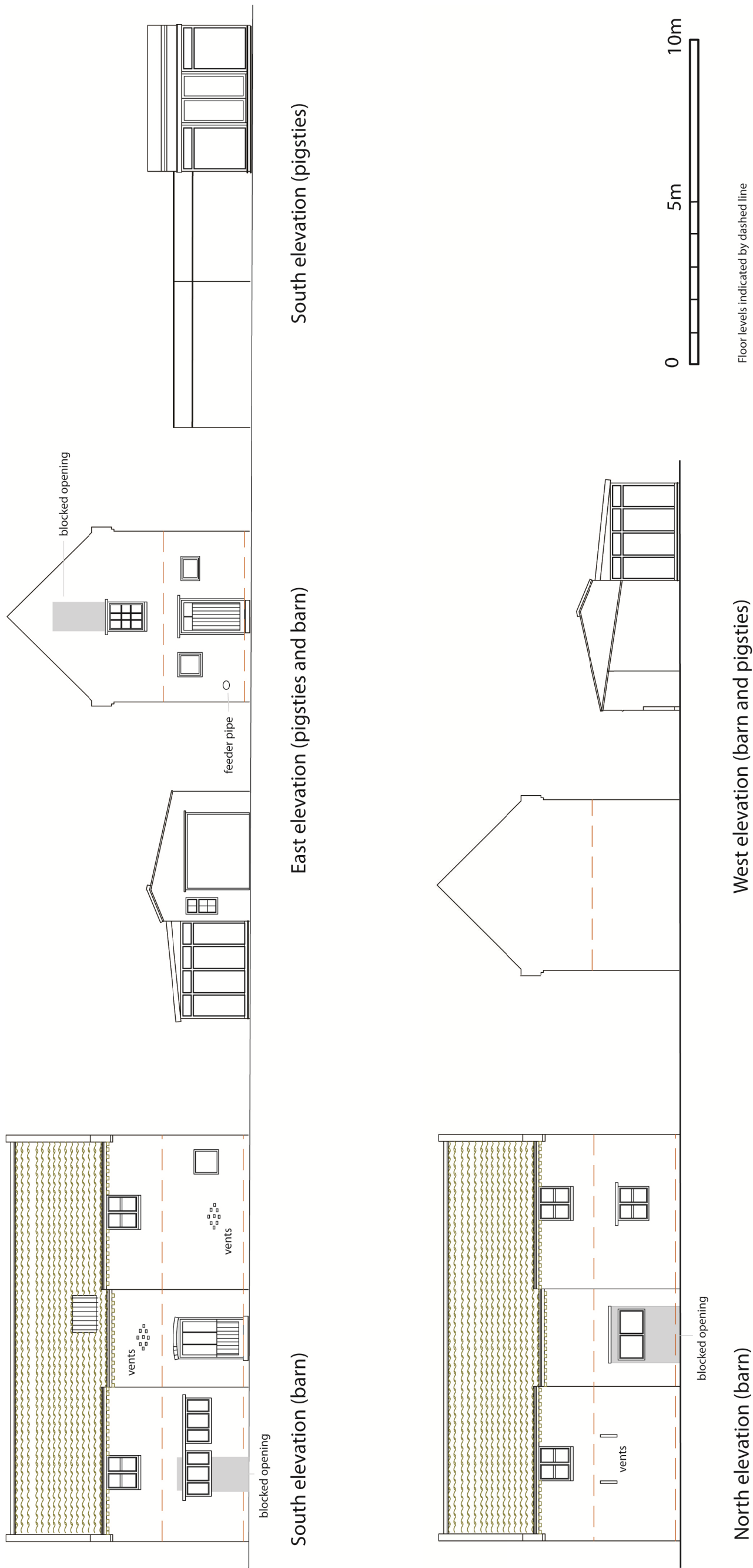


Figure 3 Elevations

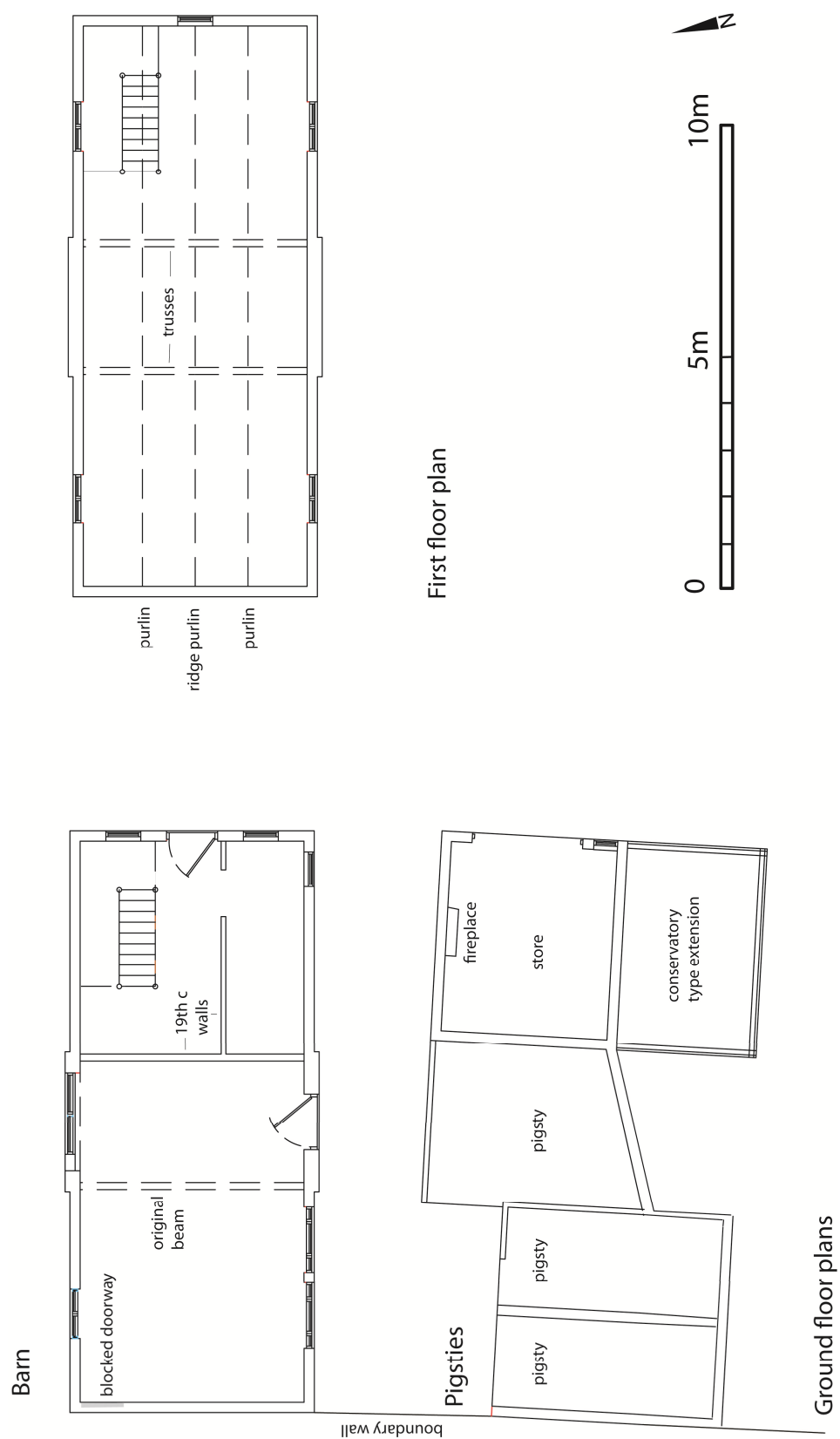


Figure 4 Plans

5. ACKNOWLEDGEMENTS

Photographs	M. Andrews
Research and author	M. Johnson
Illustrations	M. Johnson
Editor	M. Stockwell

APPENDIX 1: PHOTOGRAPHIC LISTING

PHOTO #	DIRECTION	DETAILS
		DIGITAL
5447-01	SW	Details of barn roof structure
5447-02	S	N elevation of barn
5447-03	W	Interior of store
5447-04	NW	Vents above doorway of south elevation of barn
5447-05	N	Blocking in area of barn G floor windows
5447-06	W	E gable end of barn showing tumbling and blocking
5447-07	N	G floor of barn showing N door blocking & inserted window
5447-08	NE	Feeding pipe to SW corner of barn
5447-09	W	Details of barn roof structure
5447-10	E	W part of barn G floor showing beam & inserted wall
5447-11	SW	Store of pigsty complex
5447-12	W	Area between barn & pigsties
5447-13	SW	Detail of barn roof truss
5447-14	S	Central part of N elevation of barn
5447-15	E	Upper floor of barn
5447-16	N	Central door area of S elevation of barn
5447-17	W	Blocked doorway in NW corner of barn ground floor
5447-18	SW	Smallest space at S side of E end of barn ground floor
5447-19	NW	Conservatory extension to store building
5447-20	E	Detail of beam with old joist slots, W part barn ground floor
5447-21	W	Reused beam in store building
5447-22	NE	Working shot, barn first floor
5447-23	NW	Detail of upper part of barn staircase
5447-24	N	Trough to N wall of pig sty adjacent to
5447-25	S	Interior of pigsty adjacent to store
5447-26	SW	N & E elevations of barn
5447-27	W	Store building with conservatory attached
5447-28	SW	View of pigsties
5447-29	W	Upper floor of barn
5447-30	W	E elevation of store building
5447-31	S	Small pen area at E end of barn ground floor
5447-32	N	Pig sty and barn complex

5447-33	W	E elevation of barn
5447-34	NW	E & S elevations of barn
5447-35	NE	Working shot, barn first floor
5447-36	SE	Pigstie complex
5447-37	W	Interior of store building
5447-38	S	Straight joint to E of blocked entrance to N side barn
5447-39	W	Barn first floor
5447-40	NW	E & S elevations of barn
5447-41	W	Doorway of E elevation of barn
5447-42	S	Blocked vents to eastern part of N elevation
5447-43	N	Blocked vents at E end of barn first floor
5447-44	N	Blocked opening to N wall of barn ground floor
5447-45	S	Pigsties
5447-46	N	Window to W side of S wall of barn, first floor
5447-47	N	Windows to W side of S wall of barn, ground floor
5447-48	N	Vents to E side of S wall of barn, ground floor
5447-49	SW	Western pigsties
5447-50	NE	Central part of S elevation of barn
5447-51	SW	Trough to larger E end space, barn ground floor
5447-52	E	Detail of E spaces, barn ground floor
5447-53	NW	Staircase at E end of barn
5447-54	W	W area of barn ground floor
5447-55	W	Detail of roof truss, barn first floor

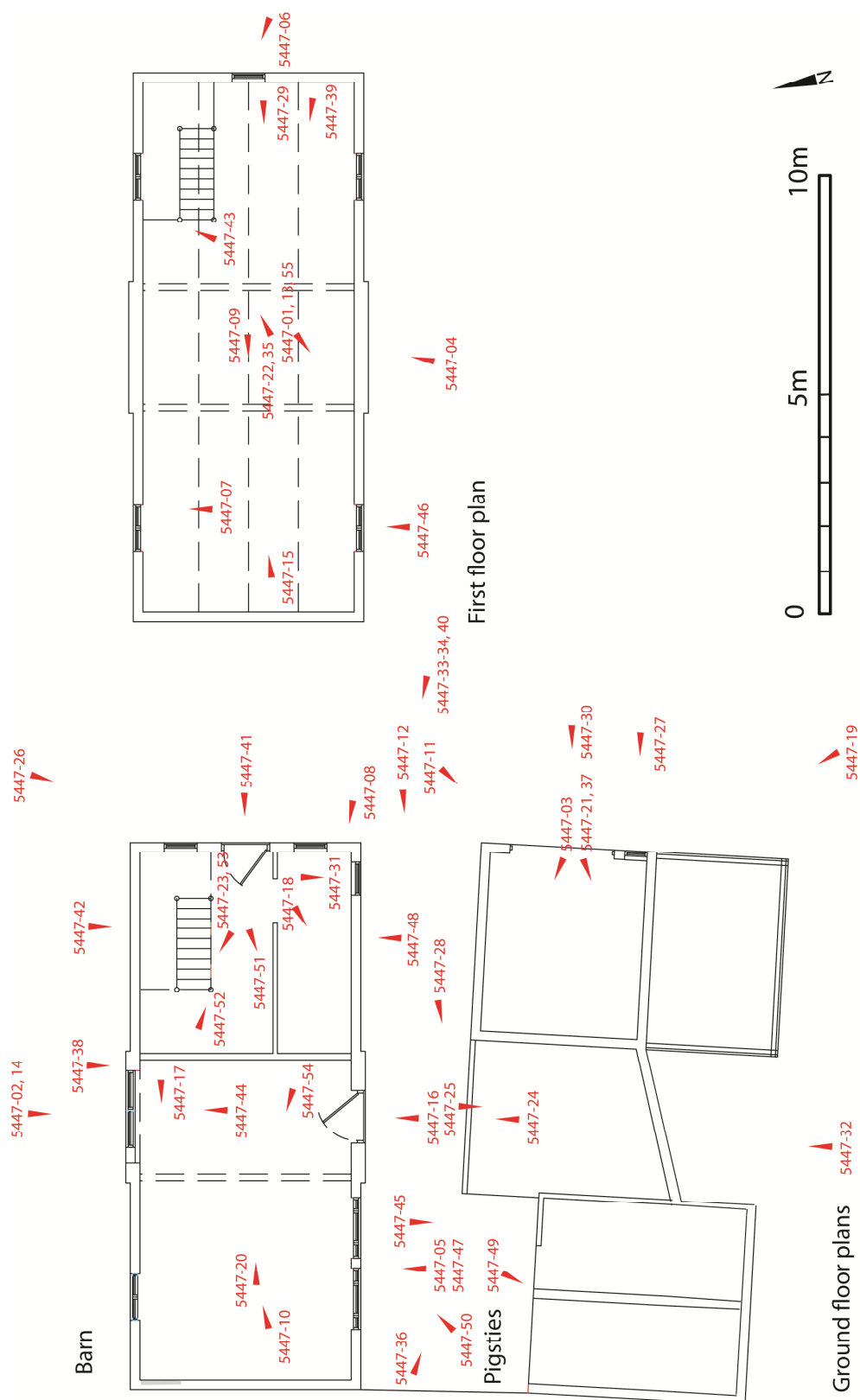


Figure 5 Photograph location plans

APPENDIX 2: BUILDING RECORDING SPECIFICATION

Prepared by York Archaeological Trust, for:

Buildings to rear of Box Tree House, 67 High Street, Hatfield, South Yorkshire

(Planning reference 09/01570/FUL).

Background: The buildings to be recorded are comprised of a small two storey barn and adjacent single storey pig sty, both located to the rear of Box Tree House, 67 High Street, Hatfield, South Yorkshire. Planning permission has been obtained for the conversion of the barn and demolition of the pig sty's. Condition 07 of the permission requires that prior to the commencement of the development a record of the existing buildings should be made (Planning reference 09/01570/FUL). This specification outlines the recording to be undertaken prior to the development. The level of recording specified below accords with Level 1 – 2 of English Heritage guidance (English Heritage 2006).

1. Photographic recording: General and detailed photographs are to be taken. These will include the interiors, exteriors and photographs setting the site in its wider context. Interior photographs will be taken of each interior space and external elevation (where feasible). Detail photographs will be taken of unusual architectural or structural details or of areas where working processes are evident. Appropriate scales will be included within photographs whilst a register of photographs listing details of, and directions of, each shot will be included in the written report, together with a photographic locating plan.

2. Drawn record: Plans and elevations, as existing and drawn to scale, of the barn and pig sty have already been prepared by the architect. These will be checked, and if necessary added to or amended, and be included within the building recording report. Should it be necessary to prepare additional drawings, these will be prepared by York Archaeological trust during the recording process.

3. Reporting: A field archive will be compiled consisting of all primary written documents, plans, elevations and photographic prints.

A written report will be prepared detailing who undertook the work, when the work was done, where the building is located, what recording was undertaken and why the work was required. A discussion of the buildings (and any structural sequence) and their historic and present usages will be presented that will consider the building's historical, social and architectural significance. The report, which will contain some analysis as well as description, will be accompanied by a location map, plans and elevations and a series of photographs.

4. Health and safety: York Archaeological Trust will operate with due regard to health and safety regulations in accordance with its Health and Safety Policy Document of 2008 (YAT 2008).

References:

English Heritage (2006) Understanding Historic Buildings, A guide to good recording practice

YAT (2008) Health and Safety Policy, York Archaeological Trust

Mark Johnson, York Archaeological Trust, 08/03/10