ASSESSMENT REPORT
ON ARCHAEOLOGICAL
INVESTIGATIONS AT
MALTBY ACADEMY,
MALTBY, ROTHERHAM,
SOUTH YORKSHIRE







PCA REPORT NO. R11776

JUNE 2014

PRE-CONSTRUCT ARCHAEOLOGY

MALTBY ACADEMY, MALTBY, ROTHERHAM, SOUTH YORKSHIRE

ASSESSMENT REPORT ON ARCHAEOLOGICAL INVESTIGATIONS

Quality Control

Pre-Construct Archaeology Limited	
Project Number	K2861
Report Number	R11776

	Name & Title	Signature	Date
Text Prepared by:	Malcolm Gould and		27/06/14
	Jennifer Proctor		,
Graphics	Mark Roughley		27/06/14
Prepared by:	17		
Graphics	Josephine Brown	1 &c	27/06/14
Checked by:	-	J. Dam.	
Project Manager	Robin Taylor-	Chafett.	27/06/14
Sign-off:	Wilson and	Mahlas	
	Charlotte Matthews	1 colling 1	

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Limited Unit 54 Brockley Cross Business Centre 96 Endwell Road London SE4 2PD ARCHAEOLOGICAL INVESTIGATIONS AT
MALTBY ACADEMY, MALTBY, ROTHERHAM,
SOUTH YORKSHIRE

Assessment Report

Archaeological Investigations at Maltby Academy, Maltby, Rotherham, South Yorkshire

Assessment Report

Central National Grid Reference: 452620 392150

Site Code: MAR12

Commissioning Client:
BAM Construction Ltd



Contractor:
Pre-Construct Archaeology Limited
Northern Office
Unit 19a Tursdale Business Park
Durham
DH6 5PG

Tel: 0191 377 1111



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PART A: PROJECT SUMMARY

1. NON-TECHNICAL SUMMARY

- 1.1 Archaeological investigations were undertaken in August 2012 by Pre-Construct Archaeology Limited at Maltby Academy, Braithwell Road, Maltby, S66 8AB. The site, centred on Ordnance Survey National Grid Reference 452620 392150, is located in the south central part of the town of Maltby, which lies on the A631, east of Junction 1 of the M18, c.12km east of Rotherham.
- Planning permission has been granted for development of the Academy; the proposals entail extension, alteration and demolition of some buildings. A programme of work to record archaeological remains of interest was required ahead of the scheme of redevelopment works. The site was considered to have particular potential for post-medieval archaeology in the form of structural remains of Maltby Hall, which is of 19th century, possibly earlier, date and associated outbuildings. It was intended that investigation would take place in two areas. Area 1, situated between existing school buildings, is located in the area of an outbuilding to the west of the Hall. Area 2, to the east, is situated within the site of the Hall itself and is occupied by modern elements of the school. A watching brief was to have taken place in this area during demolition work. However, as the development work proceeded, it was decided that the demolition work would not go ahead and therefore no archaeological work was required.
- 1.3 A 'strip, map and record' exercise was carried out to expose and plan archaeological remains and to sample excavate all exposed archaeological features and structures within Area 1, to clarify the character and date of activity. The area of investigation was limited in its extent by tarmac footpaths adjacent to and between buildings and was located within an approximately rectangular grassed space measuring c.23m x c.10m.
- 1.4 The excavation confirmed the cartographic evidence which suggested that ancillary buildings to Maltby Hall were located within the area of investigation. Structural remains exposed comprised the western end of a 19th-century outbuilding which was been identified as a stable block. The building was divided into a number of stalls, corridors and other rooms and a yard was located to the south, with probable drainage ditches to the north. A later phase of alterations in the early 20th century saw new drains and concrete floors installed within the stable block. The building was demolished prior to 1930 when school buildings were first erected on the site. A small artefactual assemblage comprising floor and roof tiles, bricks, ceramic drains and pottery provided dating evidence to confirm this sequence of activity.
- 1.5 This Assessment Report is divided into three parts. Part A, the Project Summary, begins with an introduction to the site, describing its location, geology and topography, as well as summarising the planning and archaeological background to the project. The aims and objectives of the work are then set out, followed by full descriptions of the archaeological methodologies employed during both the fieldwork and the subsequent post-excavation work. This part concludes with an illustrated summary of the recorded archaeological remains, allocated to a series of phases of activity.
- Part B, the Data Assessment, quantifies the written, graphic and photographic elements of the Site Archive and contains specialist assessments of all categories of artefactual evidence, with recommendations for any further work in each case. Part C of the report contains acknowledgements and references. There are three appendices to the report; an index of contexts, a stratigraphic matrix and a selection of photographs to illustrate the text.

2. INTRODUCTION

2.1 General Background

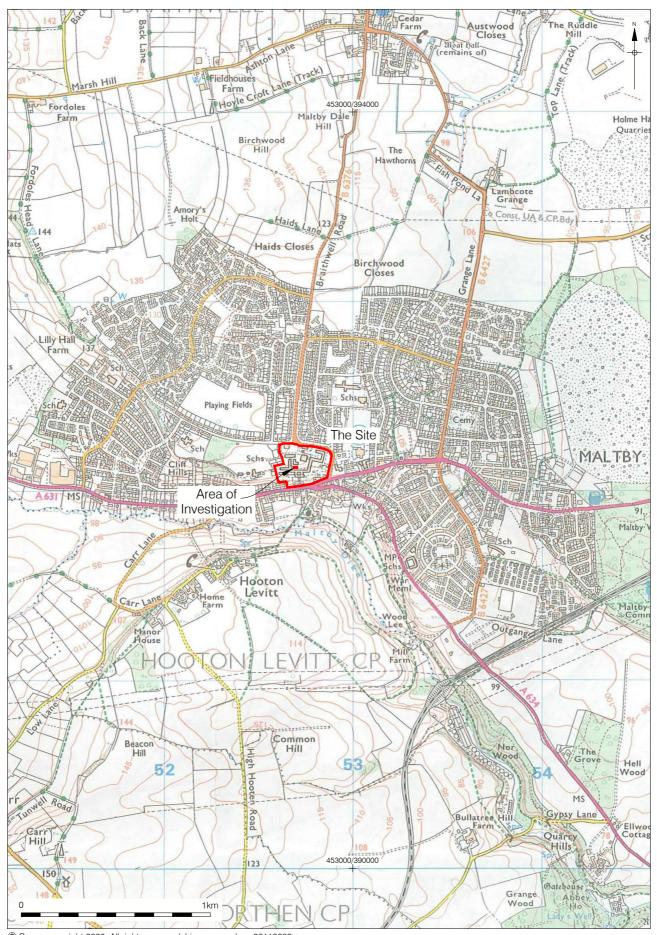
- 2.1.1 This report details the methodology and results of a programme of archaeological investigations undertaken by Pre-Construct Archaeology Limited (PCA) between 1st and 16th August 2012 at Maltby Academy, Braithwell Road, Maltby, South Yorkshire S66 8AB. The site was located within the grounds of Maltby Academy, centred on Ordnance Survey National Grid Reference 452620 392150 (Figures 1 and 2).
- 2.1.2 The project entailed a programme of archaeological work to record archaeological remains of interest ahead of a scheme of redevelopment works. Planning permission has been granted for these works by Rotherham Metropolitan Borough Council (RMBC) and South Yorkshire Archaeology Service (SYAS) at South Yorkshire County Council advised that archaeological fieldwork was required as appropriate mitigation for the impact of the development. PCA was commissioned by BAM Construction Limited (the Client) to carry out the archaeological work.
- 2.1.3 A brief for the required archaeological mitigation scheme was issued by SYAS (SYAS 2012). A Written Scheme of Investigation (WSI) for the archaeological work was prepared by PCA and approved by SYAS (PCA 2012). Two specific areas of potential archaeological interest have been identified at the site by SYAS (Areas 1 and 2). Area 1 was located between existing structures and was therefore accessible for investigation by excavation, namely a 'strip, map and record' exercise. Area 2 was located beneath existing buildings and demolition of these structures was to be the focus of a watching brief. As the development work proceeded, it was decided that the demolition work scheduled to be undertake in Area 2 would not go ahead. This report therefore details the archaeological investigation undertaken in Area 1 only.
- 2.1.4 Historic maps have indicated that both areas have particular potential for post-medieval archaeology in the form of structural remains of Maltby Hall, which is of 19th century, possibly earlier, date. The Hall appears to have replaced an earlier 'Maltby Old Hall', which is thought to have been located further to the east, beyond Braithwell Road. In Area 1, where a new build is proposed, a range of buildings is depicted to the west of Maltby Hall on an Ordnance Survey map dated 1888 (Figure 4).
- 2.1.5 The archaeological project herein described was designed according to the guidelines set out in Management of Research Projects in the Historic Environment (MoRPHE) (English Heritage 2006). In line with MoRPHE guidelines, this Assessment Report sets out a formal review of the data collected during the fieldwork.
- 2.1.6 At the time of writing, the Site Archive, comprising written, drawn, and photographic records and all artefactual material recovered during the investigations, is housed at the Northern Office of PCA, Unit N19a Tursdale Business Park, Durham, DH6 5PG. When complete, the Site Archive will be deposited with Rotherham Museums Service, specifically Clifton Park Museum (CPM), Clifton Lane, Rotherham, S65 2AA, under the site code MAR12. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the project is: preconst1-178687.

2.2 Site Location and Description

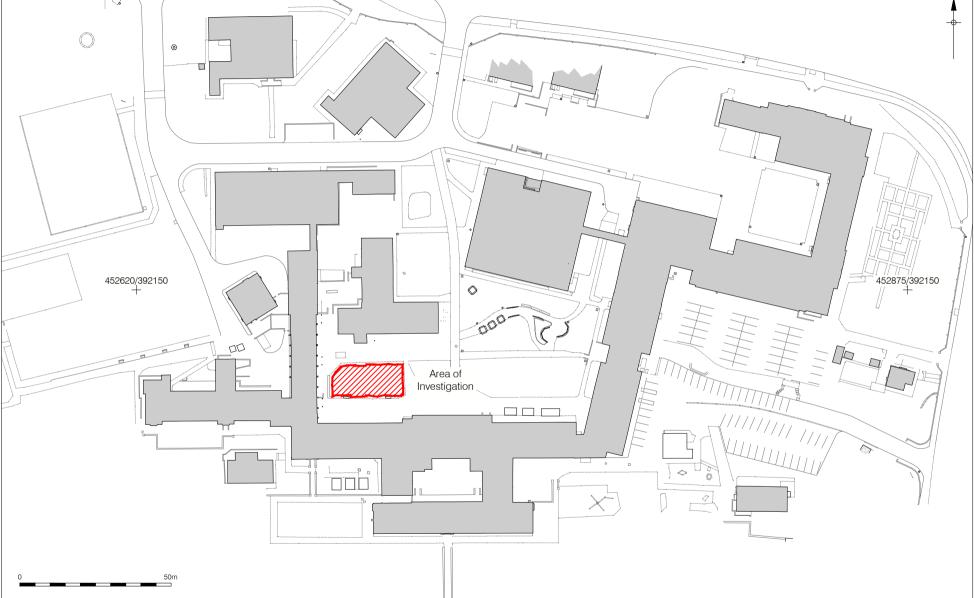
- 2.2.1 The site, centered on Ordnance Survey National Grid Reference 452620 392150, is located within the grounds of Maltby Academy, on Braithwell Road, Maltby, S66 8AB (Figure 1). The academy is located in the south central part of the town of Maltby, which lies on the A631, east of Junction 1 of the M18, c.12km east of Rotherham.
- 2.2.2 The site is bounded to the north by Lilly Hall Road and Braithwell Road, with the latter turning to the south to skirt the site on its eastern side. It is bounded to the west by Larch Plantation. It is bounded to the south-west by part of Cave Plantation, then to the south by Maltby Hall Infants School and, for a short distance, by Rotherham Road, and, to the south-east, by properties on High Street. The school buildings occupy the site, with the playing fields to the west; the overall size of the site is c. 7.6 ha.
- 2.2.3 The buildings comprising the existing Maltby Academy are largely of mid-20th-century date, with the earliest erected between the World Wars. The Academy occupies the site of Maltby Hall, which appears on a map of 1835 and was demolished in the first half of the 20th century. Many of the boundaries of parkland associated with the Hall remain preserved in the boundaries of the Academy. The Hall appears to have replaced an earlier 'Maltby Old Hall' which is thought to have been located further to the east, beyond Braithwell Road.
- 2.2.4 The area of investigation was located within the existing complex of school buildings, to the north of a 1930s school block facing onto Rotherham Road to the south and between later school buildings to the north and west.

2.3 Geology and Topography

- 2.3.1 The solid geology of the site is Cadeby Formation Dolostone, a Permian sedimentary bedrock, and the superficial geology is Mid Pleistocene Till (information from the British Geological Survey website). A geotechnical site investigation undertaken in 2010 encountered firm/stiff orange brown clay with some gravel at depths of between 0.40m and 1.47m below existing ground level in the part of the Academy site that was subject to archaeological investigation (Harrison Geotechnical Engineering 2010).
- 2.3.2 Within the area of investigation there was a drop in current ground level north to south and from east to west. This topography was more marked at the west end of Area 1. A temporary bench mark was sited to the north of Area 1 at a height of 112.91m OD. Current ground surface was recorded at a height of 112.20m OD in the centre of the northern limit of excavation, dropping to 111.16m OD at the western end of the area of investigation.



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2.4 Planning Background

- 2.4.1 Planning permission (application number RB2012/0543) has been granted by the Local Planning Authority (LPA), Rotherham Metropolitan Borough Council, for development of Maltby Academy; the proposals entail extension, alteration and part demolition of buildings. South Yorkshire Archaeology Service (SYAS) provides development control in relation to the historic environment throughout South Yorkshire. SYAS has recommended that planning permission has a two-part archaeological condition to ensure that any archaeological remains present, whether buried or part of a standing building, are recorded prior to their destruction by the development.
- 2.4.2 SYAS has established, through preliminary archaeological assessment, the potential for archaeological features of interest in two particular areas; Area 1, situated between existing school buildings, and Area 2, situated beneath existing school buildings a short distance to the east. SYAS issued a Brief (SYAS 2012) for the required archaeological mitigation scheme. PCA prepared the Written Scheme of Investigation for the archaeological work, which was approved by SYAS (PCA 2012). Following the commencement of the development work in 2012, it was decided that the buildings where Area 2 was located would not be demolished and the watching brief was therefore no longer required.
- 2.4.3 The requirement to undertake the archaeological work in association with the proposed development is in line with planning policy at a national level, as set out in the *National Planning Policy Framework* (NPPF) (DCLG 2012). In addition to the NPPF, which came into effect in 2012, Planning Policy Statement 5 (PPS5): *Historic Environment Planning Practice Guide* (DCLG (revised) 2012), is a valid, UK Government-endorsed, document. Both provide guidance for LPAs, property owners, developers and others concerned with the conservation and investigation of the historic environment.
- 2.4.4 Heritage assets those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest remain a key concept of the NPPF and PPS5. Chapter 12 'Conserving and enhancing the historic environment' of the NPPF describes, in paragraph 126, how LPAs should '...set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment' and details, in paragraph 128, that 'In determining applications, LPAs should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.
- 2.4.5 All Regional Spatial Strategies were proposed for revocation by the UK Government in 2010. The Local Plan (previously called the Local Development Framework or LDF) will provide a long-term development strategy for Rotherham, setting out policies and proposals for new housing, shopping and employment, and how you travel throughout the borough. The Local Plan will eventually replace the existing Unitary Development Plan and will help to streamline the local planning process and promote a proactive and positive approach to managing development. None of the policies within that suite of documents directly relate to archaeology and the NPPF is, therefore, the primary guidance used in relation to the historic environment.

2.5 Archaeological and Historical Background

- 2.5.1 No desk-based archaeological assessment of the site has been undertaken. However, there are no 'designated heritage assets', such as scheduled monuments, listed buildings, registered parks and gardens or registered battlefields within the development site itself (MAGIC website). A summary of the historical background of the town and the Academy site itself is included below, using information gathered from a variety of sources.
- 2.5.2 Roman occupation of the broader area is well known. For example, Rotherham was the site of the early Flavian or earlier fort of Templeborough and a larger vexillation fortress possibly built in the AD 40s to the north-east at Rossington Bridge, south of Doncaster. Link roads and associated settlement could potentially be present in the area of the town.
- 2.5.3 It is believed that Maltby was a Saxon settlement, established overlooking Maltby Dike to the south of the Academy site and possibly having a church in its historic core since Saxon times. St Bartholomew's Church has a tower which in architectural terms dates to the 10th–11th-century overlap between late Saxon and early Norman architecture. The body of the church was rebuilt in the perpendicular style in the 15th century. In 1859, the nave, chancel and south aisle were pulled down so that only the tower and spire survive.
- 2.5.4 Maltby is mentioned in the Domesday Book, but remained a small village for centuries. Roche Abbey, founded in the mid-12th century on the southern outskirts of Maltby, was ruined during the Dissolution in the 16th century. As well as St. Bartholomew's Church, the historic core of Maltby retains some older properties of late 17th- and early 18th-century date. In the later post-medieval period Maltby was known for its textile industry. The earliest schools in Maltby were those established by Viscount Castleton in 1714 and the Rev. George Rolleston in 1823.
- 2.5.5 The modern town has expanded as a result of 20th-century development, with the main catalyst for growth being the establishment in 1910 of Maltby Main Colliery, towards Tickhill to the east of the historic core of the town. Much of the housing in the eastern part of the town was built to provide accommodation for colliers, and this area includes a 'model colliery village'. In recent times additional housing development has expanded the town to the north.
- 2.5.6 Little is known about the foundation of Maltby Hall. A mid-19th-century trade directory lists the aforementioned Rev. George Rolleston at 'The Hall' and Miss Lucy Rolleston at the 'Manor House' and documentary sources refers to the building as 'Rolleston Hall'. By the late 19th century, the footprint of Maltby Hall is identified on an Ordnance Survey map dated 1888, with two L-shaped ranges of out buildings to the north-west (Figure 4). Extensive parkland lies to the north, west and partly to the south of the buildings and their immediate grounds, skirted to the west and south by Larch and Cave Plantations, respectively. The Ordnance Survey map of 1901 shows very little difference to any of these structures and grounds. There are documentary records of a Lady Violet Smithe resident at Maltby Hall in the early 20th century followed by the Gore-Booth family in the 1920s.
- 2.5.7 The same cluster of buildings and properties to the south-east of Maltby Hall fronting onto Rotherham Road is visible on the 1916 Ordnance Survey map as seen on previous maps. Further west, lining the north side of this road is a series of semi detached properties. The footprint of Maltby Hall and the outbuildings to the north-west (Figure 5) do not appear to have altered from that shown earlier, however, just to the north-east of the Hall, within its former grounds, is a large

- building annotated 'School' (Block A of the present Maltby Academy).
- 2.5.8 Maltby Grammar School officially opened in 1932 on the present Academy site following the demolition of Maltby Hall and the outbuildings to the north-west. Significant development on the site saw the school become Maltby Comprehensive School in 1967. The 1976 Ordnance Survey map shows the Maltby Academy site with an almost similar layout to that which exists today and thus the existing buildings, occupying the eastern portion of the overall site, were mainly constructed in the mid-20th century.
- 2.5.9 The extensive school playing fields to the west of the site covered much of the original parkland, while Larch and Cave Plantations remain effectively untouched. On an area of parkland to the west of the site of Maltby Hall, Maltby Hall Infants School has been built.
- 2.5.10 Jim McNeil of SYAS has identified two areas of the Academy site that are of specific archaeological interest (SYAS 2012). Area 1, which is to be occupied by a new building in the proposed development scheme, covers part of the footprint of one of the north-western range of buildings shown on the 19th and early 20th century maps. This part of the site is not currently built on and comprises grassed areas immediately adjacent to extensive ranges of mid-20th-century school buildings. Area 2 to the east, and the site of the Hall itself, is occupied by modern elements of the former comprehensive school. However demolition work did not take place and so archaeological investigation of this area was not possible.

3. PROJECT SCOPE

3.1 Aims and Objectives

- 3.1.1 The project is 'threat-led' since the re-development scheme has the potential to disturb or destroy sub-surface archaeological remains. These remains comprise heritage assets, as introduced in Paragraph 5 of PPS5 and defined in Annex 2 of the PPS as 'A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include designated heritage assets and assets identified by the local planning authority during the process of decision-making or through the plan-making process (including local listing)'.
- 3.1.2 The broad aim of the project was a strip, map and record exercise, as described in the WSI, to determine the location, form, extent, date, character, condition and significance of any archaeological remains ahead of their destruction by construction groundworks. Therefore the archaeological work had the following site specific objectives:
 - To expose all archaeological remains within Area 1 through a programme of archaeological monitoring of machine removal of turf and overburden;
 - To map the location of all archaeological remains thus exposed, in order to establish the location and extent of archaeological activity at the site;
 - To define and sample excavate all exposed archaeological features in order to clarify the character and date extent of archaeological activity at the site.

3.1.3 Additional aims of the project were:

- To compile a Site Archive consisting of all site and project documentary and photographic records, as well as artefactual material recovered.
- To compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, etc.

4. ARCHAEOLOGICAL METHODOLOGIES

4.1 Fieldwork

- 4.1.1 Fieldwork at the site was undertaken between 1st and 16th August 2012. All fieldwork was undertaken in accordance with the relevant standard and guidance documents of the Institute for Archaeologists (IfA 2008a). PCA is an IfA-Registered Organisation. The WSI for the archaeological investigations should be consulted for full details of methodologies employed regarding archaeological excavation, recording and sampling (PCA 2013). PCA's standard manual for fieldwork procedures was also adhered to (PCA 2009).
- 4.1.2 The investigation comprised a single area of excavation (Area 1). This was located to the north of the 1930s school block facing onto Rotherham Road to the south and between later school buildings to the north and west (Figure 2; Plate 1). It was sited to investigate a structure identified by 19th and early 20th century maps in this vicinity (Figures 4 and 5), but was limited in its extent by tarmac footpaths adjacent to and between buildings. The area of excavation was therefore limited to an approximately rectangular grassed area measuring *c*.23m x *c*.10m.
- 4.1.3 The eastern half of Area 1 was initially stripped of a layer of turf and topsoil by a 360° tracked excavator using a toothless ditching bucket revealing the first archaeological deposits, which were mixed levelling and demolition layers of building rubble and mortar. These were removed to expose floor surfaces, archaeological deposits and structural features at a depth of approximately 0.5m below the ground surface. Spoil was stockpiled on the western half of Area 1. All work was undertaken under direct archaeological supervision.
- 4.1.4 The exposed archaeological features were cleaned using appropriate hand tools. Structural remains, deposits and features were subsequently excavated and recorded, as appropriate, using a single context recording system utilising *pro forma* context and masonry recording sheets. Plans were drawn at a scale of 1:20 and sections at 1:10. A photographic record of the investigations was compiled using SLR cameras loaded with 35mm monochrome print and colour slide film, illustrating in both detail and general context the principal features and finds discovered. Digital photography was used to supplement this film record. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological operation mounted. Record photographs included a legible graduated metric scale and a complete written register.
- 4.1.5 A Temporary Bench Mark (TBM) was established on the site using GPS survey data. The TBM was located just to the north of Area 1, on the steps of an adjacent building, and had a value of 112.91m OD. The height of all principal strata and features were calculated relative to Ordnance Datum and indicated on the appropriate plans and sections.
- 4.1.6 Once all archaeological recording had been completed, the eastern half of the excavation area was backfilled and topsoil reinstated. The western half of Area 1 then underwent the same procedure of monitored machine excavation with spoil being stockpiled on the eastern half until all archaeological recording had been satisfactorily completed. Across both parts of the excavation area a single context recording system was maintained with sequential numbering for ease of reference in post-excavation, and any features or deposits that extended across both halves retaining their initial identification to avoid duplication.

4.2 Post-excavation

- 4.2.1 The stratigraphic data generated by the project is represented by the written, drawn and photographic records. A total of 51 archaeological contexts were defined during the course of the investigations (Appendix 2). The contents of the paper and photographic elements of the Site Archive are quantified in Section 6. Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix 1). A written summary of the archaeological sequence was then compiled, as described below in Section 5.
- 4.2.2 Artefactual material from the investigations comprised small assemblages of pottery, metallic objects and ceramic building material. For each category of material an assessment report has been produced including a basic quantification of the material and a statement of its potential for further analysis. The results are given in Sections 7–9. No palaeoenvironmental sampling was undertaken. None of the material recovered during the investigations required specialist stabilisation or an assessment of its potential for conservation research.
- 4.2.3 The complete Site Archive, in this case comprising the written, drawn and photographic records (including all material generated electronically during post-excavation) and all artefactual material recovered will be packaged for long term curation. In line with MoRPHE. PPN3:Archaeological Excavation. Appendix 1, the Site Archive will be quantified, ordered, indexed, and internally consistent before transfer to the recipient museum. It will also contain a site matrix, a site summary and brief written observations on the artefactual and environmental data.
- 4.2.4 Prior to the Closure Stage of the project, the Archive (comprising an integrated Site and Research Archive) will be deposited with the appropriate body. Through 'Renaissance Yorkshire', museums throughout Yorkshire have agreed an Archaeological Archive Deposition Policy for Museums in Yorkshire and the Humber (AADP). The relevant recipient body for this project is Rotherham Museums Service, specifically Clifton Park Museum, Clifton Lane, Rotherham, which has been contacted with regard to the project. The Archive will be organised as to be compatible with the other archaeological archives produced in the County and will include all artefacts recovered during the project. An accession number for the Site Archive will be assigned in advance of the work, in accordance with the requirements of the recipient body.
- 4.2.5 In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker 1990) and a recent IfA publication (IfA 2008b).

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the investigations, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example, [101]. Although the east and west halves of Area 1 were not exposed at the same time, the process of context numbering continued sequentially and features that extended across both halves retained their original identification number. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis. An attempt has been made to add interpretation to the data, and correlate these phases with recognised historical and geological periods.

5.1 Phase 1: Natural Sub-stratum

- 5.1.1 Phase 1 represents natural geological material exposed as the basal deposit intermittently across the northern part of the excavation area and in a small part of the south-western corner.
- 5.1.2 The natural bedrock, recorded as deposits [5] and [38], comprised buff coloured limestone outcrops with a fractured surface, part of the local Permian sedimentary bedrock, a Cadeby Formation Dolostone. Small areas of bedrock were exposed in several areas on the northern side of Area 1 and were recorded at heights of between 111.2m OD and 111.91m OD in the northeastern and north-western corners of the excavation area, respectively, reflecting the natural rise in ground level (Figure 3).

5.2 Phase 2A: 19th-century Stable Block

- 5.2.1 Phase 2 represents the earliest activity on the site. The 1888 Ordnance Survey map shows that there was a building in this location by this time and all evidence indicates that the structural remains revealed by excavation are those belonging to this structure (Figures 3 and 4). The main building range shown on the 1888 Ordnance Survey map is aligned north-west to south-east and measures *c*.35m by 5.5m. At the western end is a block which measures *c*.12m north-south by 6m (Figure 3). The western part of the main block was exposed within the excavation area and the archaeological evidence indicated that this building was a stable block, as demonstrated by internal divisions within the building, the internal drainage system and the drainage grooves within the latest concrete floor surface.
- 5.2.2 A deposit, [34], comprising small fractured pieces of limestone partially overlay one area of limestone [38] in the north-west corner of the excavation area (Figure 3). This may have been a naturally occurring weathered layer, or alternatively may represent redeposited bedrock associated with ground reduction and levelling associated with the construction of the building.
- 5.2.3 In the south-western part of the excavation area bedrock was overlain by a deposit, [40], comprising sandy silt with frequent sub-angular cobbles (Figure 3). This was exposed intermittently for a total distance of c.8.5m north-south by 8.5m east-west, and continued beyond the limits of excavation to the south and west and was overlain by unexcavated later deposits to the east. It is interpreted as a levelling/make-up deposit associated with the construction of the building. Five fragments of pottery were recovered from this deposit, four of which were Staffordshire-type coarse redware with black glaze which dates from 1650–1800 along with a sherd of English stoneware with Bristol glaze which dates from 1830–1900.
- 5.2.4 A 15m length of the north-west to south-east aligned south wall of the building [18] was exposed within Area 1, continuing beyond the south-eastern limit of excavation and truncated at the north-western end (Figure 3, Plates 2 and 5). Overlay of the outline of the excavated structural features

onto the 1888 and 1916 maps indicates that this represents the western part of the Maltby Hall outbuilding (Figures 4 and 5). The wall survived to a height of 0.5m, it had been reduced to a level just above the height of later internal floor surfaces, and was 0.5m wide. It was constructed with roughly squared limestone blocks (measuring up to a maximum of 0.4m x 0.3m x 0.1m) faced on both internal and external elevations and bonded with a whitish lime mortar. The south-east end of the wall was recorded at a height of 110.72m OD and the north-west end at 111.27m OD; this reflected the natural rise in ground level and not a higher surviving section of wall.

- 5.2.5 A c.1.2m wide doorway was located towards the western end of the surviving stretch of wall, this was indicated by splayed jambs in the wall and the fact that the later concrete floor surface extended into this doorway (Figure 3; Plate 5). This entrance would have allowed access into the building from the yard to the south.
- 5.2.6 Only the foundation of the north wall of the building survived; this comprised a 0.5m wide deposit of firm orange brown silty sand, [11], with occasional sandstone fragments and patches of mortar (Figure 3). This was recorded for a distance of c.6m, truncated at both ends by 20th-century drains.
- 5.2.7 In the north-western corner of the excavation area, several large faced limestone blocks [43] abutting the natural rock outcrop represent the remnants of an internal wall (Figure 3; Plates 3 and 4). Beyond this point no structural remains survived and only the levelling deposits [38] and [40] and a floor make-up deposit, [39], described below, were recorded.
- 5.2.8 The south wall [18] had a right-angled return forming an internal dividing wall which ran across the width of the stable block. At its southern end this partition wall was continuous with the external wall showing that they were built at the same time. There appears to have been an entrance across this internal division at its southern end, as indicated by the narrowing of the wall in this area and the fact that the later concrete surface, although truncated in this area, extended further to the east and partially across the doorway (Plate 7). A few red bricks in the upper surviving surface of the wall in this area may have formed part of an entrance structure. A brick sample taken from this part of the wall was an unstamped, machined frogged kiln brick which measured 240mm by 120mm and was probably produced in the South Yorkshire coalfields and could date from 1860-1950 (see Section 8).
- 5.2.9 The west end of the south wall [18] had been truncated by a 20th-century service cut (Figure 3). The internal north-east to south-west stretch of wall [18] was 5m in length and the same width (0.5m) as the external wall, suggesting that this wall was load-bearing and supported the roof timbers of what was likely to have been a single storey structure. This substantial internal division was situated c.5.6m east of the stone block internal partition [43]. Between the two was a 0.1m wide brick partition wall [44], which divided the area into two roughly equally sized areas which measured c.2.7m x. 4.6m internally (Figure 3; Plate 3). This internal division was built with a single course of red bricks (240mm x 100mm), laid as stretchers end to end and bonded with sandy mortar. Within the wall at the southern end was a rectangular posthole; this presumably housed part of a timber door frame and indicates the position of a doorway allowing access into this part of the building through the internal partition.
- 5.2.10 Another brick wall internal partition [16], of the same construction as [44], was located *c*.2.8m to the east of the substantial dividing wall [18] (Figure 3).

- 5.2.11 Several outcrops of natural limestone [38] at the west end of the site (Figure 3; Plates 3 and 4) showed evidence of having been reduced in height. These no doubt proved too much of an obstacle to construct the building on one level, so at the west end original floor levels would have stepped up to accommodate the higher rock outcrops; this step could be seen in the different levels of the latest surviving concrete floor surfaces (Phase 2B) (Figure 3; Plate 7).
- 5.2.12 Inside the building at the eastern end of the excavation area the earliest exposed deposit [31] comprised orange brown silty sand with frequent small stones. This was presumably a levelling deposit associated with the construction of the building. It had been truncated by two drains [22] and [23], which comprised rectangular drains constructed in red brick with pipes running southwestwards from each (Figure 3). A brick sample taken from drain [22] was particularly wide and shallow (119mm x 60mm). This was manufactured in the South Yorkshire coalfields probably after 1850 (see Section 8).
- 5.2.13 A 0.42m wide construction cut [42] for a ceramic drain pipe [47], which measured 0.21m in diameter was recorded in the north-western part of the excavation area, truncating levelling/make-up deposit [40]. This was on a parallel alignment to the south wall of the building, but was not exposed adjacent to the wall, and is likely to be contemporary with the construction of the building. Projection of its alignment shows that it was located c.0.4m beyond the southern wall of the structure and drainpipes [22] and [23] presumably fed into this pipe outside the building.
- 5.2.14 Inside the building at the eastern end of the excavation area, levelling deposit [31] was overlain by a deposit of sand [21], in turn overlain by mortar and sandy silt deposit [17]. These both represented make-up deposits for the original flagstone surface of the building. On the northern side of the building, deposit [31] was overlain by a rectangular patch of pink sandy mortar [19], which may represent the base or footing for an internal structural element.
- 5.2.15 The external pipe trench [42] was overlain by an extensive deposit [20], which comprised sandy silt with occasional small fragments of cbm (ceramic building material) and mortar and small stones. This deposit, which also overlay deposit [40], was recorded for a distance of 15m eastwest and 4.5m north-south, continuing to the south beyond the limits of excavation.
- 5.2.16 Deposit [20] was overlain by a light whitish/grey lime mortar deposit [50], a bedding deposit for the external flagstone yard surface. This was largely removed during the excavation process to reveal the archaeological deposits beneath, but was observed to have been a consistent, compact layer in the central part of the trench to the south of wall [18]. This deposit was of very similar composition to deposit [17], found inside the building and also in small patches outside the building. Further west, a similar lime mortar layer [39] overlay levelling deposit [40] within the interior of the building and probably also represents a bedding or levelling layer for floor surfaces now removed.
- 5.2.17 In the south-western corner of the excavation area, deposit [40] was overlain by a possible post pad [49], comprising a roughly rectangular arrangement of limestone fragments c.0.6m x 0.8m. The only other structural evidence in this location was a small posthole [33], c.2.5m to the east. There was no evidence of the north-south aligned wall of the block shown on the 1888 and 1916 maps at the western end of the main range in this part of the excavation area (Figures 4 and 5).
- 5.2.18 Directly adjacent to the northern external side of the building was a dark brown sandy silt deposit [10], which may represent a former soil layer. Running parallel with the north external side of the

building were a series of linear deposits. As they respected the alignment of the building, it is very likely that their formation is contemporary with or post-dates its construction. Two linear deposits of limestone fragments and crushed limestone [8], of approximately the same width, 0.6m-0.8m, were separated by a 0.4m wide band of brown sandy silt [9] with the maximum width of all elements being 2m (Plate 6). The limestone deposit [8] appears to have been laid down within a depression in the central area to form a drainage channel which had subsequently silted up [9]. The 1888 map (Figure 4) shows a track running alongside the north side of the building, and this feature may represent a drainage gully running between the track and the building. To the north was a compact deposit of sandy silt with frequent sandstone [7], which may represent a hardstanding surface. Its stratigraphic relationship with the gully was not established.

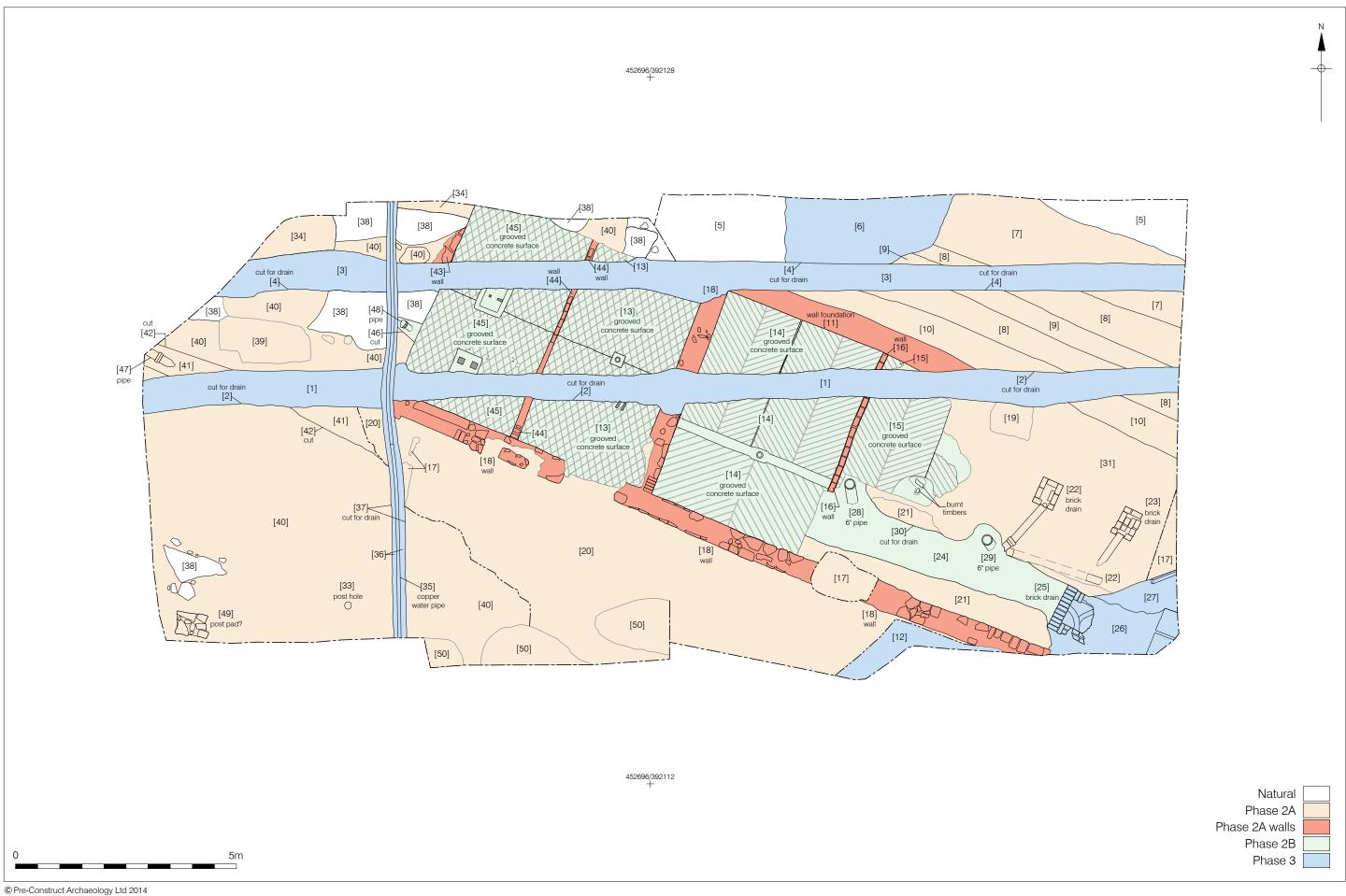
5.3 Phase 2B: Later Additions to the Stable Block

- 5.3.1 At some stage the drainage system at the eastern end of the building was modified. Drainage pipe [22] was capped and a construction cut [30] for a new drainage system was excavated. Two brown glazed ceramic drainpipes [28] and [29] were set vertically within the construction cut, which had been backfilled with a sandy silt deposit [24]. Brown glazed ceramic pipe [28] had an external diameter of 240mm and internal diameter of 200mm.
- 5.3.2 These drains were associated with the construction of a new concrete floor internal to the building, recorded as [13], [14], [15] and [45] within the areas of the building divided by the original stone and brick partition walls. The easternmost surviving area of concrete floor [15] comprised a 2.6m wide expanse of blue grey concrete, truncated to the east and south. Within the surface of the concrete was a herringbone pattern of shallow drainage grooves, with each section divided by a central groove running parallel with the width of the building. These divided the internal area into a 1.8m wide stall to the east of wall [16] which was at least 3m long; the southern edge of the floor was truncated (Figure 3; Plate 8). A small segment of another stall was located to the east, this was largely truncated.
- 5.3.3 Concrete floor [14] was located in the area defined to the east by internal brick wall [16] and to the west by stone wall [18]. Three blocks of herringbone grooves in this floor demonstrated that the northern part of this area was divided into two stalls with a narrow groove across the width of the building between the two stalls (Plate 2). The southern limit of the stalls was defined by a 0.2m wide drainage gully within the surface of the concrete, aligned with the long axis of the building; this incorporated a round drain adjacent to the south-west corner of the eastern stall. The two stalls measured 1.8m by 3m and 1.9m by 3m, from west to east. To the south of the stalls the concrete floor had a much wider herringbone pattern divided into two areas by a central groove aligned with the short axis of the building. These areas were slightly offset to the stalls and both measured 1.9m by 1.6m and 1.8m by 1.6m, from west to east. This area was presumably a 1.6m wide corridor which would have allowed the horses to be moved into the stalls.
- 5.3.4 The concrete floor [13] in the area of the building defined to the east by main wall [18] and to the west by brick wall [44] was covered in a diamond pattern of groves (Plate 5). It was divided across the centre of the building by a narrow linear line in the concrete floor to form two areas which measured 2.35m by 2.65m and 2.55m by 2.65m. A square drain with circular downpipe was situated between the two areas, slightly offset to the east. As discussed in Phase 2A above, in the south-east corner of this part of the building, floor surface [13] although truncated, extended to the east towards the location of an internal entrance suggesting that it originally spanned the

- entrance. The level of floor [13] was *c*. 0.18m higher than floor [14] to the east (Plate 7); it was constructed at the different levels because of the natural topography.
- 5.3.5 The most westerly surviving area of concrete floor [45] (Plate 4) was situated to the west of brick wall [44] and to the east of the fragmentary remains of stone wall [43] (Figure 3). It was very similar to surface [13]; a diamond pattern of grooves with a line defining two areas of the same dimensions as those to the east. Set within the floor surface were two rectangular raised concrete plinths with metal fixings, these were presumably supports for machinery or a structure such as a water tank.

5.3 Phase 3: Mid/Late 20th-Century Demolition

- 5.3.1 Activity from this phase is initially represented by the demolition of the stable building. An extensive deposit [12] comprising silty sand with frequent mortar inclusions and occasional concrete, stone and ceramic building material covered the walls and floor surfaces. This was removed by machine to expose the archaeological deposits beneath. A small area of material [6] in the north-east corner of Area 1 was of very similar composition to [12] and produced a few sherds of 19th-century pottery (see Section 7). A curved pan tile, manufactured from local brickearth clay was also recovered. It is possible that it had been used to roof the stable block as these tiles were manufactured up to 1850 (see Section 8). A floor tile recovered from the deposit was of a similar fabric as the brick used in the early drain [22], which is probably mid to late 19th century, and may be a remnant of a floor surface that predated the concrete floor. Two fragments of pottery were also recovered from this deposit; a sherd of Derbyshire stoneware and a sherd from an English stoneware cylindrical bottle, both dated 1700–1900.
- 5.3.2 Following the demolition of the building, a series of new services were installed across the site and existing services in the south-east corner of Area 1 were modified.
- 5.3.3 Two parallel linear drainpipe trenches [2] and [4], which were aligned east to west, extended across the width of Area 1, continuing beyond the limits of excavation (Figure 3; Plates 2 to 5). These were both 0.6m wide, set c.1.75m apart and were excavated from a level immediately below the topsoil. The backfills [1] and [3] were very similar as they both contained redeposited material from the layers and features through which they cut. These drains were presumably associated with the construction of the school in the 20th century.
- 5.3.4 A smaller 0.25-0.3m wide linear trench [37] for a copper water pipe [35] ran north to south across the west end of Area 1, extending beyond the limits of excavation (Plate 4). This had also been excavated from just below the level of the topsoil.
- 5.3.5 In the south-east corner of Area 1 was a brick and concrete drain junction [25], which redirected the flow from two drain pipes from the north-west and north-east, into a single pipe heading south (Plate 8). A large frogged brick stamped 'DMC Ld' had been used in the construction of this drain. This was manufactured at Darfield Main Colliery, a pit at Darfield village near Barnsley, probably in the 20th century (see Section 8). The drain was capped by a thin cement mortar layer [26], which contained two reused flagstones. This feature was probably inserted into a pre-existing drainage system as it was contained within the linear cut [30] that extended beneath concrete floors [14] and [15] of the building. It would appear that when the school buildings directly to the north of Area 1 were built in the mid-20th century, a new drain was added.



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PART B: DATA ASSESSMENT

6. STRATIGRAPHIC DATA

6.1 Paper Records

6.1.1 The paper element of the Site Archive is as follows:

Item	No.	Sheets
Context register	1	2
Context/Masonry sheets	51	51
Section register	1	1
Section drawings	4	3
Plan register	1	1
Plans	2	22

Table 6.1 Contents of the paper archive

6.2 Photographic Records

6.2.1 The photographic element of the Site Archive is as follows:

Item	No.	Sheets
Monochrome print registers	1	1
Monochrome prints	25	4
Colour slide registers	1	1
Colour slides	25	2
Digital photograph registers	1	n/a
Digital photographs	29	n/a

Table 6.2 Contents of the photographic archive

6.3 Site Archive

- 6.3.1 The complete Site Archive is currently housed at PCA's Northern Office.
- 6.3.2 The Site Archive will eventually be deposited with Rotherham Museums Service, specifically Clifton Park Museum (CPM), Clifton Lane, Rotherham, S65 2AA. All relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document Walker, (UKIC 1990) and the relevant IfA publication (IfA 2008b). The depositional requirements of the Clifton Park Museum will be met in full.

7. POTTERY ASSESSMENT

7.1 Introduction

7.1.1 A small assemblage of post-Roman pottery was recovered from the site amounting to 8 sherds, weighing 120g. The pottery is described by context in Table 7.1 below.

7.2 Assessment

- 7.2.1 With the possible exception of the Midlands purple ware variant recovered as an unstratified fragment, the assemblage can be dated to the 19th century. Indeed, although the fabric and technology of the Midlands purple ware sherd is reminiscent of this industry the vessel is not typical and may be a regional variant or later development. The remaining wares are ubiquitous finds across England at this date, with many probably originating from Staffordshire and Derbyshire to the south.
- 7.2.2 Given the date, these vessels may represent rubbish deposited from Maltby Hall and if so this is most likely to have derived from the service areas of the house. Aside from evidence of date, the pottery is of little intrinsic interest and thus no further analysis is recommended.

7.3 Catalogue of Pottery

Context	Sherd count	Weight	Description	Date of pottery	Spot date
u/s	1	39	Midlands purple ware variant?	1480 – 1750	1480 – 1750
[6]	1	8	Derbyshire stoneware	1700 – 1900	1700 – 1900
	1	20	English stoneware cylindrical bottle	1700 – 1900	
[40]	4	47	Staffordshire-type coarse redware with black glaze	1650 – 1800	1830 – 1900
	1	6	English stoneware with Bristol glaze	1830 – 1900	

Table 7.1: Pottery catalogue

8. CERAMIC BUILDING MATERIAL ASSESSMENT

8.1 Introduction and Aims

8.1.1 One box of ceramic building material was retained from the investigations. This small assemblage (9 examples 13.6kg) was assessed in order to identify (under binocular microscope) the fabric and forms of the post-medieval whole brick samples, floor tile and mortar from fill and structures from the site and make recommendations for further study.

8.2 Methodology

- 8.2.1 Whole brick samples and tile were retained from structures in order to determine their construction date.
- 8.2.2 The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10). If no match was made with the London fabric collection, different fabric types were pre-fixed by a local code *MALT1* (*Maltby*), thus *MALT* 1-4/.

8.3 Ceramic Building Material

Brick

8.3.1 On the basis of mortar type, brick shape and fabric, all three of the bricks (weighing 11.4kg) from this assemblage can be assigned a mid-19th- to 20th-century date.

Fabric 3261 MALT 1 [25]

Coal measure high alumina kiln brick – fine deep orange-red fabric with intermittent flecks (1-2mm) of clinker

- 8.3.2 Large frogged brick in a dense fabric stamped 'DMC Ld' used in the construction of a Phase 3 brick drain [25] in Area 1. A match was made with a brick image from an on-line brick stamp English index http://www.penmorfa.com/bricks/england6.html that showed the abbreviation was Darfield Main Colliery, a pit at Darfield village near Barnsley (c.20km away), that was sunk as early as 1861 http://www.darfield.btck.co.uk/Important%Dates . It is not possible to date the brick, although it seems likely that it was produced after 1880, probably in the early 20th century as the earliest bricks to be manufactured in the village appear to be those stamped Darfield Clay Works (1865-1880) http://www.penmorfa.com/bricks/england6.html. This continued as an active pit as late as 1989 so the drain pipe could conceivably be as late as this. Maltby lies approximately 20km south-east of Darfield and they were linked by railway from 1840.
- 8.3.3 It is associated with Mortar 1, a hard, light brown lime-rich fine, mortar with small inclusions of clinker and voids that mark out the outline of vegetable matter. By colour it resembles Roman cement.

Fabric 3261 MALT 2 [18]

Coal measure high alumina kiln brick – fine lighter orange-red fabric than brick sample from [25] with intermittent flecks (1-2mm) of clinker and pale cream lumps (blaes) 2-5mm across

8.3.4 This unstamped, machined frogged kiln brick used in the mid to late 19th-century mainly limestone walls of the stable block [18], was again probably produced in the South Yorkshire coalfields is

- much longer (240mm), wider (120mm) and heavier (4.5kg) than the brick from [25]. Its frog is also longer and wider but shallower with circular marks within the frog.
- 8.3.5 It is associated with Mortar 2, a hard, very pale white cream mortar with inclusions of chalk, and intact fragments of brown vegetable matter.

Fabric 3261 MALT 3 [22]

Coal measure high alumina kiln brick – busy lighter orange with numerous bands and white lumps of blaes (coal measure shale)

- 8.3.6 This unstamped, unfrogged kiln brick from an earlier drain [22] beneath the south wall of the stable block, was also a product of the South Yorkshire coalfields. It has a different profile to the examples from [18] and [25]. It is very wide (119mm) but also much shallower (60mm). It does not have the sharp arises of these later bricks and may not be a machine pressed kiln brick. Nevertheless, it cannot have been manufactured before 1850 as it is only then that kiln bricks from the coal measures were produced on anything like a grand scale.
- 8.3.7 It is associated with Mortar 3, a relatively hard pink (brick) lime mortar with small inclusions of chalk. This mortar resembles those from used in the 1850s Kings Cross Eastern Goods Yard construction (Hayward 2010).

Drain Pipe

Fabric 3261 MALT4 [28]

Coal measure high alumina kiln brick condensed fine – off white pale cream fabric.

8.3.9 The end of a drain pipe (estimated diameter 200mm) recovered from the centre of the stable block [28] is characterised by a brown glazed kiln brick fabric with a similar Roman type mortar (T1) seen in the latest drain pipes from the site [25].

Fabric 3261 MALT1 [23]

Fine deep orange-red kiln brick fabric with intermittent flecks (1-2mm) of clinker

8.3.10 Present in a brown glazed drain pipe from a probable early drain running beneath the south wall of the stable block [23] has a similar texture to the later (20th century) kiln brick stamped 'DMC Ld' (Darfield Main Colliery) from drain [25]. This does not necessarily mean the two drains are contemporary in date as kiln bricks were produced in the Darfield coalfield from as early as 1865, using the same high alumina clay with possibly the same inclusions.

Roofing Tile

Fabric 2279 Pan Tile [6]

8.3.11 A curved 18th- or 19th-century pan tile, manufactured from local brickearth clay was recovered from demolition debris [6]. This type of tile was manufactured up to 1850 and may have been used in the roof the stable block. A further example reused in hard white lime mortar T2 is present along with kiln bricks and limestone in the mid to late 19th-century walling of the stable block [18].

Floor Tile or Paved Brick

Fabric 3261 MALT 3 [6]

Coal measure high alumina kiln brick – busy lighter orange fabric with numerous bands and white

lumps of blaes (coal measure shale)

8.3.12 A floor tile in this fabric was recovered from a deposit [6] probably associated with the demolition of the stable block. It resembles the same fabric as the brick used in the early drain [22] which is probably mid to late 19th century.

Mortar and Concrete

8.3.13 A summary of mortar types and concrete from the excavation is given below.

Mortar/Concrete Type	Description	Context
T1 Local variant of Roman mortar	A hard, fine, light brown mortar with small inclusions of clinker and voids that mark out the outline of vegetable matter	Used in the Phase 2B drainage pipe [28] and Phase 3 pipe [25] and associated with kiln fabric MALT1 (brick) and MALT 4 (drain).
T2 Hard lime mortar	A hard, very pale white cream mortar with inclusions of chalk, as well as intact fragments of brown vegetable matter.	Associated with reused pan tile and late 19th-century kiln brick MALT 2 in the main (south) limestone wall [18] of outbuilding
T3 pink lime mortar	A relatively soft pink (brick) lime mortar with small inclusions of chalk	Associated with Phase 2B mid-late 19th-century drains with kiln bricks (MALT 3) [22]

Table 8.1: Summary of mortar types and concrete

8.4 Summary

- 8.4.1 Apart from the curved pan tiles from demolition debris [6] and wall [18], the remainder of the assemblage from the site is manufactured in high alumina clays (intended for use as fire or heat resistant bricks in industrial contexts) some of which came from the South Yorkshire Coal Measures. These highly refractive Carboniferous clays were manufactured from 1850 onwards to meet demand for construction materials to withstand ever higher increases in temperature in industrial processes. They were used for kilns and also in construction. It is therefore concluded that all the structures including earliest drainage features [22] beneath the stable block were constructed after 1850.
- 8.4.2 The mortar types, kiln brick and drain associated with the outbuilding of Maltby Hall date from the mid-19th century into the mid-20th century. The assemblage does not warrant further investigation.

Phase 2A

8.4.3 The drainage features [22] beneath the stable block is built of local *blaes*¹ rich unfrogged kiln bricks in a mid 19th century pink lime mortar (T3). 1850s-1880 - (1900)

8.4.4 Wall [18] includes machine made frogged kiln bricks and reused pan tile in a hard lime mortar. 1860s-1900.

¹ Lumps of burnt Carboniferous shale incorporated into the fabric.

Phase 2B and 3

8.4.5 The brick with the 'DMC Ld' stamp and glazed drainpipe from later drains [25] and [28] are both pointed in a more homogeneous locally produced Roman mortar and are 20th century in date. Probably 1900 to 1950.

Context	Fabric	Form	Size		inge of erial		Latest dated material		Spot date mortar
6	3261 2279	Floor tile kiln brick fabric MALT 3 and pan tile	2	1630	1950	1850	1950	1850- 1900+	1850- 1900+
18	2279 3261 3101	Reused pan tile, whole machined frogged unstamped kiln brick MALT 2 lime mortar T2	2	1630	1950	1850	1950	1860- 1950	1860- 1950
22	3261 3101	Whole poorly made unfrogged kiln brick MALT 3 pink lime mortar T3	1	1850	1950	1850	1950	1850- 1900	1850- 1900
23	3261	Glazed Drain Kiln brick fabric MALT 1	1	1861	1990	1861	1990	1861- 1990	1861- 1990
25	3261 3101	Kiln brick frogged stamped DMC Ltd MALT 1 brown Roman mortar T1	1	1861	1990	1880	1990	1900- 1950	1900- 1950
28	3261 3101	Glazed Drain kiln brick fabric MALT 4 brown Roman mortar T1	1	1850	1950	1850	1950	1900- 1950	1900- 1950

Table 8.2: Summary of all ceramic building material

9. METAL OBJECT ASSESSMENT

9.1 Iron Horseshoe

9.1.1 The excavations produced a single metal find in the form of an unstratified horseshoe. The shoe is complete, with a toe clip and calkins; although heavily corroded, at least two rectangular nail holes can be seen on each side with two nails remaining *in situ*. Both calkins appear to be of a simple folded type, with one heel more narrow and pointed than the other. The large size of the shoe, suitable for a draft horse, and the presence of a toe clip, dates the shoe to the 19th century or later (Ward 1939, 171).

9.2 Recommendations

9.2.1 No further work is recommended for this object, although if required an x-ray would reveal more detail.

9.3 Catalogue

Context	Description
+	Iron horseshoe; complete with toe clip and folded calkins on irregular
	heels; at least two rectangular holes for fixing on each branch with two
	nails remaining <i>in situ</i> ; W 155mm; L 160mm; branch W 35mm

10. SUMMARY DISCUSSION OF THE ARCHAEOLOGICAL FINDINGS

10.1 Phase 1: Natural Sub-stratum

10.1.1 Phase 1 represents natural geological material exposed as the basal deposit in Area 1. The underlying geology of the area consists of Permian sedimentary bedrock, part of the Cadeby Formation Dolostone. This limestone was observed as outcrops in several locations along the northern side of the excavation area and there was evidence to suggest that in the western part bedrock had been reduced in height prior to the construction of the outbuilding in the 19th century.

10.2 Phase 2: 19th-century Stable Block Construction and Modifications

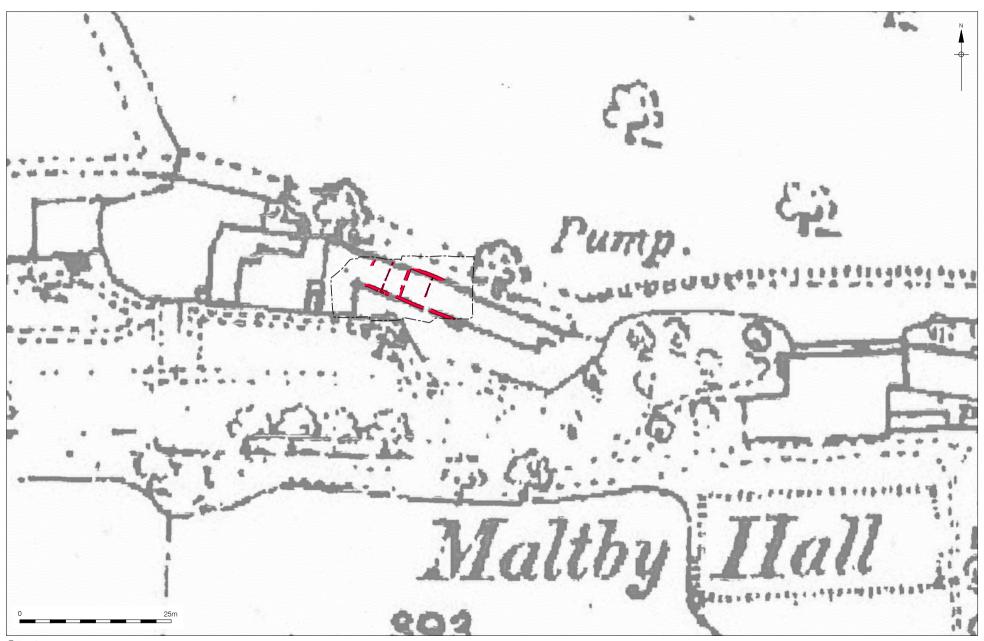
- 10.2.1 The 1888 Ordnance Survey map shows an outbuilding associated with Maltby Hall in the vicinity of Area 1. This building was located to the west of the Hall and the main north-west to south-east range shown on the map measures c.35m by 5.5m with a north-south aligned block at the western end which measures c.12m north-south by 6m. Part of the western end of the main range was exposed across Area 1 and the structural elements uncovered demonstrated that this building was a stable block (Figures 4 and 5).
- 10.2.2 The earliest deposits encountered within the excavation area are interpreted as levelling deposits associated with the construction of the building. A small quantity of pottery indicated that the levelling activity post-dated 1830.
- 10.2.3 Part of the external 0.5m wide south wall of the stable block survived for a length of 15m and to a maximum height of 0.5m; the wall had been demolished to the height of the latest surviving internal floor surface. The north wall of the building did not survive, but its line could be traced by a foundation deposit. The external and internal width of the building was 6m and 5m, respectively. The south wall, which was built with roughly squared limestone blocks bonded with a whitish lime mortar was faced on both internal and external elevations. A c.1.2m wide doorway located towards the western end of the surviving stretch of wall would have allowed access into the stables from the yard to the south. A substantial, presumably load-bearing, wall which ran across the width of the building was of the same construction as the south wall and evidently built at the same time. Bricks situated within the upper surviving surface of the wall at its southern end, adjacent to the junction with the main external wall, indicated the position of an internal doorway, allowing access through the main internal wall. A small portion of another internal stone wall which survived 5m to the west may also have been part of a load-bearing wall. Two narrow brick walls to the east and west of the main stone wall further sub-divided the internal area. The surviving subdivided areas within the stable block measured, from west to east, 2.8m, 2.8m and 3.6m wide.
- 10.2.4 The building continued to the east, as demonstrated by the external south wall, but no internal components survived. To the west, no traces of the structure survived beyond the fragmentary remains of the probable internal stone wall. However, the building continued to the west, as shown by the Ordnance survey maps (Figures 4 and 5). Presumably all traces of the building had been demolished in this area prior to the construction of the school; the building was at a higher level in this part of the site due to the natural topography in this area with bedrock 0.7m higher in the north-western corner of the excavation area than the north-eastern corner.
- 10.2.5 A ceramic drain pipe which ran parallel to the south wall of the building is likely to have been contemporary with the stable block. Internal brick drains with ceramic drain pipes revealed at the

eastern end of the excavation may have drained into this main external drain.

- 10.2.6 Modifications to the internal drainage system identified towards the eastern end of the excavation area seem to have taken place prior to the laying of a new internal concrete floor, which was largely left in situ during the archaeological investigation. This probably occurred during the early 20th century. The original drains were capped and new brown glazed ceramic drainpipes were installed. The level of the new concrete floor was 0.18m higher in the western part of the building than in the east reflecting the natural topography.
- 10.2.7 The pattern of drainage grooves in the surface of the floor indicated where the stable building had been divided into various stalls and other areas. The most westerly surviving area of concrete floor had a diamond pattern of grooves with a line across the centre of the building dividing this part into two areas which measured 2.35m by 2.65m and 2.55m by 2.65m. Two rectangular raised concrete plinths with metal fixings set within the floor surface were presumably supports for machinery or a structure such as a water tank. The area to the east, which also had a diamond pattern of drainage grooves, was divided into two similar sized areas as those to the west. A central drain with downpipe in the floor would have allowed water used to wash the stable floor to drain into the main external drainage system which was situated a short distance to the south of the southern wall of the stable block.
- 10.2.8 The internal part of the stable block defined to the west of by the main internal wall and to the east by a brick wall had been sub-divided into two stalls which measured 1.8m by 3m and 1.9m by 3m internally. The floor of the stalls had a herringbone pattern of drainage grooves with a wide drainage channel incorporating a downpipe defining the southern limit of the stalls. As with the drain to the west, this would have allowed water to discharge into the main external drain. The area to the south of the drainage channel had a much wider herringbone pattern. This was presumably an access corridor within the stable which would have allowed the horses to be moved through the building and into the various stalls. To the east, beyond an internal brick wall partition, one complete 1.8m wide and 3m long stall with herringbone pattern in the concrete floor survived, with only a small area of the adjacent stall surviving.
- 10.2.9 Cartographic evidence shows that the stable block was in existence by 1888. The date of its construction almost certainly coincides with the construction of Maltby Hall in the early to mid-19th century and there was no artefactual, stylistic or stratigraphic evidence to suggest an earlier date for the building. Bricks and ceramic drains used for the construction and modification of the building had been sourced from local manufacturers at nearby collieries. The internal floor and drainage system was renewed in the early 20th century before the stable block and Maltby Hall were demolished, prior to the erection of school buildings in 1930.

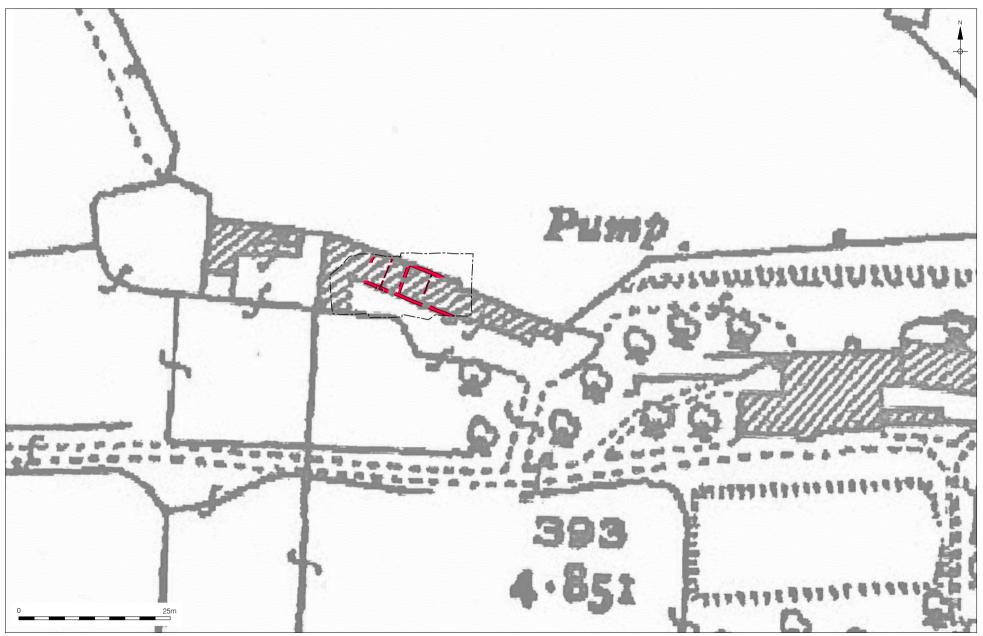
10.3 Phase 3: Mid/Late 20th Century

10.3.1 Two east-west service trenches for drains ran across the excavation area; these cut through the floor surfaces and walls of the stable block and were presumably associated with the school buildings. In the south-east corner of the excavation area was a brick and concrete drain junction which incorporated materials of mid/late 20th-century date. A north-south copper water pipe also crossed the excavation area.



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Figure 4
Phase 2A walls overlain on Ordnance Survey map of 1888
1:625 at A4



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Figure 5 Phase 2A walls overlain on Ordnance Survey map of 1916 1:625 at A4

11. SUMMARY OF POTENTIAL FOR FURTHER ANALYSIS

- 11.1 The broad aim of the project was to determine whether structural remains of outbuildings associated with Maltby Hall were present within the area to be impacted by the redevelopment. The location, form, extent, date, character, condition and significance of any structural remains were to be determined and this is detailed in this assessment report
- 11.2 The archaeological data recovered from the investigations, which represent 19th century and early 20th century activity, are of importance at a local level. However, this assessment report has concluded that no further work is considered necessary on the stratigraphic or artefactual evidence recovered from the investigations. This 'grey literature' assessment report and the deposited archive will form the permanent record of the archaeological remains encountered.

PART C: REFERENCES AND ACKNOWLEDGEMENTS

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13. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

PCA would like to thank Paul Nicholson (Project Manager) of BAM Construction for commissioning the archaeological investigations and for his on site assistance.

The role of Jim McNeil of South Yorkshire Archaeology is also acknowledged.

PCA Credits

Project management: Robin Taylor-Wilson and Charlotte Matthews

Fieldwork: Malcolm Gould (Site Supervisor), Amy Roberts, Scott Laidler

Report: Malcolm Gould and Jennifer Proctor

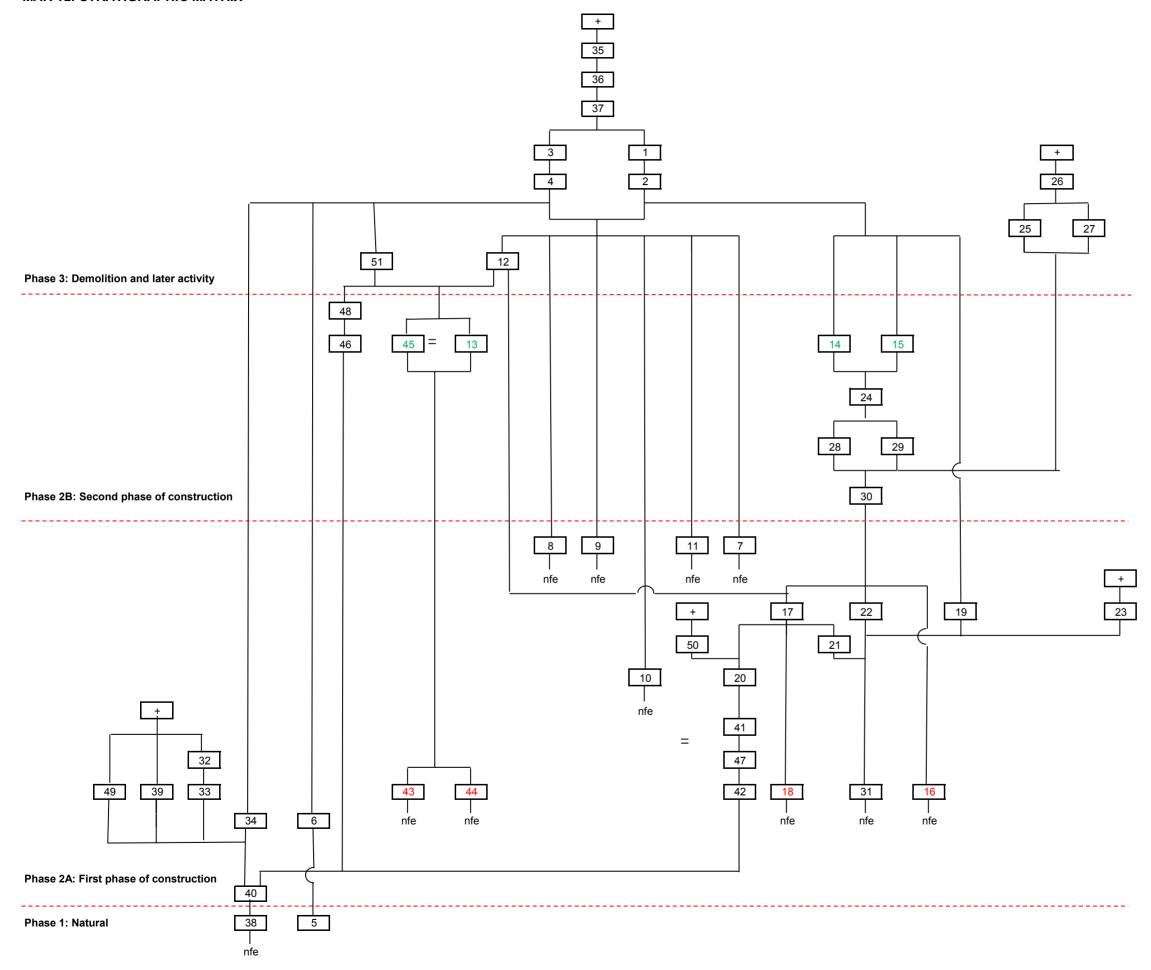
Illustrations: Mark Roughley

Ceramic Building Materials: Kevin Hayward

Metal Objects: Märit Gaimster

Pottery: Berni Sudds

Appendix 1: Stratigraphic Matrix



Appendix 2: Context Index

Context	Phase	Type 1	Type 2	Interpretation
1	3	Deposit	Fill	Fill of [2]
2	3	Cut	Linear	Linear cut for drain pipe
3	3	Deposit	Fill	Fill of [4]
4	3	Cut	Linear	Linear cut for drain pipe
5	1	Natural	Layer	Bedrock
6	3	Deposit	Layer	Demolition debris
7	2A	Deposit	Layer	Very compact stone rubble, hardstanding?
8	2A	Deposit	Layer	Very compact stone rubble, drainage channel?
9	2A	Deposit	Layer	Silting of possible drainage channel
10	2A	Deposit	Layer	Soil deposit
11	2A	Deposit	Layer	Linear wall footing, north side of building
12	3	Deposit	Layer	Demolition debris mortar rich
13	2B	Masonry	Surface	Grooved concrete stable floor surface
14	2B	Masonry	Surface	Grooved concrete stable floor surface
15	2B	Masonry	Surface	Grooved concrete stable floor surface
16	2A	Masonry	Wall	Red brick partition wall
17	2A	Deposit	Layer	Bedding layer for floor surface
18	2A	Masonry	Wall	Main sandstone south wall of building
19	2A	Deposit	Layer	Mortar foundation deposit
20	2A	Deposit	Layer	Possible original subsoil, south of building
21	2A	Deposit	Layer	Make-up sand deposit
22	2A	Masonry	Structure	Red brick drain
23	2A	Masonry	Structure	Red brick drain
24	2B	Deposit	Fill	Fill of [30]
25	3	Masonry	Structure	Red brick drain
26	3	Masonry	Surface	Mortar and flagstone layer over drain
27	3	Deposit	Fill	Fill of [30]
28	2B	Pipe	Pipe	6" drain pipe
29	2B	Pipe	Pipe	6" drain pipe
30	2B	Cut	Linear	Linear cut for drain pipe
31	2A	Deposit	Layer	Foundation layer
32	2A	Deposit	Fill	Fill of [33]
33	2A	Cut	Discrete	Circular cut for post hole
34	2A	Deposit	Layer	Levelling, possible redeposited natural
35	3	Pipe	Pipe	Copper water pipe
36	3	Deposit	Fill	Fill of [37]
37	3	Cut	Linear	Cut for copper water pipe
38	1	Natural	Layer	Bedrock
39	2A	Deposit	Layer	Mortar foundation deposit
40	2A	Deposit	Layer	Levelling deposit
41	2A	Deposit	Fill	Fill of [42]
42	2A	Cut	Linear	Linear cut for drain pipe

Context	Phase	Type 1	Type 2	Interpretation
43	2A	Masonry	Wall	Stone wall aligned north-north-east to south-south-west
44	2A	Masonry	Wall	Red brick partition wall
45	2B	Masonry	Surface	Grooved concrete stable floor surface
46	2B	Cut	Linear	Cut for drain pipe
47	2A	Pipe	Pipe	Drain pipe
48	2B	Pipe	Pipe	Drain pipe
49	2A	Masonry	Structure	Stone post pad?
50	2A	Deposit	Layer	Mortar bedding deposit
51	3	Deposit	Layer	Demolition layer

Appendix 3: Plates



Plate 1: Area 1, Pre-excavation view, looking south-west



Plate 2: Eastern half of Area 1, post-excavation, looking east-south-east (scale 0.5m)



Plate 3: Western half of Area 1 post-excavation, looking west (scales 2m and 1m)



Plate 4: North-west corner of Area 1 showing bedrock and floor [45], looking north-west (scale 1m)



Plate 5: Western half of Area 1: entrance through wall [18] with floor surfaces [13] and [45], looking north (scales 2m and 1m)



Plate 6: North-east corner of Area 1, exterior linear features and floor surfaces [14] and [15], looking east



Plate 7: Eastern half of Area 1: external and internal elements of wall [18] with floor surfaces [13] and [14], looking north-west (scale 1m)



Plate 8: Eastern half of Area 1: south-east corner of Area 1, modern drain [25], looking northwest (scale 0.50m)

PCA

PCA SOUTH

UNIT 54

BROCKLEY CROSS BUSINESS CENTRE 96 ENDWELL ROAD

BROCKLEY

LONDON SE4 2PD

TEL: 020 7732 3925 / 020 7639 9091

FAX: 020 7639 9588

EMAIL: info@pre-construct.com

PCA NORTH

UNIT 19A

TURSDALE BUSINESS PARK DURHAM DH6 5PG

TEL: 0191 377 1111

FAX: 0191 377 0101

EMAIL: info.north@pre-construct.com

PCA CENTRAL

THE GRANARY, RECTORY FARM BREWERY ROAD, PAMPISFORD CAMBRIDGESHIRE CB22 3EN

TEL: 01223 845 522 FAX: 01223 845 522

EMAIL: info.central@pre-construct.com

PCA WEST

BLOCK 4
CHILCOMB HOUSE
CHILCOMB LANE
WINCHESTER
HAMPSHIRE SO23 8RB
TEL: 01962 849 549

EMAIL: info.west@pre-construct.com

PCA MIDLANDS

17-19 KETTERING RD LITTLE BOWDEN MARKET HARBOROUGH LEICESTERSHIRE LE16 8AN TEL: 01858 468 333

EMAIL: info.midlands@pre-construct.com

