# Wessex Archaeology



# NURSERY STREET, SHEFFIELD, SOUTH YORKSHIRE

Archaeological Watching Brief



Ref: 73254.03 October 2012



# NURSERY STREET, SHEFFIELD, SOUTH YORKSHIRE

# **Archaeological Watching Brief**

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<sup>\*</sup> I= INTERNAL DRAFT E= EXTERNAL DRAFT F= FINAL



# **Archaeological Watching Brief**

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# **Archaeological Watching Brief**

#### Summary

Wessex Archaeology was commissioned by Sheffield City Council to undertake an archaeological watching brief during groundworks associated with flood alleviation works at Nursery Street, Sheffield, South Yorkshire (NGR 435670 387906), adjacent to the River Don. This work followed on from a scheme of evaluation and building recording undertaken by Wessex Archaeology in 2010.

The programme of archaeological works was undertaken in line with a Written Scheme of Investigation produced by Wessex Archaeology, and approved by the South Yorkshire Archaeology Service, advisors to the Local Planning Authority. This report presents a brief description of the methodology followed, a description of the results and an interpretation of the findings.

Several structures were identified during the monitoring which could be associated with the Cocker Bros Nursery Wire Works, which occupied the site from the 1850s. There was a good correlation between the features identified and historic mapping for the site, particularly the 1896 Goad Insurance plan. At the south of the site were a vaulted basement, flue and probable steam boiler base, most likely associated with a steam engine powering machinery in the works. The basement may also have been linked to a known area of crucible cellars preserved at the southern extent of the site. A machine base located nearby probably formed part of the power transmission within the works. In the central and northern areas of the site additional identified structures included remnants of walls, steps, stone sett surfaces, a flagstone surface and flue, and drains. Preservation of structures on the site was excellent, and most of the structures recorded were preserved *in situ*.

A summary publication note will be prepared outlining the results of the watching brief. The archive from the watching brief will be retained by Wessex Archaeology until a time that Sheffield Museums receives archives.



# **Archaeological Watching Brief**

#### Acknowledgements

This project was commissioned by Sheffield City Council and Wessex Archaeology is grateful to Dave Brown in this regard. Wessex Archaeology is also grateful to Jim McNeil of the South Yorkshire Archaeology Service for monitoring the work on behalf of Sheffield City Council.

The report was compiled by Ashley Tuck and Richard O'Neill. Fieldwork was undertaken by Ashley Tuck, Kirsty Squires, Phil Roberts and Charles Hay. Illustrations were by Chris Swales and Chris Breeden. Finds were assessed by Lorraine Mepham. The project was managed for Wessex Archaeology by Richard O'Neill.



# **Archaeological Watching Brief**

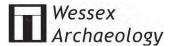
#### 1 INTRODUCTION

#### 1.1 Project Background

- 1.1.1 Wessex Archaeology was commissioned by Sheffield City Council to undertake an archaeological watching brief during groundworks associated with flood alleviation works at Nursery Street, Sheffield, South Yorkshire (NGR 435670 387906), hereafter 'the Site' (**Figure 1**). The Site lies adjacent to the River Don.
- 1.1.2 Alterations to the riverside wall and terracing of the ground behind were required to increase the flood storage capacity of the river channel. The archaeological monitoring programme was required to ensure that archaeological remains affected by the works were recorded and/or retrieved.
- 1.1.3 The archaeological monitoring was undertaken in line with a brief prepared by the South Yorkshire Archaeology Service (SYAS 2011), advisors to the Local Planning Authority (Sheffield City Council), and a Written Scheme of Investigation (WSI) produced by Wessex Archaeology (2012) and approved by SYAS.
- 1.1.4 The archaeological fieldwork described in this report follows on from previous evaluation, watching brief and building recording (Wessex Archaeology 2010), and desk-based assessment for the Site (May 2008).

#### 1.2 The Site, Location and Geology

- 1.2.1 The Site (centred on NGR 435670 387906) is a strip of land between Nursery Street to the east and the River Don to the west (**Figure 1**). To the north-west is a footbridge, crossing the river, and to the south-east are numbers 31-33 Nursery Street.
- 1.2.2 This watching brief was undertaken on works occurring between the footbridge and an area of known crucible cellars immediately north of numbers 31-33 Nursery Street. The known area of furnaces was fenced off for the duration of groundworks and was not impacted on by the flood alleviation works.
- 1.2.3 The underlying geology of the area is natural drift deposits, comprising recent alluvium over interbedded grey mudstone, siltstone and pale grey sandstone Pennine lower coal measures (British Geological Survey).



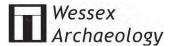
#### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

# 2.1 Post-Medieval Development (AD 1500-1800)

- 2.1.1 Despite the Site's location in proximity to the medieval Lady's Bridge and the historic centre of Sheffield, land on this part of the eastern bank of the River Don is believed to have remained largely undeveloped until the 18<sup>th</sup> century.
- 2.1.2 In 2003, excavations at 3-19 Nursery Street, to the south of the Site, uncovered several pits and post holes of probable 18<sup>th</sup> century date, indicating the first archaeological activity at that site (Lines 2003). The same excavations also uncovered evidence for the first ever clay pipe production site in the city, dating from around 1780 to 1820.

# 2.2 Modern Development (AD 1800-present)

- 2.2.1 Historical maps show several leaseholder plots extending across the entire Site in 1806. The central portion of the Site contained a large building, thought to be a warehouse belonging to Porter, Newton & Co. (grocers) (May 2008). This building and associated plot may have been taken over by Samuel Revell & Co. (sugar refiners) by 1833.
- 2.2.2 By 1856 the central and southern portions of the Site had been taken over by the wire and steel manufacturers, Cocker Brothers, occupying, what appears on the 1853 OS map to be, a collection of small structures. These structures were probably the buildings associated with the former sugar refinery under the ownership of Samuel Revell & Co. (from May 2008). Cementation furnaces are evident by at least 1862 and appear to be located on the plot of land formerly belonging to Samuel Hall, at the southern end of the Site. By the mid-19<sup>th</sup> century the northern tip of the Site appears to still include the original buildings associated with the 1806 plots belonging to Abraham Wright and John Adkin. The two former structures appear to have been linked by new buildings, and possible yard and path surfaces.
- 2.2.3 By 1890 wire and steel works covered the majority of the Site. This appears to have included extensive redevelopment at the northern tip and central and southern portions of the Site. To the south of the Site back-to-back housing, shops and a public house are recorded. The 1896 Goad Fire Insurance plan (**Figure 2**) shows the layout of the Site in considerable detail. The Wire Works includes:
  - Furnaces with two chimneys, brick arched basements with four chimneys and a steam engine, boiler base and large chimney in the southern area of the Site;
  - a Wire Mill, steam engine, boiler base and large chimney in the central area of the Site:
  - additional buildings and a lodging house in the northern area of the Site.
- 2.2.4 The Site remained predominantly in industrial usage during the 20<sup>th</sup> century, with most buildings demolished by 1978, although the public house and a 1930s works/office building survived. A watching brief undertaken by ARCUS on the Site in 2008 identified well preserved sub-surface archaeological features close to the current ground surface.



- 2.2.5 A programme of archaeological investigations including evaluation, watching brief and historic building recording was carried out by Wessex Archaeology on the Site in 2009 and 2010 (Wessex Archaeology 2010). This work revealed the well-preserved remains of a cementation furnace, consisting of two cementation chests with surviving upright walls coated with a layer of slag and fuel immediately north of 31-33 Nursery Street. An internal sandstone and external fire brick flue system was also uncovered. The level of preservation of the cementation furnace was found to be exceptionally good, making it one of the best preserved cementation furnaces in the country, and of national importance. Historic building recording confirmed that a trapezoidal shaped wall scar within the northern wall of 31-33 Nursery Street was a remnant of the cementation furnace.
- 2.2.6 To the immediate west of the cementation furnace was a crucible furnace cellar preserved beneath the current surface, but inaccessible due to health and safety considerations. The cellar appears to have been accessed to the west via a staircase on the riverbank, and possibly to the east by a staircase which was later filled in with demolition rubble. The cellar complex included ash pits for at least three crucible holes, along with a clay puddling pit, most likely for making the crucible vessels. The 1896 Goad plan shows furnaces with two chimneys along the riverside and four small chimneys and brick arched basements to the northeast in this location.
- 2.2.7 Further walls, floors, machine bases and cellars relating to 19<sup>th</sup>-century structures were also uncovered across the Site during the evaluation.

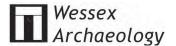
#### 3 METHODOLOGY

#### 3.1 Aims

- 3.1.1 The principal aim is to ensure that any archaeological remains affected by the proposed works will be recorded and/or retrieved, providing further information concerning the former furnaces and associated buildings.
- 3.1.2 The specific aims of the project were:
  - to record, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains observed;
  - to assess the state of survival of archaeological features and finds within the Site:
  - to place any archaeological remains within their local, regional and national contexts.

# 3.2 Objectives

- 3.2.1 The specific objectives of the project were:
  - to determine the phasing and degree of complexity of the horizontal and/or vertical stratigraphy present;



- to determine the approximate date or date range of the remains, by means of artefactual, stratigraphic or other evidence;
- to determine the condition, state of preservation and wider archaeological or historic significance of the remains;
- to collate the results of the evaluation and any detailed excavation and recording, including all necessary analyses, in a single report.

# 3.3 Methodology

- 3.3.1 All works were conducted in compliance with the WSI (Wessex Archaeology 2012) and Institute for Archaeologists' *Standards and Guidance* (2008).
- 3.3.2 All groundworks were carried out under supervision by appropriately qualified and experienced staff. Where practicable, all archaeological structures, features and deposits observed during the watching brief were cleaned manually to an archaeologically acceptable standard and located on a site plan and tied into the Ordnance Survey national grid.
- 3.3.3 All features were recorded using Wessex Archaeology's *pro forma* recording system and a photographic record maintained.
- 3.3.4 A small assemblage of finds was recovered during the watching brief. Quantities by context are given in **Appendix 3**.
- 3.3.5 Fieldwork was undertaken between 13/4/12 and 20/6/12.

# 4 RESULTS

#### 4.1 Introduction

4.1.1 The following section provides a summary of the information held in the site archive with observed features and contexts tabulated in **Appendix 2**.

#### 4.2 General Stratigraphy

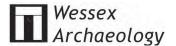
4.2.1 The site was overlain with a layer of rubble overburden ranging from 0.02m to 0.4m deep, at times very shallow. The underlying stratigraphy comprised a complex series of structures, made ground deposits and riverine silts. Natural geology was not reached during the watching brief.

#### 4.3 Southern Area

4.3.1 The southern area was dominated by a large basement area encompassing a flue (**Plate 1**; **Figure 4**), vaulted basement passage (**Plate 2**) and steam engine boiler base (**Plate 3**) northwest of the area of known crucible cellars. The cellared area is shaded yellow on the 1896 Goad Fire Insurance plan (**Figures 2 and 3**) and the structures identified correlate well with those marked on the Goad plan.

#### Cellared Area 714/715 and Flue 718

4.3.2 The cellared area was bounded to the southwest by northwest to southeast running wall **660**, to the northwest by northeast to southwest running wall

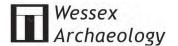


**714**, keyed into **660**, and to the northeast by the abutting northwest to southeast wall **715**.

- 4.3.3 The original construction appears to have included the eastern section of wall **714** and wall **715**, which abutted it. These sections were constructed of lime mortared handmade red bricks. Within wall **714** was an almost complete clay tobacco pipe dating to 1870-1920 (see Section 5.2 below; **Figure 7**). Later the western section of **714** and **660** appear to have been repaired or replaced in black ash mortar brick.
- 4.3.4 A low L-shaped foundation 718 in the northeast corner of the cellar, constructed of handmade brick and bonded with lime mortar, abutting walls 714 and 715, appears to have formed part of the original construction. The structure was badly heat damaged, with discoloured bricks and mortar and heavily degraded bricks.
- 4.3.5 Foundation **718** and external wall **715** were truncated by a flue **716/717** running east to west (**Plate 3**) through **715**. The position of the flue, if not its alignment, corresponds to a feature annotated 'Flue' on the Goad plan (**Figure 2**) and probably carried hot exhaust gases from the steam engine boiler to the southwest, to the chimney to the northeast. The flue was constructed of two parallel lime-mortared, handmade red brick walls, identical in materials and bonding agent to walls **714** and **715**. The walls were heat damaged with discoloured mortar and degraded bricks. A red brick surface (**719**) formed the floor of the cellared area.
- 4.3.6 A black ash mortar alteration **720** was observed in the southern side of wall **714** and west of **718** (**Plate 3**). The alteration appears to have been part of major structural alterations along probably associated with repair of the flue where exhaust gasses were being channelled from the southwest along wall **714**.

#### Vaulted structure 704/705

- 4.3.7 A vaulted red brick structure **704/705** was encountered northwest of the known area of crucible cellars (**Figures 4, Plate 2**). The vaulted structure is in the same position as basement annotated 'Bast.' within the Nursery Wire Works on the 1896 Goad Fire Insurance Plan, between a chimney to the northeast and a steam engine boiler to the southwest (**Figures 2** and **3**). It seems likely that the basement formed a passage between the furnace cellars and the steam engine and chimney base.
- 4.3.8 At least three phases of construction were observed in the vaulted structure. The original structure ran northwest to southeast and was constructed of handmade lime mortared bricks. A parallel wall, below the line of the later phase wall **701**, presumably lay 2m to the west and formed the western side of the structure. The vaulted roof **705** (Section 1, **Figure 6**) was extant over a little more than half of the total structure. There were also traces of an east to west wall **708** and a sandstone surface **710** at the south end of **704** although these were truncated by a modern drain.
- 4.3.9 This original lime-mortared phase of construction was modified by later black ash mortared structures, again made from similar handmade redbrick. This comprised repair **706** to the vaulting and a wall **701** built over the western



side of **704**. The northwest corner of **701** was finished with bull-nosed bricks, indicating a wall terminus in this location.

4.3.10 A final phase of rebuilding comprised black ash mortar and machine brick structures at the northwest end of the vaulted structure, suggesting that this end had been completely rebuilt. Remnants of a staircase **724** were found here, although this appeared to be associated with access to a cellar to the northeast. A ferrous I-beam **703** spanned the basement towards its northwestern extent, although it is unclear whether this related to reinforcement of the vaulted ceiling or some other repair.

#### Steam Engine Boiler Base 728

4.3.11 Immediately southeast of the junction of walls 660 and 714 was wall 728, constructed of handmade redbricks and bonded with black ash mortar, similar to 720 to the east. The structure ran parallel to walls 714 and 660, with the inside edge curving through 90° (Plate 5). The wall's position encloses the steam engine boiler shown as a rectangular hatched area on the 1896 Goad plan (Figures 2 and 3). The boiler base lay southwest of the vaulted passage 704/705, and was almost certainly connected to the flue 716/717 to the northeast, along wall 714.

#### Machine base 659

West of the junction of walls 714 and 660, and keyed in to riverside wall 664, 4.3.12 was a substantial sandstone machine base 659 (Figure 4, Plate 6). The location of the machine base lies close to the position of a steam engine, annotated 'ENG', on the 1896 Goad plan (Figures 2 and 3) to the immediate southeast. A number of ferrous pins, presumably for locating overlying machinery, were set into the sandstone blocks. The large rectangular blocks were bonded with a lime mortar. It seems likely that the engine itself would have been powering machinery within the Wire Works and that the machine base was part of the power transfer from the engine into the building to the northeast. A tar-like material (663, Plate 7) was observed on the river bank and on the exterior of the building, adjacent to the machine base. This may represent lubricant or fuel which dripped from the machine during usage. A later repair 661, in black ash mortar, lay immediately west of the junction of walls 714 and 660. This may have been a continuation of wall 714 to the west.

#### 4.4 Central Riverside Area

- 4.4.1 A number of structures, seen in plan (**Figure 5**) and/or section (Sections 2 and 3, **Figure 6**), were encountered in the area of the newly constructed canoe deck, adjacent to the river in the central area of the Site. Redeposited river silts **807** and **816** appear to have been used to level ground between the structures.
- 4.4.2 Three brick walls **800** (**Plate 8**) keyed into each other and bonded with lime mortar, formed the base of a small room, corresponding roughly with the position of a steam engine annotated 'ENG' on the 1896 Goad plan, immediately west of a chimney (**Figures 2** and **3**). Further sections of wall **800** and **804** may have formed the eastern side of the room and a central blocking wall divided the room in two. The remnants of a sandstone step **802** were located south of **800**.



- 4.4.3 North of **800** was northeast to southwest running redbrick wall **805** with a step on the southern side utilising a fragment from a reused grindstone **806** (**Plate 9**). The grindstone would have been approximately 1.5m in diameter when whole. Approximately 4.5m north of **805** was northwest-southeast redbrick wall **812** bonded with black ash mortar. The area between walls **805** and **812** contained northeast to southwest running drain **810**, with sandstone base and capping, and remnants of redbrick floor **811**.
- 4.4.4 A later phase of activity saw much of the floor (811) removed by a deep cutting 817, which was filled and sealed with a compacted ash deposit 823. Later still a pit or post hole (819) was cut through the ash 823. Contemporary with this was demolition of the walls 800 and 804. Layers of ash and rubble 813, 823, and 824 were deposited south of wall 805, and a section of brick wall 814 was added along with a brick floor 815. These latter structures were sealed with overburden 822.
- 4.4.5 Further to the northwest, adjacent to the river and just above water level, a redbrick and sandstone foundation (646) was identified (Plate 10). The foundation was constructed of loose handmade red bricks separated in the middle by a rectangular sandstone block, possibly a step. There appeared to be no mortar within the structure itself, although black ash mortar had been added to the surface of the bricks to the north. The foundation was set on ash bedding deposit 647.
- 4.4.6 Immediately east of this, a number of brick structures were seen in section (Figure 6, Plate 11). These included two northwest to southeast running walls (650 and 651) constructed in handmade brick and bonded with a sandy lime mortar. An opening 652 in wall 651, possibly a drain or a flue, was covered with a loose sandstone and redbrick structure 653. Remnants of sandstone set floor surface 656 were observed in section.

#### 4.5 Northern Riverside Area

- 4.5.1 A number of walls were identified in section approximately 4m east of the riverbank at the northern end of site (**Figure 6**). The southern part of this section corresponded with the previously excavated Evaluation Trench 5, and the northern part of this section with the previously excavated Evaluation Trench 4 (**Figure 1**).
- 4.5.2 At the southern extent of this area was a surface of sandstone flags **637** set on an ash bedding deposit **638**. The surface abutted northeast to southwest running wall **636** to the northwest, constructed of mainly sandstone but with some handmade brick, and bonded with lime mortar. The wall may have formed the northwest side of a building shown on the 1896 Goad plan that contained a number of furnaces (**Figure 2**). Above the surface was flue **640**, probably associated with the furnaces, with a brick lining and ash filling **641**. A later drain **643** truncated the surface to the southeast and modern manhole **634/635** and drain **631** were located beyond wall **636** to the northwest. A modern concrete slab **633** sealed the earlier structures.
- 4.5.3 A section of northeast to southwest running sandstone wall 623 bonded with lime mortar was seen to the northwest. The wall was set within a shallow cut 624. Immediately southwest of this was a brick-lined and stone capped culvert 628 set within cut 629. These foundations may have been associated



with a lodging house shown in this location on the Goad 1896 plan (Figure 2).

- 4.5.4 At the northern extent of this section were a complex series of sandstone and brick wall foundations, which had been subject to 20th century alterations (Figure 6; Plate 12). The foundations were difficult to interpret with any certainty given the limited area exposed, and all appear to relate to a single large building shown to the northwest of the site on the Goad 1896 plan (Figure 2). Three northeast to southwest sandstone foundations 608. 604 and 602, bonded with lime mortar, were located approximately 3m apart. Wall 602 is likely the end of wall 405/406 recorded in Evaluation Trench 4 (Wessex Archaeology 2010). Walls 608 and 604 were faced with handmade brick 615 and 607 on their southeast sides and most likely relate to walls 413 and 416 in Evaluation Trench 4 (Wessex Archaeology 2010). A deep cutting 617 to the south of 607 was likely related to the construction of the structures in this area. Northwest of wall 602 was a further sandstone foundation 612 with a handmade brick wall 613 above. Between walls 613 and 602 were three salt glazed pipes 615. Beyond wall 617 to the southeast was a layer of mortar 622, probably associated with brickwork 420 seen in this area in Evaluation Trench 4 (Wessex Archaeology 2010).
- 4.5.5 Modern additions/ repairs included two northwest to southeast machine brick foundations 607 and 603/616, abutting walls 608, 604 and 602 respectively. Similar additions were seen to foundations in Evaluation Trench 4 (Wessex Archaeology 2010). A modern manhole 606 was also inserted between walls 607 and 605.

#### 5 FINDS

#### 5.1 Summary

- 5.1.1 The watching brief produced a small quantity of finds. Quantities by context and weight are given in **Appendix 3**. Most of these finds came from post-demolition deposits and were briefly described and discarded.
- 5.1.2 Finds were recovered from contexts on the southern part of the site including a near complete clay tobacco pipe (see below) from within wall **714**, pottery (from **721**, **723** and **822**), glass (from **723**, **801** and **824**), rubber stoppers (from **721** and **723**), and ferrous material (from **822**). In addition, **723** provided slag, copper alloy, ceramic building material and a small quantity of cobalt blue. Cobalt has historically been used as a colouring agent in ceramics, glass and paint and began to be used in the development of wear-resistant cobalt alloys from the first decade of the 19<sup>th</sup> century.
- 5.1.3 From the western part of site, an unstratified glass bottle was recovered by workmen reading "J.W. Wardell/Attercliffe/Sheffield/Trade/Excelsior" and with an image of a flag. Similarly, an unstratified earthenware jug reading "Cheevers/Talbot Mineral Water Works/Montford Road/Sheffield" was noted. A large unstratified 1.5m diameter grindstone, similar in size to re-used stone in step 806, was also recorded (Plate 13). The stone had a circular axle aperture.



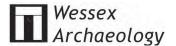
# 5.2 Clay Pipe

- 5.2.1 A single clay tobacco 'cutty' pipe was recovered from context **714** (**Figure 7**).
- 5.2.2 The 19<sup>th</sup> century witnessed a shift from the longer stemmed pipes of the first half of the century to the shorter stemmed "cutty" pipes with a nipple mouthpiece that because popular from about 1850. This particular pipe is a typical cutty style pipe with a plain spur, nipple mouthpiece, cut rim with a simple ribbon decoration on both seams. This style of ribbon decoration was a feature of the later nineteenth century and would place the pipe within the date range of 1870-1920.
- 5.2.3 Cutty pipes were produced by all the major pipe manufacturers during the 19<sup>th</sup> century. This particular example is not marked, nor does it have a pattern number moulded on to the side of the stem, as some examples did, therefore it is not possible to identify who may have produce it. However, surviving trade catalogues exist for two of the major pipe producers from Manchester Joseph Holland & Sons, *c*.1915 and Samuel McLardy, *c*.1920 these catalogues have been reproduced by Jung (2003). Pipes similar to the Nursery Street example are illustrated in both catalogues. In the Holland Catalogue the bowl form is referred to as a 'sprig cutty' and has the pattern number 34/3 (Jung 2003, 316). In the McLardy catalogue no pattern name is given but the pattern number is 34/21.
- 5.2.4 The pipe from Nursery Street is a good example of a standard cutty style pipe that would have been in common production and usage at the end of the 19<sup>th</sup> or early 20<sup>th</sup> century.

#### 6 CONCLUSIONS

#### 6.1 Summary

- 6.1.1 Several structures were identified during the monitoring which could be associated with the Cocker Bros Nursery Wire Works, which occupied the site from the 1850s. There was a good correlation between the features identified and historic mapping for the Site, particularly the 1896 Goad Insurance plan. At the south of the site were a vaulted basement, flue and probable steam boiler base, most likely associated with a steam engine powering machinery in the works. The basement may also have been linked to a known area of crucible cellars preserved at the southern extent of the Site. A machine base located nearby probably formed part of the power transmission within the works. In the central and northern areas of the site additional identified structures included remnants of walls, steps, stone sett surfaces, a flagstone surface and flue, and drains. Preservation of structures on the Site was excellent, and most of the structures recorded were preserved *in situ*.
- 6.1.2 A summary publication note will be prepared outlining the results of the watching brief.



#### 7 ARCHIVE

# 7.1 Preparation

7.1.1 The project archive, consisting of all primary written documents, plans, sections, photographs, and electronic data, will be prepared by Wessex Archaeology staff in accordance with the requirements of the repository museum and in line with national guidelines (Brown 2007).

# 7.2 Deposition

- 7.2.1 It is anticipated that the physical Site archive (**Appendix 1**) will eventually be deposited with Sheffield Museums under an accession number to be confirmed.
- 7.2.2 A digital copy of the report will be prepared for the client and physical copies will be submitted to Sheffield County Council and, along with the Site archive, to the repository museum.
- 7.2.3 An OASIS form will be completed at http://ads.ahds.ac.uk/project/oasis/ for inclusion in the ADS database. This will include an electronic copy of the report in PDF format.

#### 8 REFERENCES

- Brown, D. 2007. Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation.
- Institute for Archaeologists (IfA), 2008 Standards and Guidance for an Archaeological Watching Brief. Available: <a href="https://www.archaeologists.net">www.archaeologists.net</a>.
- Jung, S. Paul Jr., 2003 Pollocks of Manchester: Three Generations of Clay Tobacco Pipemakers, in David A. Higgins (ed.) The Archaeology of the Clay Tobacco Pipe, XVII, British Archaeological Reports, British Series 352, Oxford, 390pp.
- Wessex Archaeology, 2010 Archaeological Evaluation, Watching Brief and Building Recording. Unpublished Report WA 73253.01.
- Wessex Archaeology, 2012 Written Scheme of Investigation for Archaeological Watching Brief. Unpublished Report WA73254.01.



# **APPENDIX 1: ARCHIVE**

File No.	NAR Cat.	Details	Format	No. Sheets
1	-	Index to archive	A4	1
1	Α	Client report	A4	28
1	В	Day Register	A4	1
1	В	Site Diary	A4	11
1	В	Trench Sheets	A4	6
1	В	Context Indices	A4	2
1	В	Context and Structure	A4	79
		Sheets		
1	В	Brick Records	A4	18
1	В	Graphics Register	A4	1
1	В	Draft Matrices	A4	3
1	В	Primary Drawings	A3	15
1	D	Photographic Registers	A4	8
1	D	Black and White Index	A4	2
		Prints		
1	D	Black and White	A4	2
		Negatives		
1	D	Colour Slides	A4	4
1	E	Environmental Sample	A4	1
		Index		
1	E	Environmental Sample	A4	1
		Record		
1	G	Correspondence	A4	2
Finds	No. OF BOXES			
	(1)			

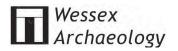


# **APPENDIX 2: CONTEXT DESCRIPTIONS**

Area	Context	Category	Description		
Trench 6	601	Deposit	Overburden – mid brown silt rubble.		
Trench 6	602	Structure	Sandstone lime mortar wall E-W at n of site		
Trench 6	603	Structure	20 <sup>th</sup> century machine brick cement N-S wall		
Trench 6	604	Structure	Sandstone lime mortar wall E-W, s of 603		
Trench 6	605	Structure	20 <sup>th</sup> century manhole – machine brick/cement		
Trench 6	606	Deposit	Rubble fill of <b>605</b> , grey brown silt with 60% red brick, concrete etc.		
Trench 6	607	Structure	20 <sup>th</sup> century machine brick/cement N-S wall, S of <b>605</b>		
Trench 6	608	Structure	Sandstone wall, E-W, mostly dry with some lime mortar, s of <b>607</b>		
Trench 6	609	Structure	Pinkish concrete with red brick fragments by river		
Trench 6	610	Void			
Trench 6	611	Void			
Trench 6	612	Structure	Sandstone and lime foundation at far NW of site		
Trench 6	613	Structure	Red brick and lime wall above 612		
Trench 6	614	Deposit	Brown silt n of 613		
Trench 6	615	Structure	3 salt glazed drains in uncertain stratigraphy between <b>614</b> and <b>602</b>		
Trench 6	616	Structure	20 <sup>th</sup> century red brick wall, E-W, tied in to <b>603</b>		
Trench 6	617	Structure	Handmade red brick and lime mortared wall, E-W, S of <b>608</b>		
Trench 6	618	Cut	Construction cut for 617		
Trench 6	619	Deposit	Fill of 618 – rubble and lime mortar		
Trench 6	620	Deposit	Silt layers cut by 618		
Trench 6	621	Deposit	Silt layers over 618		
Trench 6	622	Structure	Surface – lime mortar spread over <b>621</b>		
Trench 6	623	Structure	Sandstone and lime mortar wall, e-w, s of 622		
Trench 6	624	Cut	Construction cut for 623		
Trench 6	625	Deposit	Ash fill of 624		
Trench 6	626	Deposit	Silt fill of 624		
Trench 6	627	Deposit	Rubble over 622 s of 623		
Trench 6	628	Structure	Red brick drain capper with sandstone, no mortar, E-W.		
Trench 6	629	Cut	Cut for 628 – square profile		
Trench 6	630	Deposit	Black/brown ash fill of 628		
Trench 6	631	Structure	Modern drain s of 628		
Trench 6	632	Deposit	Ash bedding over 631; same material as 630		
Trench 6	633	Structure	Modern concrete floor & associated hardcore over <b>632</b>		
Trench 6	634	Structure	Modern manhole S of 631		
Trench 6	635	Cut	Cut for 634		
Trench 6	636	Structure	Sandstone and red brick ashy lime mortar E-W wall S of <b>634</b>		
Trench 6	637	Structure	Paving slabs S of <b>636</b> – surface		
Trench 6	638	Deposit	Black ash bedding for 637		
Trench 6	639	Deposit	Silt with lime mortar under 638		



Area	Context	Category	Description	
Trench 6	640	Structure	Sandy mortar machine brick enclosure sitting on <b>637</b>	
Trench 6	641	Deposit	Purple industrial ash fill of <b>640</b>	
Trench 6	642	Deposit	Rubble over <b>637</b> , <b>640</b> etc.	
Trench 6	643	Structure	Modern drain truncating end of <b>637</b>	
Trench 6	644	Structure	Possible sandstone surface 25m from n limit of trench. Possibly natural/rubble.	
Trench 6	645	Structure	Sandstone sets near <b>644</b> in section	
Trench 6	646	Structure	Red brick/sand stone base seen in plan	
Trench 6	647	Deposit	Surface below 646	
Trench 6	648	Deposit	Silt under <b>647</b> – grey/brown with charcoal	
Trench 6	649	Deposit	Compacted rubble/mortar used as bedding for 650	
Trench 6	650	Structure	Red brick wall, N-S, E of <b>646</b>	
Trench 6	651	Structure	Two red brick structures N of 646 forming opening	
Trench 6	652	Deposit	Loose rubble filling opening in 651	
Trench 6	653	Structure	Loose red brick and sandstone structure over opening in <b>651</b> – dry and collapsing	
Trench 6	654	Deposit	Ashy brown silt under 651	
Trench 6	655	Structure	Small black ash mortar red brick structure at S end of sets <b>656</b>	
Trench 6	656	Structure	Sandstone sets in section – probably same as <b>645</b> ?	
Trench 6	657	Deposit	Black ash bedding under 656	
Trench 6	658	Structure	2 skin lime mortared wall by road	
Trench 6	659	Structure	Sandstone machine base complex S of site	
Trench 6	660	Structure	Red brick lime mortared wall, N-S, e of 659	
Trench 6	661	Structure	Sandstone and red brick structure/repair over <b>659</b> . Black ash mortar	
Trench 6	662	Deposit	Fe residue on <b>659</b>	
Trench 6	663	Deposit	Bitumen/tar industrial residue on riverbank near 659	
Trench 6	664	Structure	Red brick and sandstone wall along riverbank near <b>659</b>	
Trench 6	665	Grindstone	Unstratified grindstone near 659	
Trench 6	666	Structure	2 skin red brick black ash mortar wall, E-W, seen in small trench at E of site.	
Trench 7	700	Deposit	Overburden – rubble etc.	
Trench 7	701	Structure	N-S red brick black ash mortar wall	
Trench 7	702	Structure	Lime mortared patch in 701	
Trench 7	703	Structure	Fe I-beam E-W	
Trench 7	704	Structure	N-S lime mortared red brick wall	
Trench 7	705	Structure	Lime mortared vaulted ceiling	
Trench 7	706	Structure	Black ash mortar repair to <b>705</b>	
Trench 7	707	Structure	Black ash mortar structure over <b>705</b>	
Trench 7	708	Structure	E-W lime mortar wall s end of <b>704</b>	
Trench 7	709	Structure	Machine brick structure by I-beam 703	
Trench 7	710	Structure	Sandstone floor by <b>708</b>	
Trench 7	711	Structure	Fragmentary structure near 706	
Trench 7	712	Deposit	Rubble in cellar	
Trench 7	713	Deposit	Ash under 710	

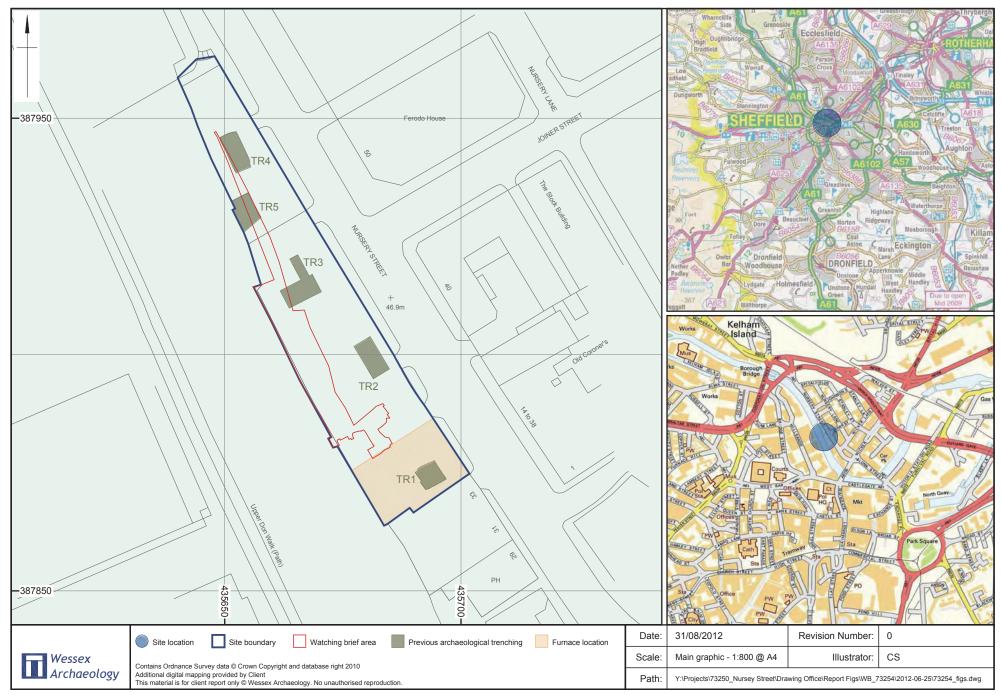


Area	Context	Category	Description	
Trench 7	714	Structure	Major e-w lime mortared wall	
Trench 7	715	Structure	N-S lime mortared wall	
Trench 7	716	Structure	NW wall of flue	
Trench 7	717	Structure	SE wall of flue	
Trench 7	718	Structure	Lime mortared structure NW corner of cellar – furnace?	
Trench 7	719	Structure	Red brick floor in cellar	
Trench 7	720	Structure	Black ash mortar structure in cellar – bend in flue	
Trench 7	721	Deposit	General fill of cellar	
Trench 7	722	Deposit	Clay/silt fill by 717 - fill of 726	
Trench 7	723	Deposit	Black ash fill w side of cellar	
Trench 7	724	Structure	Staircase	
Trench 7	725	Structure	Wall – N end of vaulting	
Trench 7	726	Cut	Late intervention filled with 722 test pit?	
Trench 7	727	Structure	Modern drain between 716 and 715	
Trench 7	728	Structure	Radius butting 714 and 660	
Trench 7	729	Structure	Black ash mortar wall behind 715	
Trench 8	800	Structure	End of lime mortared Cellar, looked like a Trough	
Trench 8	801	Deposit	Industrial Ash fill of 800	
Trench 8	802	Structure	Step built into S end of 800	
Trench 8	803	Deposit	Red ash demolition around 800 805 &c.	
Trench 8	804	Structure	Return of <b>800</b> seen in section	
Trench 8	805	Structure	NE-SW lime mortared wall	
Trench 8	806	Structure	Step built into 805 – reused grindstone	
Trench 8	807	Deposit	Redeposited riverine silt	
Trench 8	808	Cut	Late intervention S of 800	
Trench 8	809	Deposit	Coarse ash fill of 808	
Trench 8	810	Structure	Drain N of 805	
Trench 8	811	Structure	Red brick floor seen in section	
Trench 8	812	Structure	NW-SE black ash mortar wall	
Trench 8	813	Deposit	Thin ash layer over 800	
Trench 8	814	Structure	Red brick structure in section S of 805	
Trench 8	815	Structure	Intermittent floor S of 814	
Trench 8	816	Deposit	Multiple layers piled against 810	
Trench 8	817	Cut	Demolition event though 811	
Trench 8	818	Deposit	Primary fill of 817 – redeposited riverine silt	
Trench 8	819	Cut	Post hole cutting 821 &c.	
Trench 8	820	Deposit	Ashy fill of 819	
Trench 8	821	Deposit	Mortar dump over 823	
Trench 8	822	Deposit	Overburden	
Trench 8	823	Deposit	Compacted ash layer over 818	
Trench 8	824	Deposit	Rubble over 814, under 815	
Trench 8	825	Cut	Demolition event prior to 800 etc.	

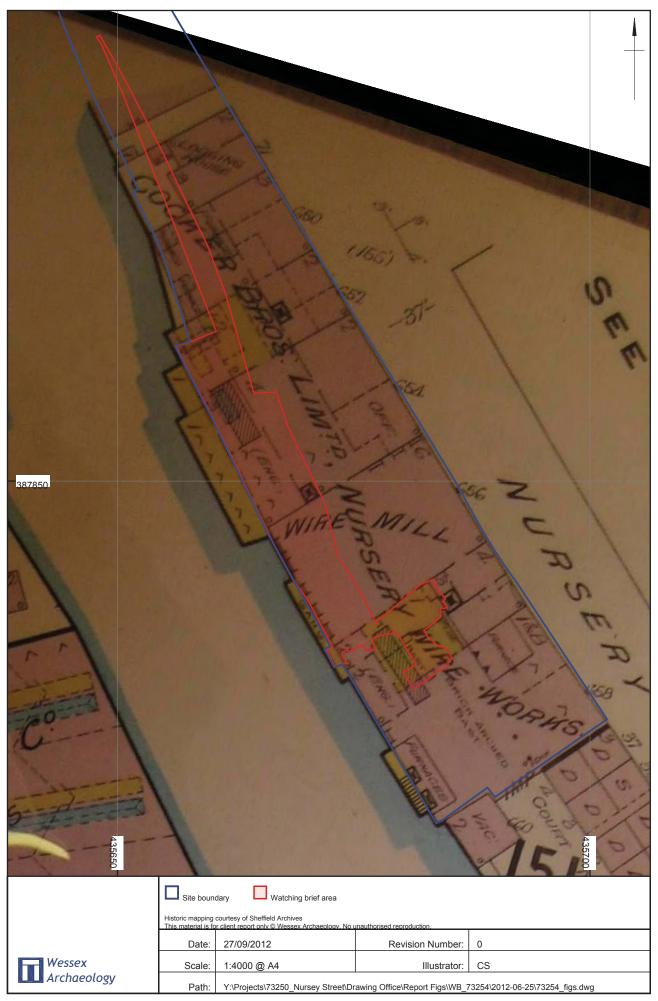


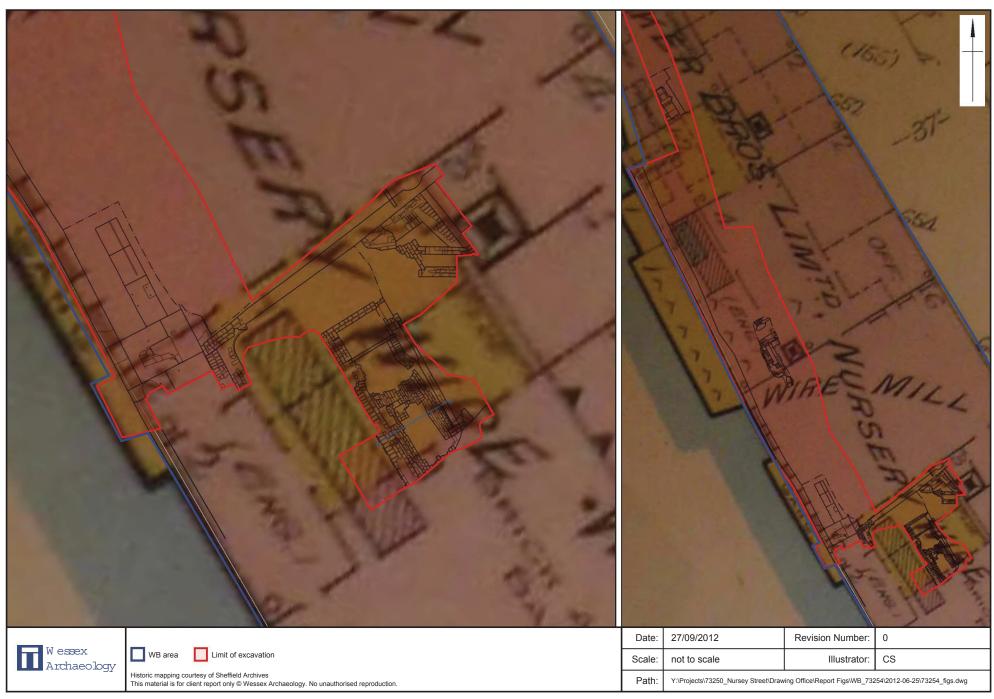
# **APPENDIX 3: ARTEFACTS BY CONTEXT**

Context	Material	No	Weight	
723	Slag	1	166	Amorphous lump
723	Copper Alloy	2	36	1' wide strip and wire
714	Clay Pipe	1	18	Near complete pipe
721	Synthetics	1	24	Rubber bottle stopper "CANNON BREWERY/ Wm STONES LTD/ SHEFFIELD"
723	Synthetics	1	24	Rubber bottle stopper "CANNON BREWERY/ Wm STONES LTD/ SHEFFIELD"
723	Glass	3	308	Misc glass including complete bottle
723	Unknown	4	86	Possible cobalt? dye
723	Pottery	7	804	Misc including handle and vessel fragment "[C]ANNON BREWE[RY]"
723	Ceramic Building Material	1	1180	Partial glazed Leeds fireclay company brick "LEEDS Co" "LFC/ENGLAND"
721	Pottery	11	2655	Misc bulky post medieval pottery
822	Pottery	3	26	Misc post med wares including mug handle
801	Glass	1	26	Green vessel glass
824	Glass	3	34	2 x window glass, 1x green vessel glass "[L]IMITED O"
822	Iron	1	208	Iron Strip exactly 1' by 1.5"
U/S Tr8	Iron	1	536	Iron bar section
TOTAL		41	6131	

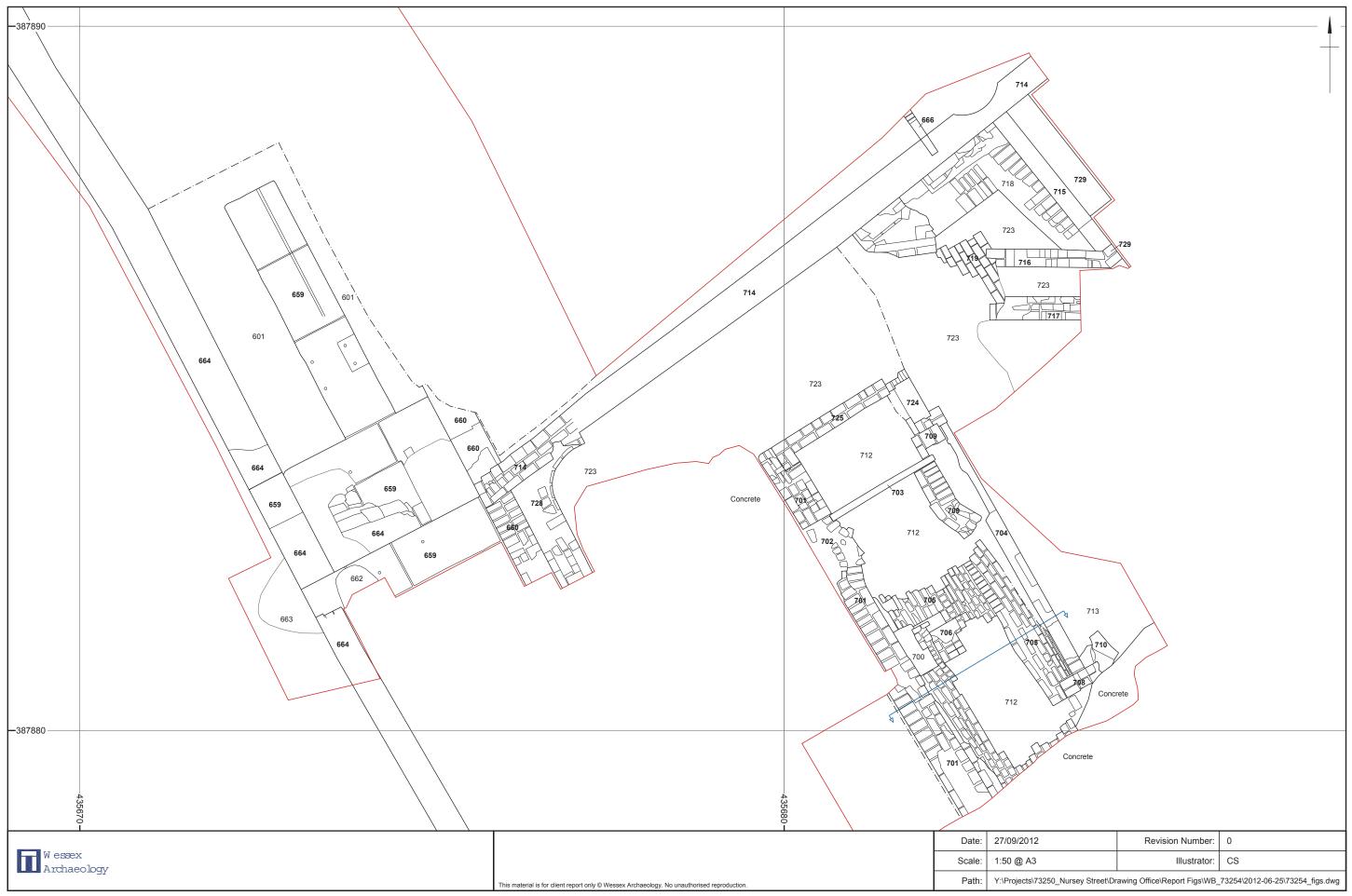


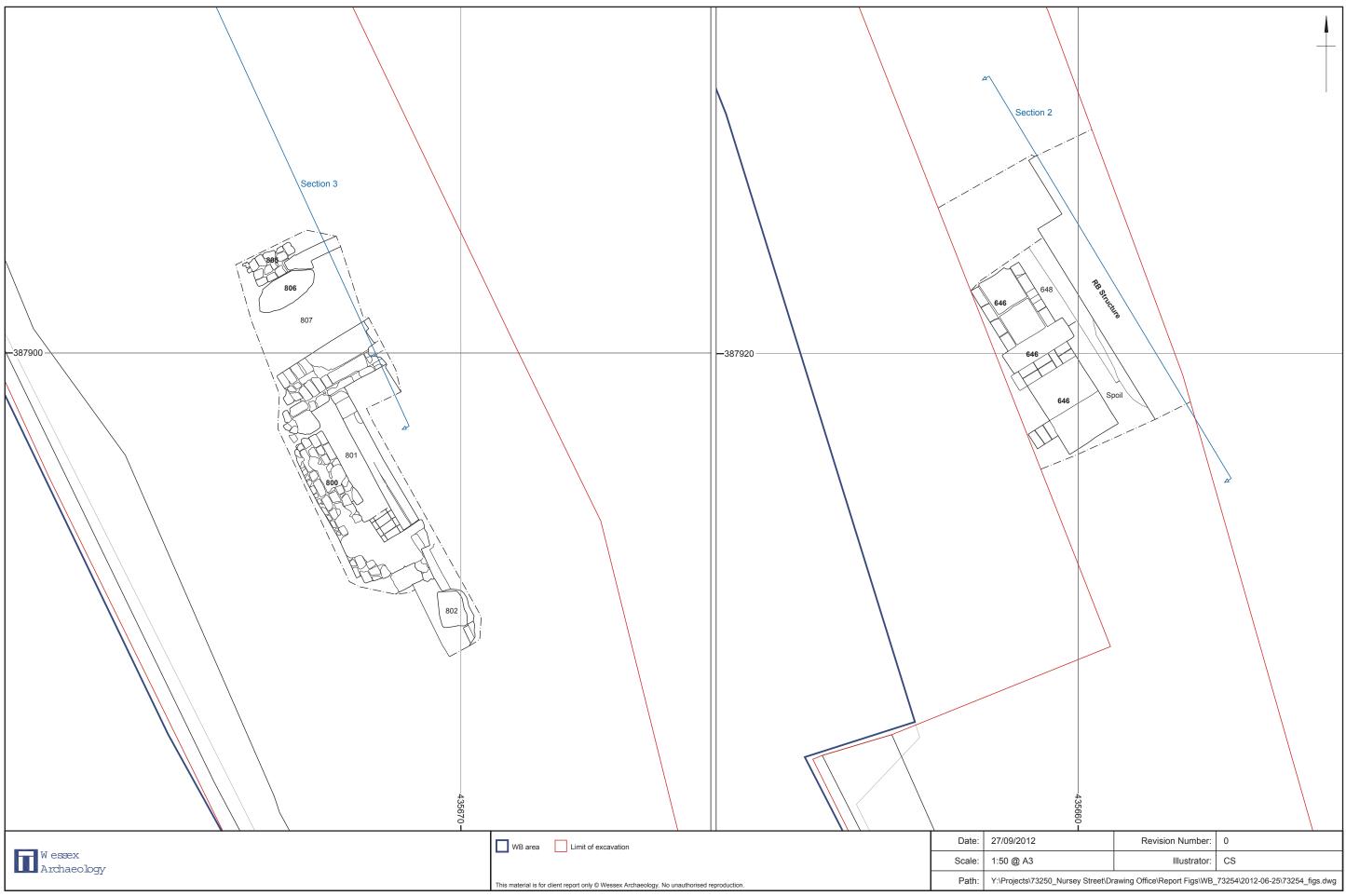
Site location Figure 1

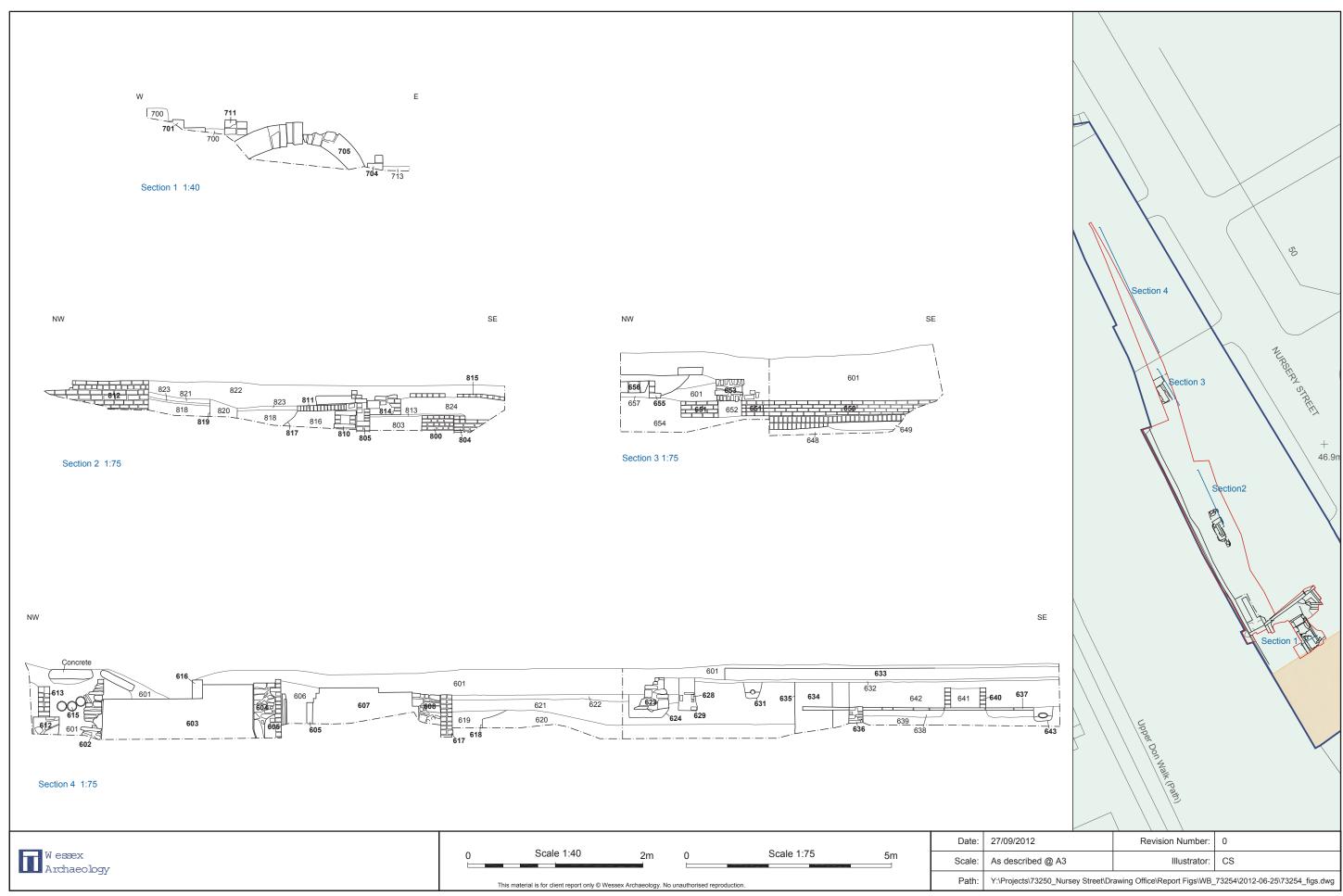




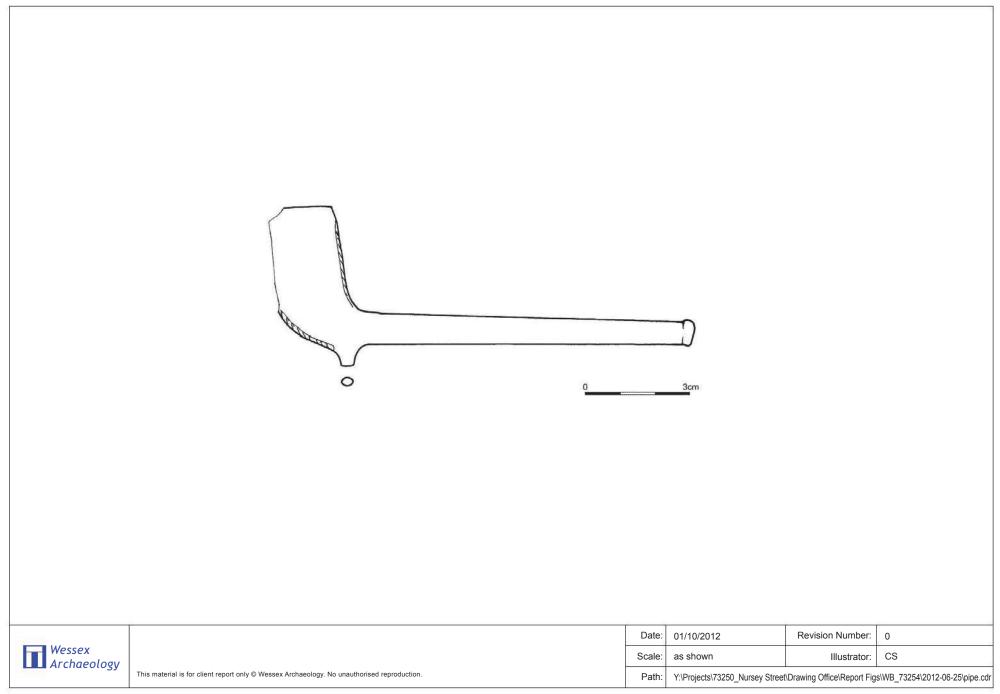
Site plan overlaid on 1896 Goad Insurance Map







Sections Figure 6



Clay Pipe recovered from **714**.



Plate 1: Northeast corner **714/745**, lasouthern area, looking east.



Plate 2auTted Struc704605, southern area, looking northeast.

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Plate 3: Black ash mortar **320**ersbitchern area, looking northwest.



Plate 4: Detail 716/717 within cellbooking southeast.

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Plate 5: Curve of 28 allooking southeast.



Plate 6: Machine **659** south part of Site, looking southeast.

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Plate 7arTlike mat 6663 alear machine ba659, southern area, looking southeast.

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Plate 8: Ro**800**, with blocking, central riverside area.



Plate 9: Grindstone reused 806, steptral riverside area.

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Plate 10: Founda646pn central riverside area, looking northeast.



 ${\tt Plate11~Structures~in~section,~central~riverside~area,~looking~northeast.}$ 

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Plate 12 a M 603 - 608 & 617, northern riverside area, boking northeast.

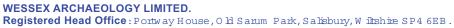


Plate 13: Unstratified grindston 206 similar to

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