

**FIRST STREET PLOT 11 (8)
MANCHESTER, M15 4FN**

**ASSESSMENT OF AN
ARCHAEOLOGICAL EXCAVATION**

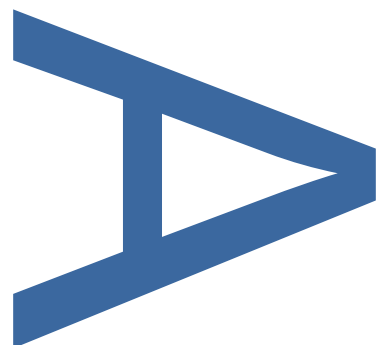
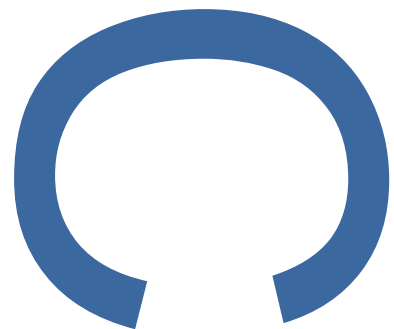
**LOCAL PLANNING AUTHORITY:
MANCHESTER CITY COUNCIL**

**PLANNING APPLICATION NUMBER:
111170/FO/2016/C1**

PCA REPORT NO: 12915

SITE CODE: FSS16

JUNE 2017



PRE-CONSTRUCT ARCHAEOLOGY

FIRST STREET PLOT 11 (8)
MANCHESTER, M15 4FN

ASSESSMENT OF AN ARCHAEOLOGICAL
EXCAVATION

Quality Control

Pre-Construct Archaeology Ltd	
Project Number	K4609
Report Number	R12915

	Name & Title	Signature	Date
Text Prepared by:	Rosemary Banens		June 2017
Graphics Prepared by:	Ray Murphy & Josephine Brown		June 2017
Graphics Checked by:	Josephine Brown	<i>Josephine Brown</i>	June 2017
Project Manager Sign-off:	Jon Butler	<i>Jon Butler</i>	June 2017

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Limited
Unit 54
Brockley Cross Business Centre
96 Endwell Road
London
SE4 2PD

**An Assessment of an Archaeological Excavation at First Street Plot 11 (8),
Manchester, M15 4FN**

Site Code: FSS16

Central NGR: SJ 83794 97218

Local Planning Authority: Manchester City Council

Planning Reference: 111170/FO/2016/C1

Written/Researched by: Rosemary Banens

Project Manager: Chris Mayo, MCIfA

Post Excavation Manager: Jon Butler, MCIfA

Commissioning Client: Arcadis

On behalf of: Southside Regeneration Ltd.

Contractor:

Pre-Construct Archaeology Limited

Unit 54 Brockley Cross Business Centre

96 Endwell Road

Brockley

London SE4 2PD

Tel: 020 7732 3925

E-mail: cmayo@pre-construct.com

Web: www.pre-construct.com

© Pre-Construct Archaeology Limited

June 2017

© The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Limited cannot be held responsible for errors or inaccuracies herein contained.

CONTENTS

1	Abstract	5
2	Introduction	6
3	Planning Background	10
4	Geology and Topography	14
5	Archaeological and Historical Background	15
6	Archaeological Methodology	20
7	Archaeological Sequence	21
8	Phased Discussion	58
9	Research Questions	62
10	Contents of the Archive	65
11	Importance of the Results, Further Work and Publication Proposal	66
12	Acknowledgements	69
13	Bibliography	72

Appendices

Appendix 1	Context Index	73
Appendix 2	Pottery Assessment by Chris Jarrett	81
Appendix 3	Clay Tobacco Pipe Assessment by Chris Jarrett	88
Appendix 4	Glass Assessment by Chris Jarrett	90
Appendix 5	Building Materials Assessment by Kevin Hayward	95
Appendix 6	Metal and Small Finds Assessment by Märit Gaimster	105
Appendix 7	Animal Bone Assessment by Karen Deighton	107
Appendix 8	Environmental Assessment by Kate Turner	109
Appendix 9	OASIS Form	114
Appendix 10	Finds Photographs	117

Illustrations

Figure 1	Site Location	8
Figure 2	Trench Location	9
Figure 3	Multi-phase Plan	31
Figure 4	Detailed plan of north-east part of site , Phase 2	32
Figure 5	Detailed plan of north-east part of site , Phase 3	33
Figure 6	Detailed plan of south-east part of site , Phase 2	34
Figure 7	Detailed plan of south-west part of site, Phase 2	35
Figure 8	Detailed plan of western part of site, Phase 2	36
Figure 9	Sub-phased plan of western part of site	37
Figure 10	Elevation of wall [177]	38
Figure 11	Phase 2 features overlain on Banck's Map of 1831	39
Figure 12	Phase 2 features overlain onto Ordnance Survey map, 1844-49	40
Figure 13	Phase 2 features overlain onto Ordnance Survey map, 1888-89	41
Figure 14	Phase 3 features overlain onto 1931 Goad Fire Insurance Plan	42

Plates

Plate 1	Mount Street Terraces looking south-west	43
Plate 2	Internal wall [257] in floor [239] looking north-east	43
Plate 3	Walls [178], [184], [185] and [257] looking south-west	44
Plate 4	Brick and stone stairs [188] and wall alteration [191] looking south-west	44
Plate 5	Brick coal store [236] and [237] looking south-east	45
Plate 6	Mount Street Terraces looking south	45
Plate 7	Mount Street Terraces looking north	46
Plate 8	Ash pit [58] looking north-east	46
Plate 9	Coal chute [68]	47
Plate 10	Brick tank [74], [75], [76] and [77] looking north-east	47
Plate 11	Brick air raid shelter [168], [151] looking south-west	48

Plate 12	Drain [41] and walls [43], [44] looking south-west	48
Plate 13	Coal store [126] looking south-west	49
Plate 14	Structure [223] looking south-west	49
Plate 15	Ebenezer Street [7]/[203] looking west	50
Plate 16	Wall [175] and air raid shelter entrance G looking south-west	50
Plate 17	Air raid shelter entrance D looking north-east	51
Plate 18	Air raid shelter entrance C looking north-east	51
Plate 19	Air raid shelter 8 looking south-east	52
Plate 20	Construction of Chester Street Cottages, 1898	52
Plate 21	Back passage between Newcastle Street and Fawcett Street, 1901	53
Plate 22	Corner of Newcastle Street and Irving Street looking east to George Street	53
Plate 23	Aerial view of Hulme, 1922	54
Plate 24	Looking west to Parker Street, 1922	54
Plate 25	Parker Street, 1922	55
Plate 26	Back passage behind George Street, 1923	55
Plate 27	Galloway Street, 1924	56
Plate 28	Aerial view of Hulme, 1927	56
Plate 29	West Gorton air raid shelter interior, 1940	57
Plate 30	West Gorton air raid shelter entrances, 1940	57

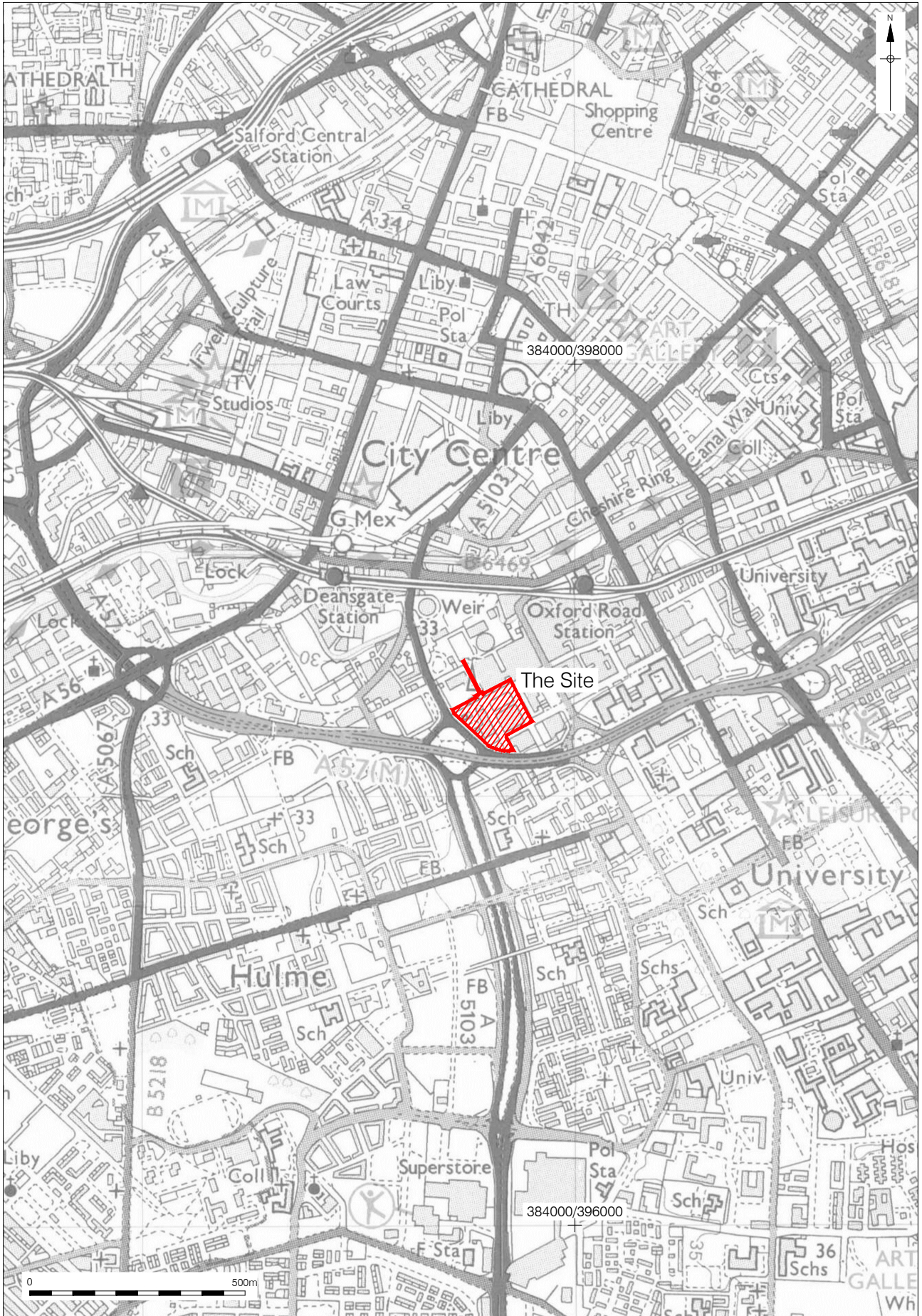
1 ABSTRACT

- 1.1 Following an archaeological evaluation in October 2016 an excavation was conducted between 24th October and 18th November 2016 on land bound by Hulme Street, Wilmott Street, Chester Street, and Medlock Street, Manchester. This revealed a series of cellars and other building remains which dated from the early to mid 19th century, as well as a series of air raid shelters and associated entrances from WWII. The 19th-century buildings were primarily residential in nature; commercial/industrial buildings replaced the terraced housing after slum clearance of the early 20th century.
- 1.2 The archaeological investigations found that natural deposits on site comprised a sand/sandy gravel deposit. This was encountered between 34.09m OD in the south-eastern corner of the site, sloping down to 33.52m OD in the north, indicating that the natural topography slopes down from the south to the north into the River Medlock valley. There was no evidence of any subsoil horizon. It seems probable that both the topsoil and subsoil were stripped from the area prior to or as part of the extensive building development during the early 19th century.
- 1.3 The earliest buildings on site consisted of a row of terraced houses fronting Mount Street, which were constructed in the early-mid 19th century. It is possible that these houses belong to a row of buildings shown on the Bancks' Map of 1831. These were altered throughout the course of the 19th century.
- 1.4 In the mid 19th century, industrial development along the Medlock resulted in the construction of workers' housing across the site, as well as in neighbouring areas. Streets with rows of terraced back-to-backs and terraced through-houses, two to three storeys tall were built. In addition to the cellars fronting Mount Street, the fragmentary truncated remains of structures fronting onto Mouncey's Court, Cream Court, Parker Street, Jones Street, Galloway Street, and George Street were recorded. The houses fronting Mount Street and Parker Street had cellars, while there was no evidence of the houses on other streets having cellars.
- 1.5 At some point, the walls of the cellars of the terrace fronting Mount Street were knocked down to form one large cellar and the staircases providing access to the cellars were blocked up.
- 1.6 Between 1922 and 1937, all the housing on site was demolished, and the school building was rebuilt for use as a 'works'. The land between Ebenezer Street and George Street was turned into a coal yard, in which a series of air raid shelters in two rows was built for the Second World War. Eight brick entrances and eight shelters were recorded. Modern commercial/industrial buildings were constructed on the site during the 1930s, however, these were later demolished and the site was primarily used as a car park.
- 1.7 This report outlines the results of the archaeological investigations and assesses their importance. Recommendations for further post-excavation work are also made.

2 INTRODUCTION

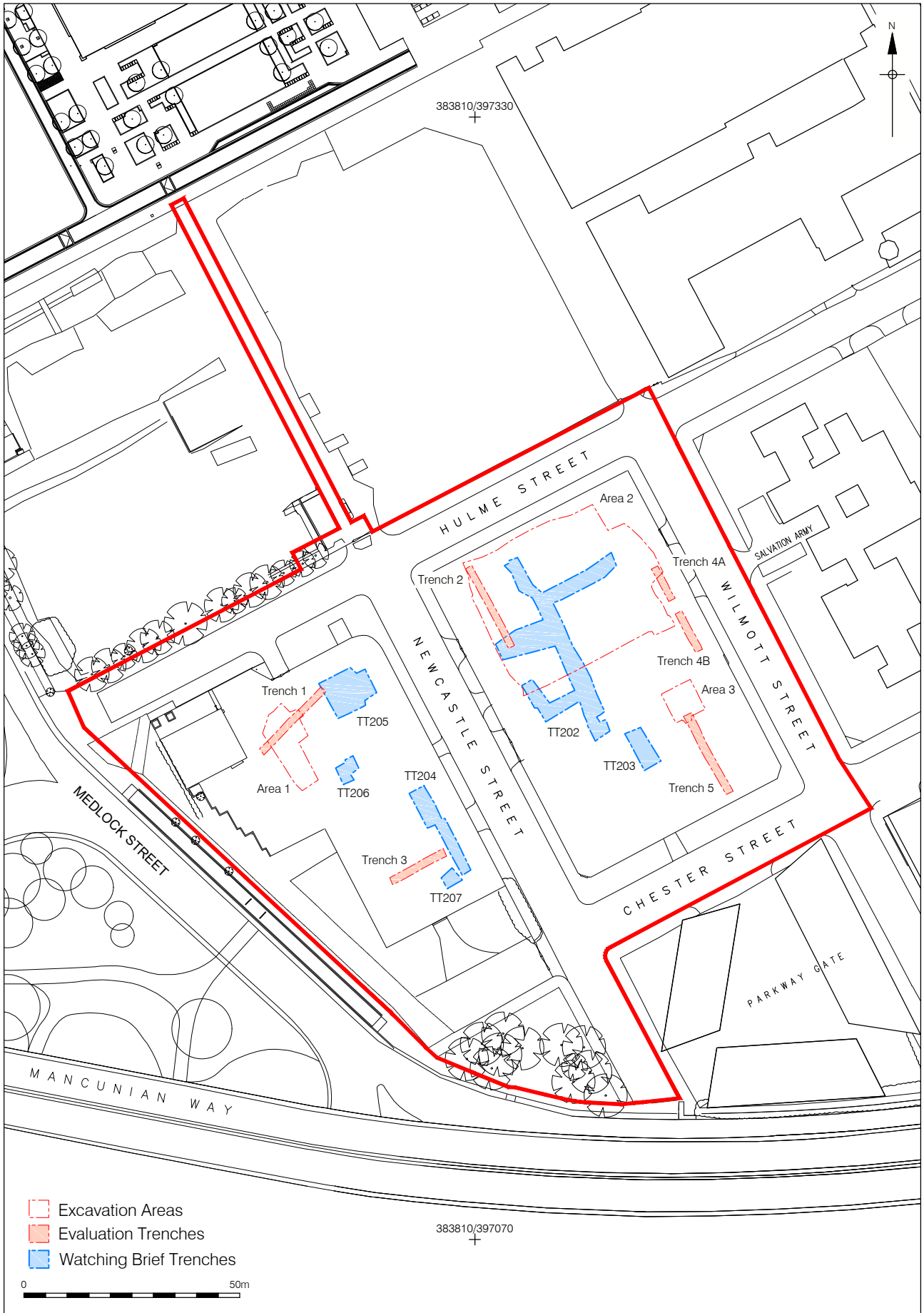
- 2.1 Archaeological investigations were undertaken between 24th October and 18th November 2016 by Pre-Construct Archaeology Limited, on land bound by Hulme Street, Wilmott Street, Chester Street, and Medlock Street, Manchester (Figure 1). The work was carried out in advance of planned development works on the site. Permission for the development had been granted by the local planning authority, the City of Manchester, under application number 111170/FO/2016/C1. The proposed development includes the construction of a 22-storey residential apartment complex with the inclusion of some retail/commercial premises at ground level, turning Newcastle Street into a 'pedestrian only' highway, and landscaping to include extensive green spaces within the centre of the complex as well as paved access routes and public realm.
- 2.2 The archaeological and historical background of the site had previously been researched for a chapter in an Environmental Statement, and was undertaken by Pre-Construct Archaeology Limited (PCA 2016). This chapter established that the site probably remained as open agricultural land until the early 19th century, when it was rapidly developed, along with wider intensive and extensive industrial development of the surrounding Hulme area. The site was completely developed by the middle of the 19th century and was fully occupied by buildings up until the inter-war years, after which large areas of Hulme were condemned, and the entire eastern half of the site was cleared. Early buildings survived in the western part of the site until the mid 20th century, when they were demolished.
- 2.3 Archaeological watching briefs were conducted by PCA during two phases of geotechnical works, in April and October 2016. A summary of the results from the archaeological evaluation included the findings from these watching briefs (Jorgensen 2016).
- 2.4 The planning consent for this development included, on the recommendation of the Greater Manchester Archaeological Advisory Service (GMAAS), an archaeological condition for a physical site evaluation based on a program of trial trench excavation. The results of the evaluation were set out in a PCA report in October 2016 (Jorgensen 2016). The archaeological evaluation revealed the remains of a variety of workers' houses, both cellared and non-cellared, and identified an area considered by GMAAS to be worthy of fuller investigation. Following this a targeted, open area archaeological excavation was carried out in the northern half of the site, with the majority of the investigation conducted on the eastern side (Figure 2). This report details the result of the 'Strip, Map and Record' style programme of works conducted in those selected areas.
- 2.5 The Site is located approximately 1.2km to the south-east of Manchester city centre, and approximately 1.0km from the centre of Hulme. It measures approximately 1.6ha in area, centred at NGR 383794,397218 (Figure 1). The site is bound by Hulme Street to the north, Wilmott Street to the east, Chester Street to the south, and Medlock Street to the west.

- 2.6 The area covered by the archaeological excavation consisted of the northern half of the overall development site, with the majority of the investigation conducted on the eastern side. The largest area targeted measured c. 34m NW-SE by c. 35m NE-SW, an area comprising c. 1290m². A smaller area was opened to the south-east, measuring c. 9m NW-SE by c. 8m NE-SW and covering an area of c. 74m². On the western half of the site, the area investigated measured c. 19m NW-SE by c. 9m NE-SW, an area comprising c. 129m².
- 2.7 By the time archaeological excavation work commenced the buildings on the north-western half of the overall site had been demolished, with the southern and western areas of site until recently in use as car parks.



© Crown copyright 2017. All rights reserved. License number 36110309
 © Pre-Construct Archaeology Ltd 2017
 23/05/17 RM

Figure 1
 Site Location
 1:12,500 at A4



Topographical survey drawing supplied by Benoy, 2012
 © Pre-Construct Archaeology Ltd 2017
 23/05/17 RM; 10/06/17 JB

Figure 2
 Detailed Site Location
 1:1,250 at A4

3 PLANNING BACKGROUND

3.1 National Planning Policy Framework

3.1.1 In March 2012, the government published the National Planning Policy Framework (NPPF), which replaced existing national policy relating to heritage and archaeology (Planning Policy Statement 5: Planning for the Historic Environment (PPS5)). In summary, current national policy provides a framework which protects nationally important designated Heritage Assets and their settings, in appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions regarding the historic environment and provides for the investigation by intrusive or non-intrusive means of sites not significant enough to merit in-situ preservation. Relevant paragraphs within the NPPF include the following:

128. In determining applications, local planning authorities 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. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

The Glossary contained within the NPPF includes the following definitions:

Heritage asset: A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).

Archaeological interest: There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Historic environment: All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Historic environment record: Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.

3.2 Local Policy: Archaeology in Manchester

- 3.2.1 The local planning authority responsible for the study site is Manchester City Council, whose current planning policy is governed by its Core Strategy Development Plan Document adopted on the 11th of July 2012. This replaced the previous Unitary Development Plan, though some policies of the earlier plan are still extant, including that relating to archaeology:

20. ARCHAEOLOGY

DC20.1 The Council will give particular careful consideration to development proposals which affect scheduled Ancient Monuments and sites of archaeological interests, to ensure their preservation in place. In particular:

a. Applications for consent to alter scheduled Ancient Monuments or sites of archaeological interest or their settings should be accompanied by an evaluation and assessment of the implications of the proposal.

b. The Council will have special regard to the desirability of securing the preservation of Ancient Monuments and other sites of archaeological interest and their setting in place. It will not permit development that, in its opinion, would adversely affect scheduled Ancient Monuments, or other sites of archaeological interests, and their settings, In exceptional cases where development is inevitable, the Council will look at the scope for combining preservation in place with limited investigation and recording.

c. Where the preservation of scheduled Ancient Monuments and sites of archaeological interest in place is not appropriate, the Council will seek to gain full and proper recording of the site through early consultation between the applicant and approved archaeological organisation.

Reasons:-

Ancient Monuments and sites of archaeological interest are valuable as part of Manchester's heritage and there is a presumption for their retention in place and against any damage occurring to them or to their setting. The policy gives effect to the obligation placed on the Council by statute to give particular attention to development proposals affecting Ancient Monuments and sites of archaeological interest, and reflects the general policy objective set out in policy E2.8 in this plan. The Council will rely on the coverage of Ancient Monuments and sites of archaeological interest contained in the Sites and Monuments Record for Manchester for evidence of known archaeological remains.

3.3 Site Specific Planning Constraints

- 3.3.1 In terms of designated heritage assets, as defined above, no Scheduled Ancient Monuments, Historic Wreck sites or Historic Battlefield designations lie within the vicinity of the study site; neither does the site lie within a conservation area or archaeological priority area.

3.4 Site Specific Planning History

- 3.4.1 A planning application for the site, under reference number 111170/FO/2016/C1, was submitted in February 2016 to Manchester City Council. This proposal involved the:

Demolition of on-site building and structures. Erection of a residential building (part 8, part 10, part 23 and part 26 storeys with roof plant, to accommodate 624 apartments (43 x studio, 210 x 1 bed, 328 x 2 bed, 15 x 2 bed duplex and 28 x 3 bed) (Use Class C3). Associated residential amenity uses including podium garden, ground floor commercial units (Class A1, A2, A3, A4, B1, D1 (creche/day nursery and/or doctor's surgery) and D2 (gym use)) with associated access, servicing, parking and public realm.

- 3.4.2 Planning permission for the development of the site was granted in June 2016 by the City of Manchester with a number of conditions, one of which related to the potential archaeological resource of the site. The archaeological condition was worded as follows: -

25) The applicant or their agents or their successors in title will secure the implementation of a programme of archaeological works. The works are to be undertaken in accordance with a Written Scheme of Investigation (WSI) submitted to and approved in writing by the local planning authority. The WSI covers the following:

1. A phased programme and methodology of investigation and recording to include:

- An evaluation using trial trenching*
- Detailed historical analysis*
- Informed by the above, more detailed, targeted archaeological excavation and recording.*

2. A programme for post investigation assessment, to include:

- Detailed analysis of finds.*
- Production of a final report on the significance of the below ground archaeological interest.*

3. *Deposition of the final report with the Greater Manchester Historic Environment Record.*
4. *Dissemination of the results commensurate with their significance.*
5. *Provision for archive deposition of the report, finds and records of the site investigation.*
6. *Nomination of a competent person or persons/organisation to undertake the work set out within the approved WSI.*

Reason: In accordance with NPPF Section 12, Paragraph 141 - To record and advance understanding of heritage assets to be lost and to make information about the archaeological heritage interest publicly accessible

- 3.4.3 A Written Scheme of Investigation for the mitigation work herein reported was prepared by PCA (Mayo 2016) and approved by GMAAS.
- 3.4.4 Since approval of the application, the buildings on site, which comprised a small 2-storey office building in the north-western corner of the site and a vacant parking kiosk associated with the surface car park, have been demolished and the area has been used as a car park.

4 GEOLOGY AND TOPOGRAPHY

4.1 Geology

- 4.1.1 According to the British Geological Survey, the site is underlain by Triassic Sandstone of the Chester Pebble Beds Formation, deposited between 251 and 246 million years ago in a local environment dominated by rivers. This is overlain by superficial deposits of Devensian Glaciofluvial Sheet Deposits and Devensian Diamicton till, laid down in ice age conditions.
- 4.1.2 Geotechnical investigations of the site conducted in April 2016 recorded the top of the bedrock between heights of 21.35m OD and 26.20m OD. Sealed by clay (Glacial Till) between 1.80m to 7.80 thick, the top of the clay was encountered between 21.1m OD and 32.60m OD (Cundall 2016). The overlying natural sand and gravel (Glaciofluvial deposits) was 1.35m to 5.10m thick, the top of which was recorded between 30.10m OD to 34.20m OD; this was sealed by made ground.
- 4.1.3 During archaeological works on the site, the natural sand and gravel was seen as islands surviving between later truncation. Recorded as loose mid-yellowish brown sand to sandy gravel, it varied little across the site and was seen in all excavated test pits and trenches. At its highest point, in the south-eastern part of the site, the sand was recorded at 34.09m OD. From here, it sloped down to the north, towards the River Medlock, and was recorded between 33.46m OD and 33.52m OD (Jorgensen 2016).

4.2 Topography

- 4.2.1 The site gradually slopes down, from approximately 34.70m OD in the south to 33.70m OD in the north. This slope is barely perceptible, the ground having been modified to provide a relatively level surface. The modern surface topography is, however, probably the product of some post-medieval ground modification. Despite these later ground works, the natural slope of the area is still apparent, reflecting the valley of the River Medlock.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Prehistoric

5.1.1 There is very little evidence for prehistoric activity in the vicinity of the study site. However, though prehistoric evidence in Manchester is generally sporadic and typically derives from finds spots rather than *in situ* archaeological contexts, it is believed that settlements and activity tended to be concentrated on sands and gravels, preferably by water courses and wetlands. Settlements have been identified along the valley of the River Irwell whilst small assemblages of prehistoric artefacts have been recovered from the Castlefield area, at the junction of the Rivers Irwell and Medlock, to the north-west of the site. It is possible that any evidence of prehistoric activity on the site was lost due to later industrial development.

5.2 Roman

5.2.1 The Roman fort at Castlefield lies c. 750m to the north-west of the study site, and was set up at the end of the 1st century AD. Outside of the fort walls was a *vicus*, an associated civilian settlement, which is known from both excavation and the discovery of chance finds. The distribution of finds suggests that the settlement extended to the south-east as far as the present Deansgate Station, around 500m to the north-west of the site. A coin hoard numbering over 1600 examples was found during the excavations of the Knott Mill railway station in the 19th century, while several other Roman coins have been recovered from the channel of the River Medlock. Other findspots in the study area have yielded an assortment of pottery, glass, and tiles, amongst other items.

5.2.2 The Manchester to Buxton road is believed to pass through the area, and deposits interpreted to be part of a road were observed to the south of Central Station. However, although evidence of a road was expected during excavations at Concert Hall, following a record of it from 1760, it was not observed and was thus thought to have been destroyed.

5.3 Early Medieval

5.3.1 The surrounding areas came under the control of a number of different kingdoms during the post-Roman period, and a settlement may have been established at Manchester in the early 7th century AD, probably in the area around the cathedral.

5.3.2 Only a Saxon ring has been recorded in the study area, and it is likely that the site was removed from areas of settlement and land usage in this period.

5.4 Medieval

5.4.1 The study area historically straddled two townships, Manchester to the north and Chorlton on Medlock to the south, with the boundary between the two formed by the River Medlock. The medieval centre of Manchester was concentrated in the area around the cathedral, some 1.5km to the north of the site. A lack of finds from the medieval period and later cartographic evidence suggests that the site lay within open land, and was possibly used for agricultural purposes.

5.5 Post-Medieval

- 5.5.1 By the early post-medieval period, Manchester had developed into a moderate sized town, and as the textile industries began to flourish in south Lancashire in the early 17th century, it emerged as a centre for textile finishing processes, expanding its role as a market centre for textiles produced in the region. By the end of the 18th century, Manchester had developed a thriving overseas trade and had begun to displace London as the centre for the export of cotton cloth.
- 5.5.2 During the early post-medieval period, the site likely remained within open and potentially agricultural land. Cartographic evidence shows the area of the site as largely open space until the early 19th century. The earliest known maps to display the study site in any detail are Green's plan of Manchester, surveyed in 1787-94, and Laurent's map, produced in 1793 (not illustrated). Both maps show the study site as largely open space divided by hedgerows; an early roadway crosses east-west to the immediate north of the site, as does a waterway.
- 5.5.3 Johnson's Map from 1818-1819 (not illustrated) displays the site as largely open land, though an unidentifiable lone structure is shown within the site. A new road, possibly the precursor of modern Hulme Street, is seen at the very northern edge of the site, joining the roads that transect the site. To the east of the site, Cambridge Street had been laid out and had become a focus of new development. Two steam-powered mills had been constructed in 1795 by Samuel Marsland on the eastern side of Cambridge Street between Hulme Street and Chester Street. Chorlton New Mill was also begun in 1813.
- 5.5.4 The site had been almost completely covered by smallholdings and small orchard plots, by the time of Swire's Map in 1824 (not illustrated), with a few buildings (perhaps dwellings) along the line of the roads that crossed the site. The Gaythorn Gas Works, which had been established in the 1820s by the Provincial Portable Gas Company, a firm which supplied oil gas in copper vessels to customers who were not yet connected to the mains, are shown to the north of the site. Published accounts date the foundation of the Gaythorn works to 1825 but structures are shown on Swire's map of the previous year. The Cambridge Street Mill is also seen on Swire's 1824 map, although it reputedly dates to approximately 1830. The Gaythorn Vaults Public House, north of the site on the east side of Albion Street, had been built by 1824, and adjoined a row of back-to-back houses. These houses had been taken down by the early 20th century; however, the public house remained into the late 20th century, adjacent to the north-west corner of the expanded gas works.
- 5.5.5 Bancks' Map of 1831 (Figure 11) illustrates that by 1831 the allotments had been removed, the plots of land had been re-divided and a new road system was beginning to be established. The waterway to the north is still present, although it had not featured on Swire's earlier map. A row of terraced buildings is shown on the western side of the site, while other individual structures are shown on the eastern side.

- 5.5.6 By the 1844-49 Ordnance Survey Map (Figure 12), the layout, usage, and surroundings of the site had drastically changed, with streets of worker's housing having been developed. The site is seen to be bound by George Street to the north, Medlock Street to the west, Chester Street to the south, and Wilmott Street to the east. The new housing comprised both through-houses and back-to-backs, of two to three storeys in height. Cartographic evidence indicates that possible light wells and thus basements were present in a number of properties fronting more prominent roads, including Chester Street and Newcastle Street which bisect the site. This urban expansion included a pub, the Bedale Arms, on the corner of Chester Street and Bedale Street, along the south-western boundary of the site, while a school was established on the upper floor to a row of back-to-backs between Ebenezer Street and Jones Street. The watercourse to the north of the site is no longer present, having been culverted.
- 5.5.7 Back-to-back houses, along with terraced and blind-back housing, were a characteristic feature within the area during this period. These houses are comparable to those seen in the Ancoats area of Manchester, to the north-east of the site, having been typically poorly constructed so as to house the quickly growing worker population. The back-to-back layout was intended to make the maximum use of the available land, saving on material construction costs. However, this type of construction led to unsanitary conditions, with privies located on the streets, which due to often inadequate supply and thus overuse had a tendency to leak into the nearby cellars. The Borough Police Act of 1844 and the Sanitation Improvement Act of 1845 effectively banned back-to-backs, and whilst this led to the development of through-houses it did not effectively stop the use of back-to-back housing.
- 5.5.8 The domestic history of the workers' housing areas have become the subject of increasing archaeological focus, research, and interest within the past decade, with a number of archaeological investigations have been undertaken upon similar housing in the Ancoats region, though none have yet been undertaken within the vicinity of the site. Little Ireland, an area of deplorable conditions to the north-west of the site that was heavily criticised by Friedrich Engels in his survey of the working class in England in the mid-19th century, has been the subject of historical studies. However, archaeological investigations have only revealed features associated with the later industrial history, with no evidence of the earlier housing surviving thus far.
- 5.5.9 The growth of the textile industry in Manchester in the mid 19th century resulted in an expansion of development, including around the River Medlock and south towards Chorlton-upon-Medlock. Numerous local mills were established in this period including the Gaythorn Mill, Pictons Cotton Mill, Ewarts Cotton Mill, the Medlock Bridge Mill, Chorlton New Mill, and the cotton mills of the Little Ireland complex, as were other industrial works; these industrial developments were concentrated to the north of the site, towards the River Medlock.
- 5.5.10 The construction of the Manchester South Junction and Altrincham Railway in the late 1840s, opening in 1849, required the demolition of the southern area of the Gaythorn Dye Works, though inevitably contributed to the growth of the area. To the south of the site, the church of

St Philip's, plus rectory and school, was constructed in 1860, following the removal of two blocks of through-housing.

5.5.11 The Ordnance Survey Map of 1888-89 (revised 1894) (Figure 13) shows the site much the same as before, although Park Street – running between Newcastle Street and Wilmott Street – has been renamed Parker Street. However, a number of back-to-back properties had been removed in order to improve ventilation to those that remained. The school had been altered to occupy the majority of the land between Jones Street and Ebenezer Street, while a working man's club was constructed in the early 1880s on the corner of Newcastle Street and Chester Street. The land to the east of the site had been cleared of the back-to-backs which had occupied it, with only the foundry and structures fronting Lower Cambridge Street still remaining.

5.6 Modern (Late 19th-20th century)

5.6.1 In the late 19th century, the Gaythorn Gas Works underwent considerable expansion into areas which had previously been occupied by earlier industrial buildings. When the Partington works opened in 1929, the Gaythorn works ceased to be used for gas making and instead became used solely for gas distribution. The gasholders were progressively removed, with only two remaining by the late 1960s.

5.6.2 Few changes are visible to the site on the 1905 Ordnance Survey map (not illustrated), with the further expansion of the school and the associated removal of several back-to-back houses being the only alteration of note. To the east of the site, terraced housing had been constructed on a different layout to the previous housing which had occupied the site. By the 1915 Ordnance Survey Map (not illustrated), a central property on the east of Bedale Street had been removed, while further back-to-back properties between Galloway Street and Ebenezer Street had been removed.

5.6.3 The land bound by River Street, Wilmott Street, Hulme Street and Newcastle Street, to the immediate north of the site, was cleared of buildings in the early 20th century, and was redeveloped with a new building belonging to Mackintosh & Co, marking a westward expansion of the firm's works on Cambridge Street. This new building, known as the Wilmott Street Works, was in production by 1915. In 1923, Mackintosh & Co were taken over by the Dunlop Rubber Company Ltd.

5.6.4 In the early 1920s, the area bound by Welcome Street, Clarendon Street, Wilmott Street, and River Street was condemned. With the majority of houses deemed unfit for habitation, the buildings were to be subject to mass clearance. However, only a small area could afford to be demolished initially, due to the prohibitive cost of the clearance. The initial areas to be cleared first included the eastern half of the site – the land bound by Newcastle Street, Chester Street, Wilmott Street, and George Street – as well the area bound by Medlock Street, George Street, Newcastle Street, and River Street, and the area bound by Duke Street, George Street, Clegg Street, and River Street.

- 5.6.5 The 1932 Ordnance Survey Map (not illustrated) shows the result of this clearance. The housing and roads on the on the eastern side of the site, between Newcastle Street and Wilmott Street, was removed, with only Jones Street, Ebenezer Street, and the school and structure next to it remaining. The land to the north of the site, east of Newcastle Street, has been incorporated into the Dunlop Rubber Works, while the land to the west of Newcastle Street has been cleared of housing. The Goad Fire Insurance Plan of 1931 (Figure 14) illustrates that the land between Ebenezer Street and George Street was in use as a coal and scrap yard, while the western half of the land between Ebenezer Street and Chester Street is occupied by a printers and pattern card factory. The school building itself is labelled as a paper store and noted as having a basement. There is some discrepancy with the maps at this period, for the Goad Fire Insurance Plan of 1931 indicates that the western half of the site had been cleared of housing as well, and replaced with commercial/industrial buildings. Although the 1932 Ordnance Survey Map and the 1940-41 Bomb Damage Map (not illustrated) show the housing between Medlock Street, Chester Street, Newcastle Street, and George Street still present, aerial photographs from 1937 show that the housing had been removed; the commercial/industrial buildings which replaced the housing are visible on aerial images from 1939.
- 5.6.6 Much of the remaining housing in the wider area was removed by the mid-20th century, and the sites were partly redeveloped with other works and warehouse buildings. The remaining earlier buildings were mostly cleared away in the late 20th century, including the Gaythorn Mill, the Cambridge Street Mill, St Philip's church, school, and rectory, and the Gaythorn Gas Works.
- 5.6.7 Although the clearance plans for Hulme were interrupted by World War II, the demolition of housing resumed in the 1960s. By the time of the Ordnance Survey Map of 1965 (not illustrated) was produced, no evidence of housing was left on site, with the only remaining housing in the area located to the east, between Wilmott Street, Chester Street, Cambridge Street, and Hulme Street. The school building is noted as being an unspecified 'works', as it is the land to the south, while a coal yard is located to the north. An institute occupies the site the former club to the south of the site, while a small warehouse lies to the east of Bedale Street. The land between Mount Street and Newcastle Street is primarily occupied by Medlock House, which the Goad Fire Insurance Plan of 1931 labels as a 'Piece Goods Warehouse'. George Street has not yet been renamed Hulme Street, and the majority of the land around the site has been cleared, with few buildings replaced.

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The methodology, aims and objectives to be employed during the archaeological excavation were set out in a Written Scheme of Investigation compiled in October 2016 by Pre-Construct Archaeology and approved by GMAAS (Mayo 2016). The work comprised a strip, map and record (SMR) investigation of the eastern side of the site (Areas 2 & 3), with a targeted area of SMR in the north of the western side of the overall site (Area 1) (Figure 2). In broad terms, the excavation aimed to establish an archaeological record of this area prior to the re-development of the site.
- 6.2 The excavation targeted the locations of structures depicted on 19th- and 20th-century maps and found during the watching brief and evaluation stage. The excavation was designed to examine archaeological remains associated with residential dwellings depicted on 19th- and 20th-century maps, as well as remains associated with WWII air raid shelters.
- 6.3 A 360° mechanical excavator was used to carefully remove the modern ground surface and overburden to reveal buried cellars, walls and archaeological deposits. These structures were then cleaned by hand and recorded using digital and drawn methods. Targeted excavation by hand through soft strata was undertaken to retrieve finds and understand the deposition sequences.
- 6.4 Archaeological features were recorded using the single context recording system, with individual descriptions of all archaeological features and strata excavated and exposed entered onto pro-forma recording sheets. All detailed plans and sections of archaeological deposits and features were recorded on polyester based drawing film, the plans and sections being drawn at a scale of 1:10 and 1:20 as appropriate. Features that were evidently modern were not given context numbers, and were recorded as modern intrusions in plan.
- 6.5 GPS survey equipment was used to establish the outline of all the structures revealed on the site, and to determine the OD height of all principal strata.
- 6.6 Photographs in digital format were taken of the archaeological features and deposits where relevant.
- 6.7 The site was allocated the unique site code FSS16, which was retained from the initial watching brief phases of the investigation.

7 ARCHAEOLOGICAL SEQUENCE

7.1 This section describes in detail the structures, features and associated deposits found on the site. Ordnance Datum levels, physical dimensions and soil descriptions are referenced when relevant for an understanding of the archaeological sequence. A full index of all the contexts recorded is given in Appendix 1. The specialist assessments are reference within the archaeological sequence, and the full specialist assessments are included as Appendices 2-8.

7.2 Phase 1: Natural

7.2.1 Natural deposits identified during the archaeological excavation consisted of a loose mid-yellowish brown sand to sandy gravel. During archaeological works, the sand was recorded at 34.09m OD at its highest point, in the south-eastern part of the site. From here, it sloped down to the north, towards the River Medlock, and was recorded between 33.46m OD and 33.52m OD. The natural deposits were seen as islands surviving between later truncations.

7.3 Phase 2: 19th Century

Mount Street and Associated Terraces

7.3.1 The earliest apparent structures on the site consisted of a terraced row of five single room houses fronting Mount Street, originally thought to be depicted on Banck's map of 1831 (Figures 3 & 8-12; Plates 1, 6-7). However, the overlain plan showing the Phase 2 features on the 1831 map shows these structures immediately to the west of a row of buildings, rather than overlapping. The structural remains in Excavation Area 1 consisted of four north-west to south-east orientated cellars built in similar fashion using the same materials, and part of one ground floor room. The lack of straight joints between the bricks would indicate that they were built concurrently as a single development.

7.3.2 Walls [177], [258], [529], and [260] enclosed the four cellars, whilst walls [189], [238] formed part of the fifth terraced house. Although all the walls were built with local red brick, the walls to the east were two bricks in width, while the rest of the main walls were a single brick thick. The handmade, unfrogged bricks typically measured, 225mm x 110mm x 65mm and were bonded with a light-mid yellow-brown lime mortar. Overall the terrace of five measured 17.84m in length, with the four basements extending c. 14.5m. The cellars were built to a width of c. 3.6m, with each plot having a frontage averaging c. 3.55m, and an internal area averaging between 10.94m² to 12.82m². Although all the walls appear to be original, the mortar indicates later repair work carried out in the late 19th century (see Appendix 5).

7.3.3 The basemented terrace formed by [177], [258], [259], and [260] was divided into four separate dwellings (Nos. 6-12 Mount Street) by means of three single brick wide party walls [178], [179], and [257]. Wall [258] was an interior wall forming the southern boundary of No. 12 Mount Street, with wall [178] dividing it from No. 10 Mount Street, whilst wall [257] separated Nos. 8 and 10 Mount Street, and wall [179] separated Nos. 6 and 8 Mount Street. These walls were both made

from red unfrosted brick, measuring 227mm x 120mm x 68mm and laid as stretchers, and were c. 3.6m in length by 0.11m wide. Being only one brick wide, the walls would have been cheap to construct, and would have provided only minimal privacy and sound attenuation between adjacent dwellings. For the majority of their lengths, each of these party walls was only visible as a 'scar' in the red brick flooring [239]. This floor spanned the entirety of the basement, within which occasional York stone drain slabs were set, and sloped down slightly to the north, from 32.22m OD to 32.12m OD. The bricks measured 220mm x 110mm x 70mm and were laid in an irregular offset running pattern. At some point in time, the walls dividing the individual cellars were knocked down to form one large room.

No. 12 Mount Street

- 7.3.4 No. 12 Mount Street was the southernmost building, and contained a fireplace, floor, and stairs. It had an internal area of 12.16m², although only 9.75m² of usable space, due to the incorporation of the stairs within the room. The fireplace, which measured 0.90m in length and 0.30m in width, was built as a part of wall [258] to the south-east. Access to the room would have originally been provided by the brick and York stone stairs [180] located along the north-west wall. This was later modified with the addition of wall [181] to enclose the staircase, and the eventual construction of wall [182] to block access between the stairs and the cellar. A doorway, measuring c. 0.70 wide, at the junction of walls [178] and [177] in the north-east of the room formed the entrance to what was likely a coal store. The coal store was filled with rubble and not excavated.

No. 10 Mount Street

- 7.3.5 No. 10 Mount Street was almost exactly the same in its layout and construction as No. 12 Mount Street, containing a fireplace, floor, and stairs. While its overall internal area was larger than No. 12 Mount Street, at 12.82m², the usable internal space was virtually identical, measuring 9.78m². The fireplace for No. 10 was seen as part of the scar of [178] in the brick floor [239], while the stairs [183] into the basement were later enclosed by wall [184] and finally blocked off by wall [185] (Plate 3). In the north-east corner of the cellar was a doorway, measuring c. 0.70 wide, providing access to a possible coal store. As with No. 12 Mount Street, the coal store was filled with rubble and not excavated.

No. 8 Mount Street

- 7.3.6 Following the layout of Nos. 10 and 12 Mount Street, No. 8 Mount Street contained a fireplace, floor and stairs, with a similar usable internal area of 9.60m². The fireplace was seen as a part of the scar of [257] in brick floor [239] (Plate 2). Although the staircase would have followed the same sequence of construction as those within Nos. 10 and 12 Mount Street, the walls

enclosing the staircase had not survived to the same extent. As a result, York stone slab fragments forming stairs [186] extended from wall [259], with only 4 courses remaining of the supporting red brick wall. A single brick was the only surviving part of wall [187], which would have blocked access to the staircase, though the impression of wall [187] was still visible on wall [177]. A doorway providing access to a rubble filled coal store was located in wall [177] at its junction with [179].

No. 6 Mount Street

- 7.3.7 No. 6 Mount Street differed somewhat in its construction to Nos. 8-12 Mount Street. The staircase, [188], extended down to the north-east between the northern wall of [260] and wall [189] (Plate 4). Although slightly narrower than the other cellars, measuring c. 3m between its east and west walls, the change in staircase location provided No. 6 Mount Street with a larger open area, which measured 10.94m². Access from the stairs was provided by a doorway in the northern wall of [177]; this was later infilled with wall [190]. Composed of red unfrogged brick, it was bonded with a hard grey chalky mortar, and keyed in to wall [177]. The north-east corner of the cellar remained unexcavated, however, the coal store and doorway were observed in plan. Measuring 1m by 1.25m, with an internal area of 1.28m², the coal store was composed of two red brick walls – ‘L’ shaped wall [236] and slightly curved wall [237] (Plate 5). It is possible that wall [237] was originally straight, and that the curve is a result of bowing through the years.
- 7.3.8 Fragments of the ground level brick flooring, [240], extended south from wall [237], with further fragments of the ground level brick flooring, [241], extending east from wall [177]; this brickwork was recorded at 33.37m OD. It is possible that two fragments of brickwork formed part the base of the steps entering the houses. Only one course of red unfrogged bricks remained; these were bonded with a light-mid yellow-brown lime mortar.

No. 4 Mount Street

- 7.3.9 Unlike Nos. 6-12 Mount Street, the majority of No. 4 Mount Street was not intact. Formed of walls [189] and [238], it likely also had a cellar; however this was unexcavated. Later infill [191] between walls [177] and [189] suggests the possibility that Nos. 4 and 6 Mount Street shared a set of stairs, [188], to the cellars, with separate entrances at the base of the staircase (Plate 4). Although brick feature [194], which extended east from wall [238], was recorded as a fireplace, examination of historic maps shows that it is far more likely to have formed the base of steps into the house. Built into wall [189], and extending north, were the remains of a fireplace, aligning with the fireplaces from the cellars. In addition to the fireplace, a single skin brick wall of stretchers extended north from [189], aligning with [177] and likely forming the outer wall of No. 4 Mount Street.

Mount Street

- 7.3.10 A York stone capped brick drain, [37], was recorded in TT206 running along what would have been the east side of Mount Street. At least 4.46m in length, its structure was similar to other box drains recorded on site, such as [28]. The drain had a York stone slab base, with three courses of red unfrosted brick stretchers - each brick typically measuring 220mm x 110mm x 70mm - forming the sides, and a York stone slab capping. The remains of Mount Street itself, [80], were recorded in Trench 1 of the evaluation, as a compact gravel surface.

Mouncey's Court and Associated buildings

- 7.3.11 First appearing on the 1844-49 Ordnance Survey map, Mouncey's Court was accessed from George Street to the north, providing access to the back to back houses on Mount Street and Newcastle Street (Figures 3, 8 & 12-13). These houses do not appear to have had basements, as the wall fronting the west of Mouncey's Court, [33] in TT205, was built on top of the natural sand. Made of red brick, typically measuring 220mm x 110mm x 70mm, it was abutted by paving slabs, [34], which were in turn abutted by (granite?) setts, [35]. The York stone paving slabs, which measured 700mm x 300mm x 40mm, and the setts, which measured 400mm x 300mm x 200mm, formed the road surface of Mouncey's Court. To the east, a partly truncated square structure, [31], and associated terrace wall, [32], were uncovered. Both had 2 courses remaining, with the red bricks typically 220mm x 110mm x 70mm, and were bonded with a light-mid yellow brown sandy lime mortar, which included chalk and charcoal flecks. The squared masonry, [31], was possibly an ash pit or coal chute.

Buildings associated with Newcastle Street

- 7.3.12 A heavily truncated York stone capped brick box drain, [28], similar to drain [37], was identified running north-east between Mount Street and Newcastle Street in TT204 (Figures 3 & 7). Built directly on top of the natural sand, it extended c. 1.70m. Two red brick walls, [29] and [30], were observed in the section of the watching brief trench; however, they were recorded at a distance for safety, and consequently, brick and feature dimensions could not be ascertained. A similar red brick wall, [38] was recorded in TT207. These walls are likely to form part of the terrace fronting Newcastle Street, which does not appear to have had basements, as walls [29], [30], and [38] were constructed directly upon the natural sand.

Cream Court

- 7.3.13 An ash pit, [58], and associated wall, [62], were recorded during the evaluation in Trench 207, and would have formed part of a house accessible from Cream Court, which extended west from Wilmott Street (Figures 3 & 7; Plate 8). These features were both constructed of red unfrosted brick, typically measuring 220mm x 110mm x 70mm. Laid as stretchers, they were

bonded by a light yellow brown sandy lime mortar. The fill of ash pit [58] contained mid 19th-century glass, clay tobacco pipe, animal bone, and pottery, including a naval mess trap basin dated to the mid-late 19th century (See Appendices 2-4, 7-8).

Jones Street Building

7.3.14 The only remaining wall associated with the buildings fronting Jones Street was a cellar wall [2] running east-west below a modern brick and concrete wall in TT202 (Figures 3 & 4). While possibly associated with buildings seen in Banck's 1831 map (Figure 11), it is more likely that this wall is associated with the dwellings visible on the 1844-49 Ordnance Survey map (Figure 12). As it was only exposed in a deep narrow slot, measurements of the wall could not be ascertained.

Parker Street Buildings

7.3.15 In Area 3 a curving brick coal chute, [68], extended down from what would have been Parker Street into the cellar of one of the houses (Figures 3 & 4; Plate 9). Brick walls [253], [254] and [255] formed the exposed walls of the cellar, which measured just over 5m in length. The remains of a York stone paved floor [256] was observed. An adjoining cellar was recorded to the east, and was formed of walls [250], [251], [252], and [253]. This property would have had a frontage measuring 3.6m and also extended back c. 5m, creating an internal area of around 19m². The walls forming the terraced back-to-backs on Park Street were all built of red unfrogged brick laid as stretchers. The bricks measured 220mm x 110mm x 65mm and were bonded with a mid-brown sandy lime mortar.

Galloway Street buildings

Brick walls [69] and [73] in Evaluation Trench 4A appeared to be the demolished remnants of a covered passageway leading between Ebenezer Street and Galloway Street shown on the 1844-49 Ordnance Survey Map (Figures 3, 4 & 12-13). To the south-west of walls [69] and [72] was a brick tank, composed of walls [74], [76], and [77] (Plate 10). This tank, which was possibly some form of privy for the terrace of back-to-backs, had a York stone lining, [75]. The backfill of the tank, [79], which contained 19th-century pottery, corresponds with the demolition date of the passageway – while shown on the 1844-49 Ordnance Survey Map, it is not present on any subsequent maps, suggesting that it fell out of use by the late 19th century (see Appendix 2).

7.3.16 The heavily truncated remains of buildings fronting the south of Galloway Street in Excavation Area 2 were formed by red unfrogged bricks, typically measuring 220mm x 110mm x 75mm, bonded with a yellow-brown sandy lime mortar. Wall [175], which had been incorporated into an air raid shelter entrance, was likely the same as east-west running wall [150] (Plate 16). Both walls had been truncated by the air raid shelters later constructed on the site. Wall [151]

ran perpendicular to walls [175] and [150], extending 4.9m in length to form what would have been an internal dividing wall between houses. Extending west from [151] were walls [233], [228], and [229], while an 'L' shaped brick feature to the west was composed of walls [232] and [231] (Plate 11). Between one and two courses of these walls were exposed, so any bonding pattern could not be ascertained. It is likely that box drain [17] was located below Galloway Street, with associated circular brick backdrop [12] providing street level access for the drain run.

George Street Dwellings

7.3.17 George Street, now known as Hulme Street, ran along the northern boundary of the site. The terraced housing fronting George Street was truncated by air raid shelters, so that no dwelling was uncovered completely intact, and their internal area cannot be determined. However, the remaining walls gave an indication as to the layout of the dwellings, which due to their truncation, can be divided into three areas: west, central, and east (Figures 3, 4 & 12-13).

Western Area

7.3.18 In Evaluation Trench 2 wall [43] formed the back wall of a house fronting George Street (now Hulme Street), joining with wall [44]/[197] to form the boundary of the property. Both walls were built of red unfrosted brick, typically measuring 230mm x 110mm x 65mm, and bonded with a yellow-brown lime mortar. A similar wall [198] ran parallel to wall [44], possibly originally forming an ash pit or coal chute, comparable to those seen across site. A brick box drain, [41], ran parallel to wall [43], continuing into the western section of the site (Plate 12). North-east to south-west running brick wall [42] was located at the northern limit of excavation, and had the same construction as walls [43] and [44]. Immediately to the south was pit [27], measuring 1.0m x 0.70m. The fill, [26], was very similar to [57], the fill of ash pit [58] in the south-east of the site – loose dark brown sandy ash, which contained 19th-century pottery (see Appendix 2; Plates 34-37).

Central Area

7.3.19 The highest concentration of 19th-century remains was located between Air Raid Shelters 1 ([102]) and 2 ([244]) and the walls of the entrance to shelter [102]. Running north-east to south-west were red brick walls [216] and [217], which had the same alignment as walls [42] and [165]. It is likely that these walls were used for internal partitions to create a front and back room within each house. Although located in separate dwellings, the terrace would have been constructed all at once, with the layout of the houses following a set pattern (Plate 20 shows the Chester Street Cottages to the east of the site being constructed in a similar manner). A narrow corridor formed of walls [214] and [215] extended south from the internal dividing walls,

creating what would have been the passageway for a staircase. At the junction of walls [214] and [215] with wall [249] was a York stone slab, [222], which likely formed the base of a cupboard under the stairs.

- 7.3.20 Running parallel to walls [216] and [217], with a distance of 5m between them, was red brick wall [129]. This wall enclosed the rear yard of the terraces, bordering the yard and the back passageway. A coal store, [126], extended south from the corner of [222] and [217] to wall [129]. The chute for the coal store had a sloping brick base, leading to a flat York stone paved base (Plate 13). The backfill of this coal store, [127], which included pottery, clay tobacco pipe, glass, and bone, dated from the mid 19th to early 20th century (See Appendices 2-4, 6-7).
- 7.3.21 Several drains, including curving brick drain [122], ran through the yard area to the rear of the houses fronting George Street. Drain [122], which continued below wall [129], and external yard surface [133] were truncated by later ceramic pipes. These pipes are likely associated with the drain pipes located to the south of coal store [126], within investigation slot [226]. A small paved area bound by brick walls to the north, south, and east [223], was partly truncated by the ceramic drain pipes extending from slot [227] (Plate 14). This brick feature, also recorded as walls [140] and [155], is thought to be an ash pit accessible from the through-passage between the George Street and Galloway Street houses.
- 7.3.22 To the south of wall [129] were two small wall fragments, [111] and [113], which ran from north to south. These red brick walls were heavily truncated by the construction of a later air raid shelter entrance to the south.

Eastern Area

- 7.3.23 Contained between Air Raid Shelters 2 ([244]) and 3 ([219]), with air raid shelter entrance wall [135] to the south, were the remains of 19th-century walls and associated features belonging to the terraced buildings fronting George Street. Two parallel north-east to south-west running red brick walls [165] and [162] formed the outline of the building, extending to a maximum length of 6.27m. Extending perpendicular from the northern side of wall [162] were parallel walls [163] and [199], which together with a squared York stone slab, formed the outline of a staircase and under-stair cupboard, nearly identical to that formed by [214], [215] and [222] to the west. A curving brick drain capped with York stone slabs [164] was located in the room formed by walls [165], [163], and [162].
- 7.3.24 Extending south from wall [162] was a coal store, formed by walls [200], [201], and [212]. Composed of at least 7 courses of red brick, it had a sloping brick base, similar to coal store [226]. However, a later alteration had been made, with wall [235] extending between walls [200] and [212] to make the store narrower. The backfill of the coal store [213], which contained pottery, clay tobacco pipe, glass, and possible iron straps, dated from the late 19th-early 20th century (see Appendices 2-4 and 6).

7.3.25 A small fragment of red brick wall [202] also extended south from wall [162], joining with wall [212]. Likely a yard boundary wall between houses, it measured 1.63m in length and was built in a header bond.

Jones Street, Ebenezer Street and drain

7.3.26 Jones Street, although not exposed during the excavation, was recorded spanning the width of the trench during the watching brief in TT202 (Figures 3, 4 & 12-13). Measuring 3.18m x 4.74m, it was composed of squared setts. Ebenezer Street, originally seen in the watching brief in TT202, ran 38.5m east to west across the entirety of the excavation trench. Like Jones Street, it was composed of squared setts, and had a width of 3.38m (Plate 15). Running parallel to Ebenezer Street was brick box drain [204]. Measuring 1.39m long and 0.35m wide, the bricks forming the base of the drain were angled to form a 'V'.

7.4 Phase 3: 20th Century

School

7.4.1 The 1844-49 Ordnance Survey map shows a school located in the 3rd storey of the buildings between Jones Street and Ebenezer Street (Figure 12). By 1888, the dwellings had disappeared and the school occupied the majority of the land between Jones Street and Ebenezer Street (Figure 13). Having survived the clearance of the houses in the 1930s, the school building was later turned into a paper store, and is noted on the 1931 Goad Fire Insurance Plan (Figure 14) as having a basement and 1-2 stories. Walls [4], [6], [20], and [92] formed the basement, and consisted of a mix of single and double skinned brick walls coated with white damp proofing paint on the internal side (Figures 3 & 5). Although it is possible that some of the walls represent the remains of Ebenezer School, alterations would have been made in the 1930s when the building was converted or possibly rebuilt. When the building was demolished in the latter part of the 20th century, the demolition rubble [5] was used to backfill the basement.

Air Raid Shelters and Entrances

7.4.2 The majority of the buildings occupying the land between Chester Street, Newcastle Street, Wilmott Street, and George Street were demolished in the early 1930s, having been condemned for clearance. The northern area, between Ebenezer Street and George Street, was turned into a coal yard for the Dunlop Rubber company to the north of the site. During the Second World War, air raid shelters with brick entrances were built in the yard, with the entrances visible in aerial photographs from 1939. During post-excavation, the air raid shelters were numbered 1-8, while the entrances were identified by a lettered series, starting from the top left corner (Figures 3, 5 & 14).

Entrance A

- 7.4.3 Located in the north-west corner of the site, air raid shelter Entrance A was composed of red unfrogged brick walls [103], [45]/[104]/[107], [105], and [106] and continued into the western limit of excavation. Bonded with a black concrete mortar, the bricks measured 230mm x 110mm x 65mm and were laid as headers for the interior face and stretchers for the exterior face. The curved entrances associated with the shelters would have provided blast protection, preventing shrapnel from reaching the interior of the air raid shelter.

Entrance B and Shelter 1

- 7.4.4 Shelter 1 [102] was oriented roughly north-south, within construction cut [100]. Formed of corrugated metal sheeting curved over metal ribs to form a barrel vault, it was unexcavated due to the presence of asbestos. Access to Shelter 1 was provided by Entrance B, which was near identical in its construction to Entrance A. Formed of walls [109]/[110]/[112]/[119]/[120] and [108]/[114]/[115]/[116], it curved to the west so that it was perpendicular to Shelter 1. A brick surface, [117], was located within the entrance.

Entrance C and Shelters 2 & 3

- 7.4.5 Rather than forming a 'J' shape, as Entrances A and B, Entrance C formed a 'T', with the main entrance splitting to the east and west (Plate 18). This allowed Entrance C to be used for both Shelters 2, [244], and 3, [219]. The air raid shelters on site all followed the same format - corrugated metal sheets forming north-south aligned barrel vaults. Entrance C was composed of back wall [135], western curving front wall [138], and eastern curving front wall [139]. A fragmented brick surface, [137], was recorded within the entrance, while a more substantial brick surface, [218] covered nearly half of Shelter 3. Unlike the rest of the masonry associated with Entrance C and Shelters 2 and 3, [218] was composed of yellow unfrogged bricks placed on edge (see Appendix 5). The bricks typically measured 240mm x 12mm x 8mm, however, there was no definite bonding pattern or material observed.

Entrance D and Shelter 4

- 7.4.6 Entrance D was a mirror image to Entrances A and B; the brickwork formed a 'J', but curved to the east instead of the west (Plate 17). Composed of walls [146] and [148], fragments of a brick surface, [147] were recorded within Entrance D. This entrance provided access to Shelter 4, [144], which was not excavated.

Entrance E

- 7.4.7 Entrance E was almost identical to Entrance D. The entrance curved to the east, and its associated air raid shelter would have been located beyond the limit of excavation. Bonded with a black concrete mortar, the bricks measured 230mm x 110mm x 65mm and were laid as headers for the interior face and stretchers for the exterior face. As with Entrance D, a brick surface, [142], was located within the walls of the entrance to the air raid shelter formed by walls [141] and [143].

Entrance F and Shelter 5

- 7.4.8 The second row of air raid shelters started with Shelter 5 and Entrance F. The majority of Shelter 5, [195]/[24]/[205], was removed during the watching brief, however, Entrance F was uncovered during the excavation. It comprised of walls [157]/[160] and [156]/[159]/[161], which curved to the west. The intact remains of Shelter 5 were partially covered by brick surface [158]. Entrance F was of an identical construction to Entrances A and B, with the layout flipped so that the primary access into the shelter was from the north instead of the south. A large pit, [23], seen in section during the watching brief was likely related to the construction of either Shelter 5 or Entrance F.

Entrance G and Shelters 6 & 7

- 7.4.9 Access to Shelters 6 and 7 was provided by Entrance G, which was a mirror image of Entrance C. A 'T' shaped passage, it was composed of walls [10]/[168]/[169], [170]/[171], and rear wall [172]/[173]/[174]/[176], with earlier wall [175] incorporated into the rear wall (Plate 16). Shelter 6, [9], to the west of the entrance, was removed during the watching brief, while to the east, a substantial area of Shelter 7, [196], was overlain by brick surface [166] (Plate 11).

Entrance H and Shelter 8

- 7.4.10 Only one wall, [149], remained of Entrance H, curving east towards Shelter 8, [152]. A slot was excavated between two ribs of Shelter 8 to expose its construction (Plate 19). Identical to the other air raid shelters on site, it was composed of corrugated metal sheeting curved over metal ribs to form a barrel vault.

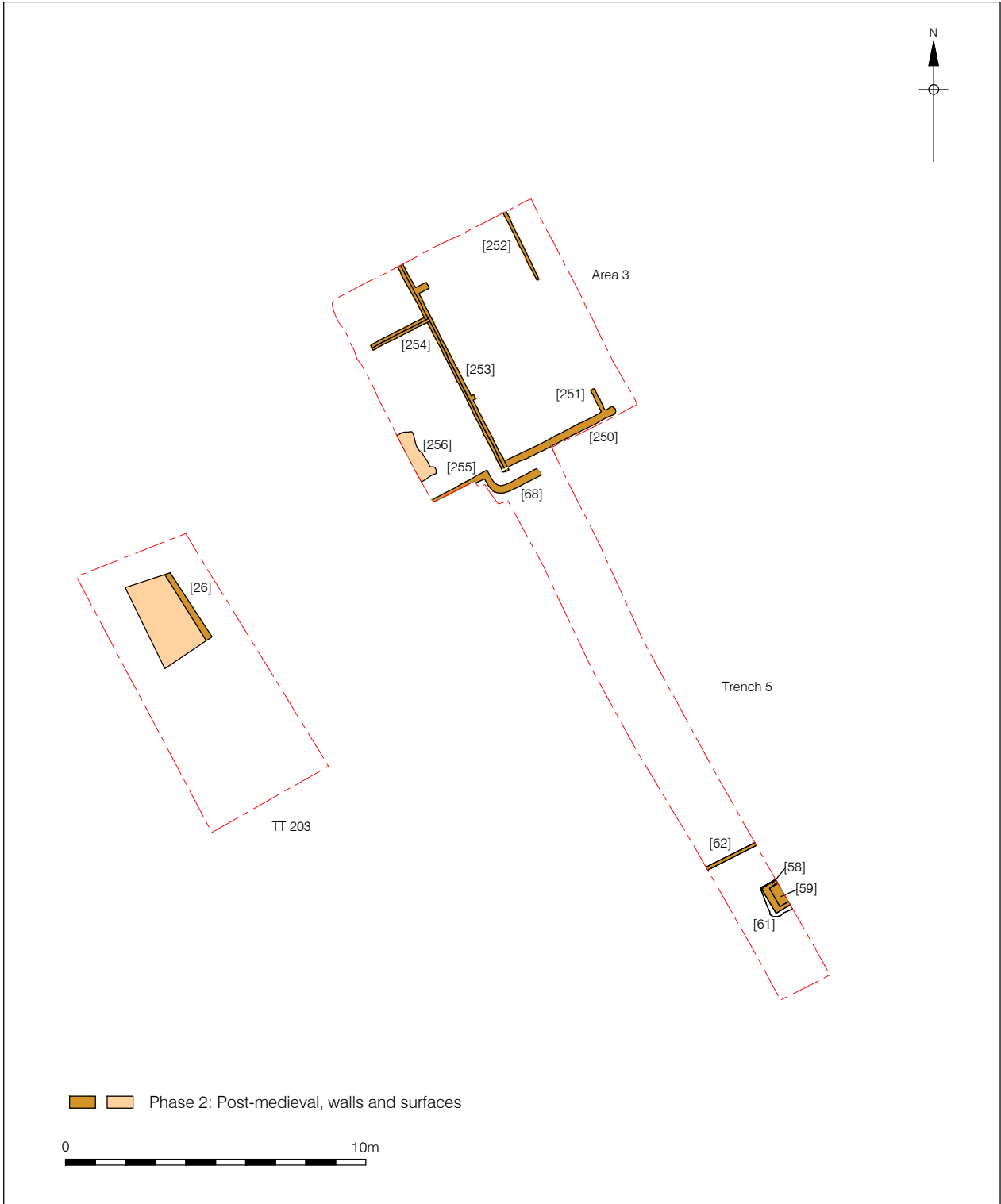




Figure 4
Detail of north-east area, Phase 2
1:200 at A3

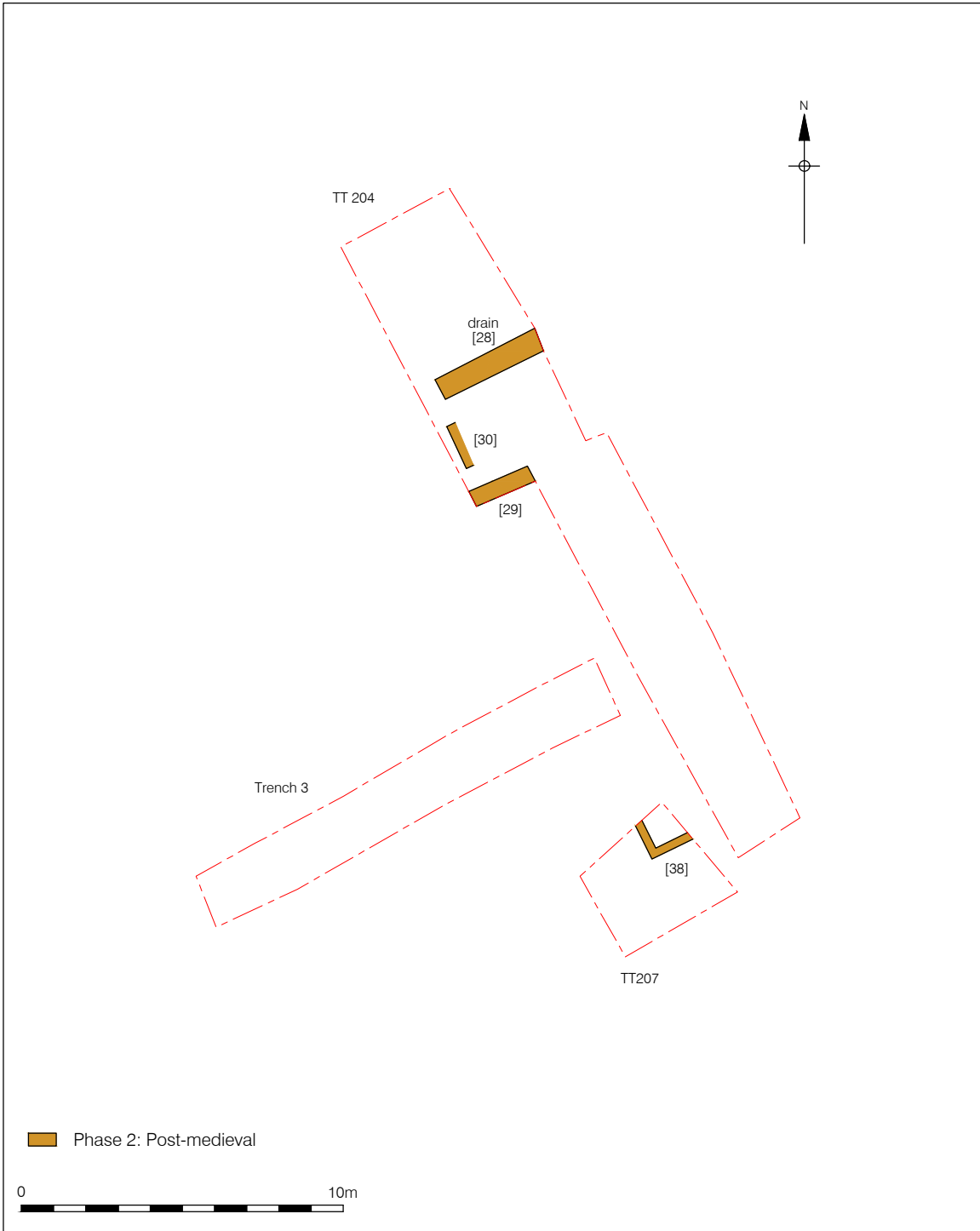


Figure 5
 Detail of north-east area, Phase 3
 1:200 at A3



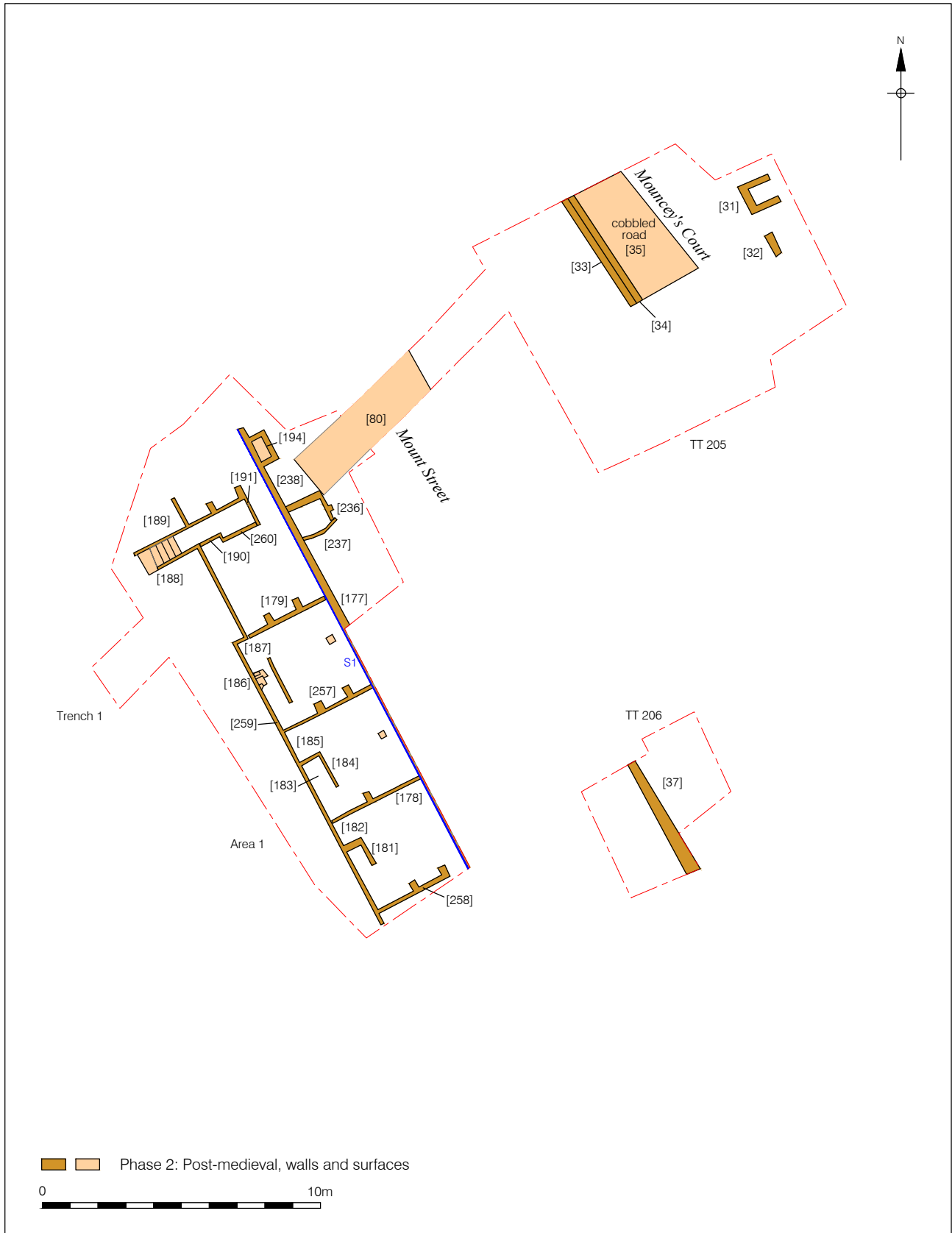
©Pre-Construct Archaeology Ltd 2017
 23/05/17 RM; 10/06/17 JB

Figure 6
 Detail of south-east area, Phase 2
 1:200 at A4



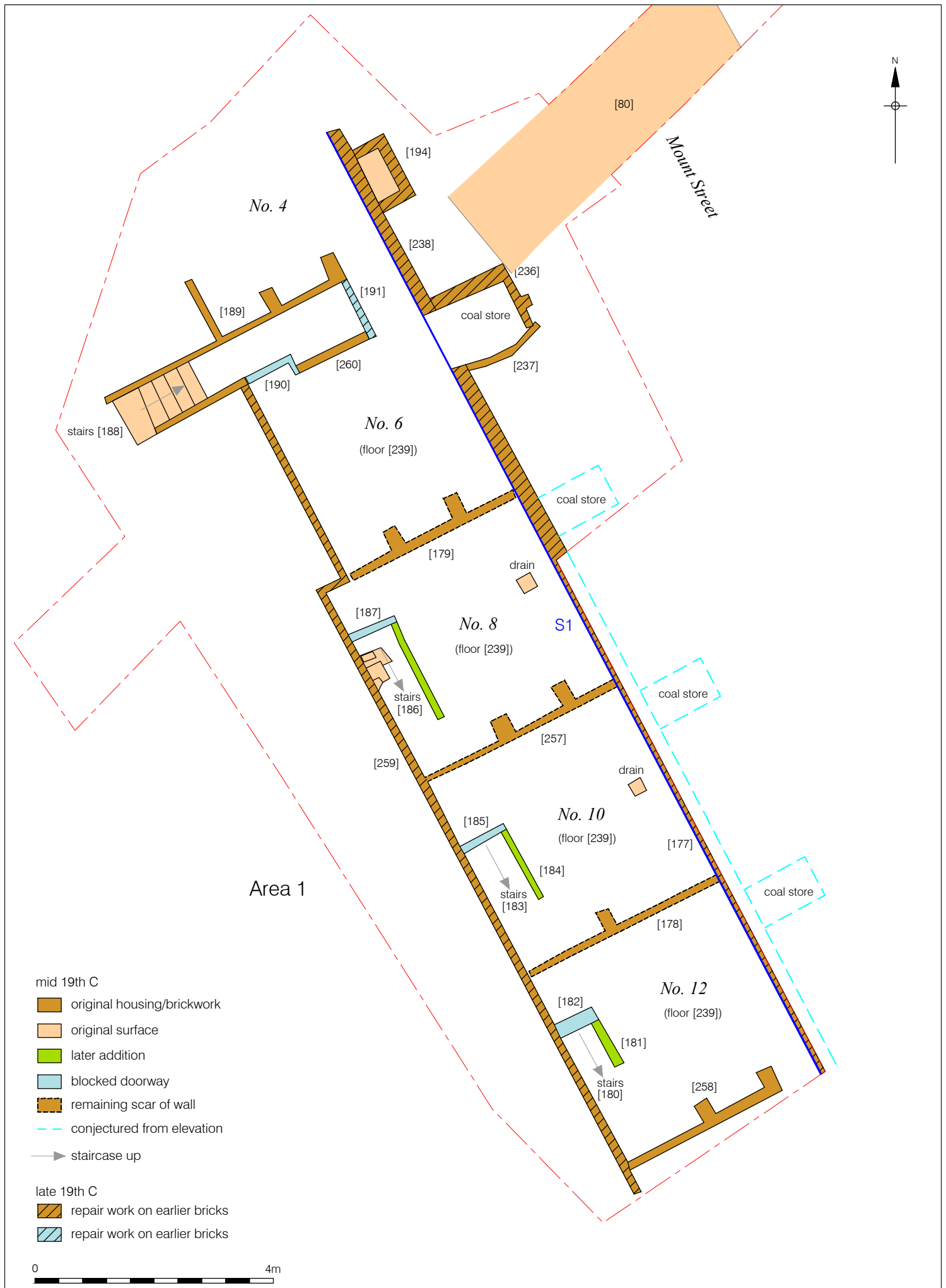
© Pre-Construct Archaeology Ltd 2017
 23/05/17 RM; 10/06/17 JB

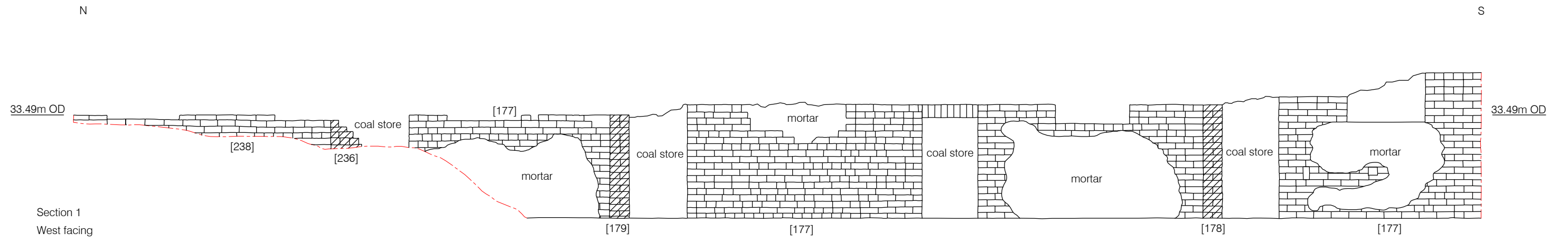
Figure 7
 Detail of south-west area, Phase 2
 1:200 at A4



© Pre-Construct Archaeology Ltd 2017
 23/05/17 RM; 10/06/17 JB

Figure 8
 Detail of west area, Phase 2
 1:200 at A4





Section 1
West facing
Area 1

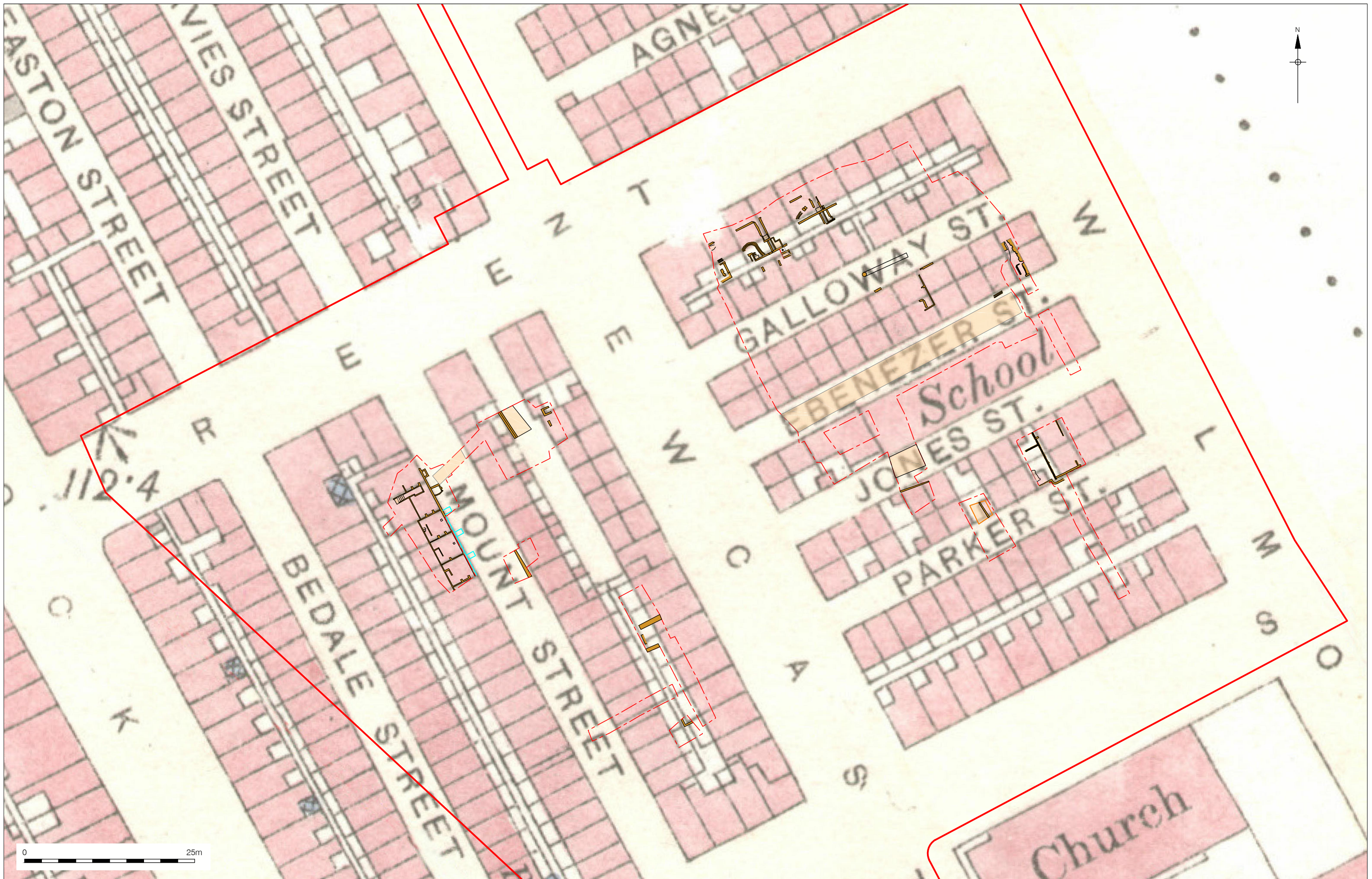
0 2.5m

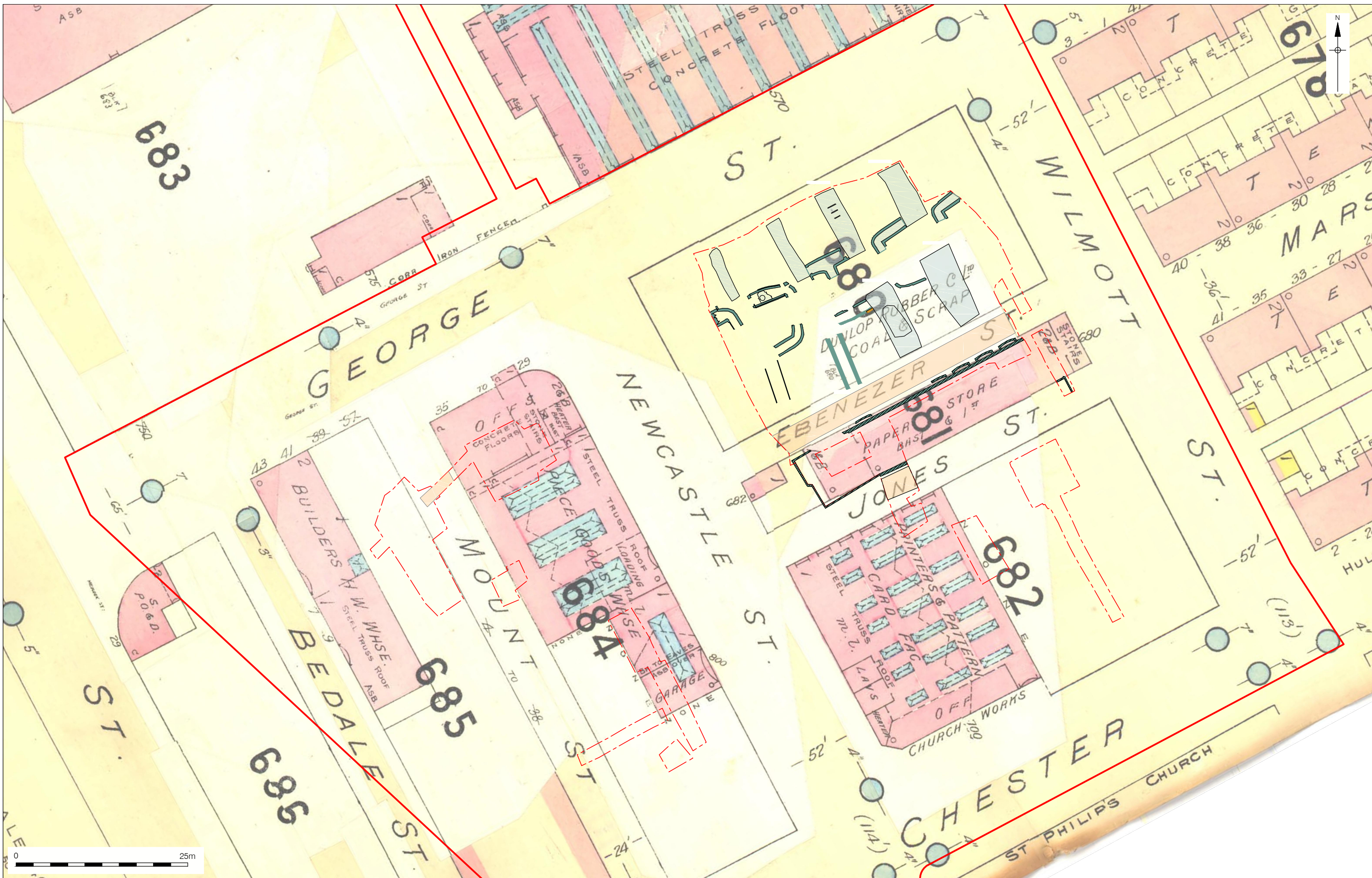
© Pre-Construct Archaeology Ltd 2017
23/05/17 MSS; 10/06/17 JB

Figure 10
Elevation of wall [177]
Area 1, West facing
1:50 at A3









Plates

Plate 1: Mount Street Terraces looking south-west



Plate 2: Internal wall [257] in floor [239] looking north-east



Plate 3: [178], [184], [185] and [257] looking south-west



Plate 4: Brick and stone stairs [188] and wall alteration [191] looking south-west



Plate 5: Brick coal store [236] and [237] looking south-east



Plate 6: Mount Street Terraces looking south



Plate 7: Mount Street Terraces looking north



Plate 8: Ash pit [58] looking north-east



Plate 9: Coal chute [68]



Plate 10: Brick tank [74], [75], [76] and [77] looking north-east



Plate 11: Brick air raid shelter [168], [151] looking south-west



Plate 12: Drain [41] and walls [43], [44] looking south-west



Plate 13: Coal store [126] looking south-west



Plate 14: Structure [223] looking south-west



Plate 15: Ebenezer Street [7]/[203] looking west



Plate 16: [175] and air raid shelter entrance G looking south-west



Plate 17: Air raid shelter entrance D looking north-east



Plate 18: Air raid shelter entrance C looking north-east



Plate 19: Air raid shelter 8 looking south-east



Plate 20: Construction of Chester Street Cottages, 1898. Study site visible in the background (Greater Manchester Lives GB127m25656).



Plate 21: Back passage between Newcastle Street and Fawcett Street, looking north-west to St Philips Church, 1901 (Greater Manchester Lives GB127m26524).



Plate 22: Corner of Newcastle and Irving Street looking east to George Street, 1913 (Greater Manchester Lives GB127m26069).



Plate 23: Aerial view of Hulme, 1922. Housing on the site seen in the left of the photo (Greater Manchester Lives GB127m67722).

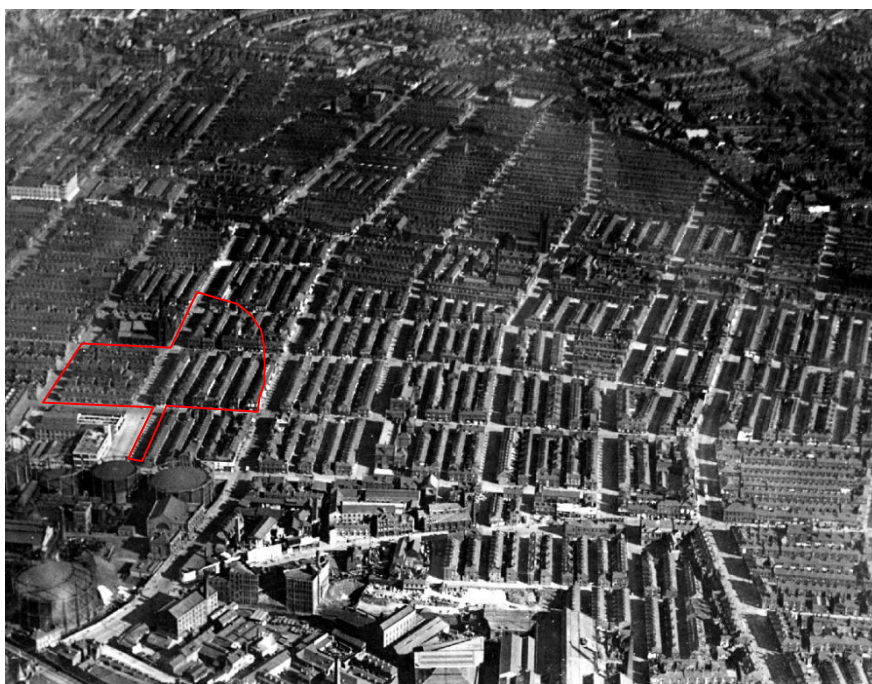


Plate 24: Looking west to Parker Street, 1922 (Greater Manchester Lives GB127m26541).



Plate 25: Parker Street, 1922 (Greater Manchester Lives GB127m26542).



Plate 26: Back passage behind George Street, 1923 (Greater Manchester Lives GB127m77903).



Plate 27: Galloway Street, 1924 (Greater Manchester Lives GB127m78194).



Plate 28: Aerial view of Hulme, 1927. Site visible in bottom left corner (Greater Manchester Lives GB127m67666).

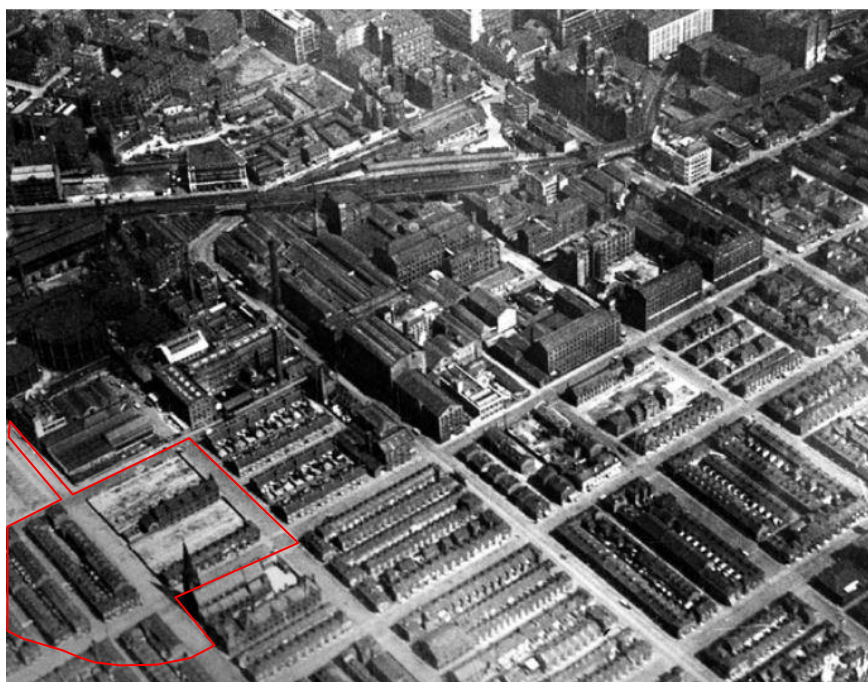


Plate 29: West Gorton air raid shelter interior, 1940 (Greater Manchester Lives GB127m09607).



Plate 30: West Gorton air raid shelter entrances, 1940 (Greater Manchester Lives GB127m09608).



8 PHASED DISCUSSION

8.1 Phase 1: Natural

8.1.1 Natural deposits across the site were recorded as loose mid-yellowish brown sand to sandy gravel. Earlier geotechnical investigations of the site showed that the natural sand and gravel was 1.35m to 5.10m thick, the top of which was recorded between 30.10m OD to 34.20m OD; however, these levels included the height of the natural sand in areas which had been truncated by later features. During archaeological works, the natural sand and gravel was seen as islands surviving between later truncations. At its highest point, in the south-eastern part of the site, the sand was recorded at 34.09m OD. From here, it sloped down to the north, towards the River Medlock, and was recorded between 33.46m OD and 33.52m OD. The sand and gravel varied little across the site, and was seen in all test pits and trenches.

8.2 Phase 2: 19th century

8.2.1 The earliest buildings on site were the terraced row of five dwellings which fronted Mount Street, Nos. 4-12 Mount Street. They were constructed in the 1830s, were originally thought to be shown on Bancks & Co's Plan of Manchester and Salford of 1831 (Figure 11); however, when overlain onto the map, the cellars are placed immediately to the west of the row of buildings shown. While the size of the cellars appears to match the 1831 map, they do not appear to conform to subsequent maps, such as the 1844-49 and 1932 Ordnance Survey Maps. The cellars measured an average of 3.6m in length by 3.55m in width, with an area of nearly 13m². However, the dwellings shown on subsequent maps are approximately double the length of the cellars, suggesting that the cellars were only present below the front half of the terrace. All the cellars originally had separate stair access, which suggested that they were more than just storage areas and were inhabited. Two of the four cellars had evidence of drainage in the brick floors, consisting of York stone capped brick drains. At some point in their history, the internal partition walls were broken through to form one large cellar, while access from the staircases was blocked off. Each of the cellars had a doorway on the eastern side leading to a coal store. Although internal modifications were present, no external changes are apparent until the demolition of the terrace in the mid 19th century.

8.2.2 According to the map evidence, it would appear that the other 19th-century structures on site were constructed between 1831 and 1844. The 1844-49 Ordnance Survey Map depicts the rapid construction of houses in the area, with land that had been fields in the 1831 map now occupied by rows of terraced housing (Figure 12).

8.2.3 Fragments of masonry belonging to Mouncey's Court and the buildings fronting Newcastle Street were uncovered in the western half of the study site. Mouncey's Court was seen to have a cobbled surface, with York stone paving acting as a footpath between the alleyway and housing. Two York stone capped brick box drains would have provided drainage for some of the housing between Mount Street and Newcastle Street.

- 8.2.4 Only fragments of the buildings along Cream Court, Parker Street (labelled Park Street on the 1844-49 Ordnance Survey Map and Parker Street on subsequent maps), and Jones Street were uncovered on site. Although no structure was uncovered intact, the remains suggest that the blind back terraces between Jones Street and Parker Street had cellars, while those between Cream Court and Chester Street did not. The 1844-49 Ordnance Survey Map shows the houses along Park Street varying slightly in size, with some wider than others (Figure 12). A brick coal chute extended from Parker Street down into a room that measured 5m in length, matching the size of the terrace shown on the map. Other walls indicated that the neighbouring dwelling had a frontage measuring 3.6m, extending back 5m (Plate 25). These back-to-back houses, with no evidence of a privy, were partially demolished by 1894 (Plate 24). This change was likely a result of the privately sponsored Manchester Waterworks and Improvement Act of 1867, which required landlords to renovate, recondition, or change the use of existing back-to-backs. Previously, the Manchester Police Act of 1844 only had clauses allowing the local authorities to insist on the provision of privies for new houses and to ban the building of back-to-back, without actually requiring the existing back-to-backs to be demolished, while a local by-law passed in 1853 banned cellar dwellings, though this did not appear to be heavily enforced.
- 8.2.5 A covered passageway leading between Ebenezer Street and Galloway Street is shown on the 1844-49 Ordnance Survey Map (Figure 12), though is not depicted on later maps. Evidence for this passageway consisted of two heavily truncated brick walls. These walls are all that remained of the passageway after its demolition, while the presence of multiple setts scattered within the associated demolition layer indicate that the passageway was once paved with setts. A York stone lined brick tank lay within the southern half of this passage way; it is possible that this was related to some form of privy for the back-to-back houses. There was little remaining of the back-to-back dwellings, with the wall fronting Galloway Street heavily truncated (Plate 27). Later alterations to the dwellings are apparent in the layout of the remaining brickwork, which is shown in the 1922 Ordnance Survey Map (not illustrated).
- 8.2.6 On the 1844-49 Ordnance Survey Map terraces are shown fronting Galloway Street and George Street, with narrow passageways off of Newcastle Street and Galloway Street leading behind the houses (Figure 12). Unlike the majority of the terraces on the site, they were not back-to-back houses, having a rear yard and the aforementioned passage (Plate 26). Located between the later air raid shelters, the rear half of some of the houses fronting George Street were recorded. These houses would have been two-up-two-down, with coal storage and possible a privy in the rear yard (Plate 22). A staircase extended along the eastern wall of each dwelling, with a York stone paved cupboard under the stairs. Although the stairs themselves did not remain, for two dwellings, the paving slab and brick walls forming the staircase were intact, as was the internal partition wall dividing the front and rear of the house. Coal stores, with paved sloping bases were located in the rear yards of these dwellings, in addition to the boundary wall for the back passage; a photograph looking down the back passage of between Newcastle street Fawcett Street north-west towards St Philips Church in 1901 shows how

narrow this through passage between houses would have been (Plate 21). The houses would have had c. 4m of frontage, extending back c. 6m; the internal partition walls recorded show that the rear rooms of the houses would have measured c. 3m, dividing the house equally between front and back, while the rear yard would have extended c. 1.7m. There was evidence of drainage in each of the houses, in the form of brick lined drains capped with York stone slabs.

8.3 Phase 3: Early – mid 20th century

8.3.1 In the early 1920s, the worst houses in Hulme were condemned, and it was determined that they would be demolished. Due to the limited funds available, only 199 of the 1065 occupied houses originally scheduled were included in the first phase of demolition; of these 199 houses however, 170 were deemed totally unfit for habitation, while the others had either serious or minor defects. This initial area of clearance included the houses bound by Chester Street, Wilmott Street, George Street, and Newcastle Street. Although these buildings are still shown on the 1922 Ordnance Survey Map (not illustrated), only the school building is shown on the 1932 Ordnance Survey Map (not illustrated), with Galloway Street and Parker Street having disappeared completely. This change is also evident in aerial photographs of Hulme taken in 1922 and 1927 (Plates 23 & 28)

8.3.2 Ebenezer School is marked as being on the 3rd storey of the back-to-backs along Jones Street and Ebenezer Street on the 1844-49 Ordnance Survey Map (Figure 12), and by the 1888-89 Ordnance Survey Map, had replaced just over half of the terrace (Figure 13). Although the building was condemned, it was left standing during the slum clearance of the 1920s which opened up the land to the north and south of the school. It is seen on the Goad Fire Insurance Plan of 1931 as a paper store, and by 1965 was a compliance works (Figure 14). Despite its origins in the 19th century, it is likely that the structure was heavily altered, if not rebuilt, when its use was converted. This is evidenced from the use of reinforced concrete and the presence of later bricks within the walls.

8.3.3 The area north of Ebenezer Street is labelled on the Goad Fire Insurance Plan of 1931 as 'Dunlop Rubber Co. Ltd. Coal and Scrap', indicating that after the slum clearance, it was used as a coal yard for the neighbouring Dunlop Factory (Figure 14). Earlier records indicate that the land was originally redeveloped by Mackintosh & Co as a westward expansion of their works on Cambridge Street, and that the new building was in production by 1915; however, in 1923, Mackintosh & Co were taken over by the Dunlop Rubber Company Ltd.

8.3.4 There is some discrepancy with the historic maps of the site. The Goad Fire Insurance Plan of 1931 (Figure 14) shows that all the houses previously occupying the site had been removed and the site cleared, with some commercial buildings erected. However, the 1932 Ordnance Survey Map and 1940-1941 Bomb Damage Map (not illustrated) show the terraces to the west of Newcastle Street still intact; the area to the west of Newcastle Street is not shown as cleared of houses until the 1956 Ordnance Survey Map (not illustrated). Aerial photographs, however, provide a more accurate picture. The houses to the west of Newcastle Street were demolished between 1927 and 1937, with some small buildings visible along Bedale Street and Medlock

Street in an aerial photograph from 1937. A building, labelled as 'Piece Goods Warehouse' on the 1931 Goad Fire Insurance Plan, was constructed between Mount Street and Newcastle Street by 1939. This is noted as a two storey building with a basement and is visible in an aerial photograph showing the result of slum clearance around George Street; it is later noted as Medlock House on the 1965 Ordnance Survey Map (not illustrated).

8.4 **Phase 3: WWII**

8.4.1 During the Second World War, a series of air raid shelters were located in the area bound by George Street, Newcastle Street, Ebenezer Street, and Wilmott Street. Two rows, of at least six north-south oriented shelters each, were constructed, although only eight shelters were uncovered. The air raid shelters took the form of Anderson Shelters – corrugated metal sheets forming barrel vaults covered by redeposited sand and other material to protect the occupants from the shrapnel of nearby blasts. The interior of these shelters would have been similar to those seen at West Gorton (Plate 29).

8.4.2 The air raid shelters had brick built entrances, which were all accessed from what would have once been Galloway Street. With the exception of the central two entrances, all the air raid shelter entrances curved so that the direction changed by 90 degrees. These entrances are visible on aerial images of Hulme from 1939. While the majority of the entrances led to individual shelters, the central two entrances each provided access to two shelters, forming a 'T' shape. The curving entrances would have prevented blast debris from entering the shelters and injuring the occupants or damaging the shelter itself. Air raid shelter entrances at West Gorton also demonstrate this curving entrance (Plate 30).

9 RESEARCH QUESTIONS

9.1 Original Research Objectives

9.1.1 The research objectives were contained within the WSI for the archaeological mitigation (Mayo 2016) and are as follows:

9.1.2 **To further determine the natural topography of the site within the SMR area.**

The natural sand was recorded at a maximum height of 34.09m OD in the south-eastern part of the site during archaeological investigations. From here, it sloped down to the north, towards the River Medlock, and was recorded between 33.46m OD and 33.52m OD. Geotechnical work on site recorded the top of the bedrock between heights of 21.35m OD and 26.20m OD (Cundall 2016). It was sealed by a layer of natural clay, which in turn was overlain by the natural sand and sandy gravels. The geotechnical investigations documented that the sand was 1.35m to 5.10m thick, the top of which was between 30.10m OD to 34.20m OD.

9.1.3 **To confirm an absence of prehistoric, Roman, early medieval and medieval activity, as suggested by the evaluation.**

No evidence of prehistoric, Roman, early medieval or medieval activity was recorded on site.

9.1.4 **Desk-based research suggests an absence of development at the site until the 18th century, can this be confirmed?**

No artefacts or deposits dating to a period prior to the 19th century were revealed on the site.

9.1.5 **To further expose, investigate and record the post-medieval structures and features at the site.**

A row of 19th-century cellared terraced houses was exposed in the north-western area of the site, while fragmentary remains of mid 19th-century back-to-back and through-terraces were uncovered on the eastern half of the site. These remains indicated that both cellared and non-cellared housing was present on the site, though many of the remains had been truncated by later 20th-century features.

9.1.6 **To better understand in terms of form, function and date, the features recorded during the evaluation, for example:**

The cellar found in the north-west area of the site is believed to perhaps be contemporary with the structures shown to be present on the map by Bancks dated 1831 (see Jorgensen 2016, fig. 4). Can the SMR work confirm this? What cultural material is contained within the cellars?

The layout of the cellars exposed in the north-west of the site are possibly contemporary with the structures shown on the 1831 Bancks Map (Figure 11), though the overlain map shows the cellars immediately to the west of these structures. The cellars, while matching in frontage size, were approximately half the length of the terraced housing illustrated on the 1844-49 Ordnance

Survey Map (Figure 12). Various internal alterations had occurred during the 19th century, resulting in the individual cellars being knocked through to create one large room. Fragments of 19th-century pottery, glass, clay tobacco pipes and bone, were recovered from the cellars. Some of this cultural material was located below the staircases into the cellars, while backfill relating to the demolition of the cellars contained pottery, glass and animal bone. Finds recovered from the brick rubble backfill were primarily domestic wares, including teapot and wine bottle fragments.

9.1.7 Can the remains be better phased, or indeed correlated to historic maps?

There are a wide selection of detailed historic maps covering the area of the site dating from William Green's Map of 1794, with a series of Ordnance Survey maps dating from 1849 and a Goad fire insurance map from 1931. These have allowed the overall development of the site to be reconstructed. The majority of the remains found are almost certainly mid 19th century in date, and were associated with the rapid expansion in central Manchester during that period. Structures uncovered which could be identified on the 1844-49 Ordnance Survey Map (Figure 12) included terraced housing along: Mouncey's Court, Cream Court, Parker Street, Jones Street, Galloway Street, and George Street. The remains of Jones Street, Ebenezer Street, and Mouncey's Court were also uncovered.

9.1.8 To establish the nature, date and survival of activity relating to any archaeological periods at the site.

The archaeological investigations showed that there were isolated areas with good survival of 19th-century low quality houses across the site, along with the remains of two 19th-century roads. There was little archaeology recorded in the southern half of the site. Several 20th-century features, including basements and air raid shelters with brick entrances, truncated the earlier 19th-century remains; these features were well preserved across the site.

9.1.9 To establish the extent of all past post-depositional impacts on the archaeological resource.

The investigation demonstrated that there had been heavy truncation of the 19th-century remains by the WWII Air Raid Shelters in the north-east of the site. Across the rest of the site, the archaeology had survived to varying degrees. The preservation of remains was greater to the north, where the natural topography sloped down. While the slum clearance of the 1920s and 1960s removed all of the 19th-century buildings on site, the clearance was shown to only have been to ground level, with below-ground features such as cellars and drainage services still surviving.

9.2 Additional Research Questions and Aims

9.2.1 The excavations have raised a number of additional research questions. These are:

- *How does the 19th-century workers housing uncovered across site, in addition to the cultural material recovered, alter our understanding of the social history and archaeology of the Hulme*

Area? Is it possible to compare the conditions of workers in the back-to-back terraces on site to the 'Little Ireland' area less than 250m to the north-east.

- *How does the workers housing in Ancoats constructed during this period compare to the ones identified on site? Are there any other parallels for this low quality housing? How does the construction of this housing compare across Manchester in the 19th century, and is the use of internal space different?*
- *A naval mess trap was recovered from an ash pit between Cream Court and Chester Street. Is it possible to link this vessel with a resident of the area? How does this affect our understanding of the inhabitants of these houses?*
- *Is it possible to find any more information about the school between Jones Street and Ebenezer Street?*
- *Although the OS maps of the area show that the site was dominated by housing during the 19th and early 20th centuries, photographs from the early 20th century indicate that businesses were established in some of the premises, i.e. at the corner of Parker Street and Wilmott Street. Is it possible to trace any of these businesses through the census records and directories?*
- *A more detailed chronology of the site will be created at the publication stage of the site. What information about the changes to the site over time regarding domestic life and living conditions can be gleaned from this chronology?*

10 CONTENTS OF THE ARCHIVE

10.1 Paper Records

- Contexts 221 sheets
- Plans 3 sheets
- Sections 1 section 7 sheets

10.2 Finds

- Pottery 4 boxes
- Glass 1 box
- Clay tobacco pipe >1 box
- Animal bone >1 box
- Metal and small finds 9 objects
- CBM/Stone 4 crate & 16 bags

10.3 Photographic Record

- Digital 411 images

11 IMPORTANCE OF THE RESULTS, FURTHER WORK AND PUBLICATION OUTLINE

11.1 Importance of the Results

11.1.1 The archaeological investigations have provided a history of development on the site from the early 19th century through to the 20th century. The site would appear to primarily contained buildings of residential use, which were replaced by commercial buildings during the 20th century. While the archaeological and survey history of workers' housing in the Ancoats area of Manchester has been the subject of much work in the past, with the exception of 'Little Ireland', the Hulme area has had little investigative work conducted thus far. Consequently, the archaeological investigations undertaken on the site provide crucial information as to the development and social history of the area.

11.2 Further Work

11.2.1 Additional documentary research will be undertaken and will consist of a study of historic street directories and the census returns from 1841 to 1911 to determine who was living in the buildings on site and what occupations they were employed in. Further research into the social history and living conditions of the site will also be undertaken, using historic newspaper and photographs; this information will be consolidated with the census and directory information to form a detailed picture of the development and social history of the site.

Pottery

11.2.2 The pottery has some significance at a local level, and a number of items require illustrating or photographing. The pottery is likely to relate to the residents of the 19th-century terraced streets located on the site and demonstrates the material culture of the people living there, while the stoneware bottles are a good indication of what they were drinking. Of particular interest is the naval mess trap basin found in context [57], Plate 34, which indicates that one of the residents was in service with the Royal Navy and almost certainly in a low ranking position. It may be possible through documentary research to link the naval trap vessel with an actual individual resident on the study area.

11.2.3 A publication on the pottery assemblage is recommended, concentrating on groups that can be related to specific households. It is recommended that at least ten items are photographed or illustrated to complement the publication text. Time should be made available to reconstruct some of the more fragmentary groups of pottery in order for them to be photographed. Time should also be made available to research who the possible owner of the naval basin was and compile a short biography on the individual.

Clay tobacco pipe

11.2.4 There are no recommendations for further work on the assemblage.

Glass

11.2.5 The glass has some significance at a local level, and is important for understanding the material culture and activities of the residents of the terraced houses living on the streets within the study area. There are vessels of interest, particularly those with Manchester area businesses embossed upon them.

11.2.6 It is recommended that a publication report is produced on the glass assemblage and that group photos of the bottles embossed with Manchester and Salford businesses are photographed to supplement the text. Time should be set aside to research the names of the companies embossed on the bottles, in order to understand the nature of the businesses and their histories.

Building materials

11.2.7 The value of this assemblage though lies in the ability of the brick (and especially mortar) to date the sequence into an early Victorian build, and much later 20th century and WWII modifications. This centralised period of building using locally available brick, mortar and stone in this part of Manchester (and indeed Salford) is in contrast to 19th-century Glasgow where a large numbers of different brick makers were in competition with each other (judging from the large number of different brick stamps). The comparable brick fabrics and sizes found at other nearby sites, as well as the widespread use of York stone may need to be looked into at publication stage.

Metal and small finds

11.2.8 A range of objects provide some information on personal life and domestic surroundings in the worker's housing of the 19th and early 20th centuries, a period where this element of the finds have often been neglected in archaeological literature. Here the small assemblage includes some elements of dress, in the form of two buttons, and household-related objects as seen in the teaspoon, the slate pencil and a fragmented copper-alloy implement of unknown function. These finds should be included in any further publication of the site. For this purpose, it is recommended that the copper-alloy implement is x-rayed to enable further identification. To aid identification, the stamps on the electroplated spoon would benefit from cleaning by a conservator, and the two iron objects from context [213] could be x-rayed.

Animal bone

11.2.9 There are no recommendations for further work.

11.3 Publication Outline

11.3.1 It is proposed that the publication will consist of an article, published in either a local journal or the Industrial Archaeology Review. It will consist of an introduction, an outline of the history of the site, the results of the archaeological investigation, and a conclusion which answers the research aims and discusses the importance of the results. The publication will focus on the development of the site, with an emphasis placed on understanding the site within the wider archaeological landscape and social history of the area; it will be illustrated with historic maps and photographs, site photographs and a selection of finds photographs.

12 ACKNOWLEDGEMENTS

- 12.1 Pre-Construct Archaeology Limited wishes to thank Ralph Pedersen of Arcadis for commissioning the work on behalf of Southside Regeneration Ltd, along with Alistair Sinclair also of Arcadis for their assistance at the project initialisation and during the site works. Thanks are also given to Rory O'Donoghue of Carillion for arranging and providing site accommodation and welfare facilities.
- 12.2 PCA also thanks Norman Redhead of GMAAS for his advice and for monitoring the work.
- 12.3 The author would like to thank Chris Mayo for project managing the investigation, Jon Butler for managing the post-excavation and editing the present report, Mick Steel, Mark Roughley, Ray Murphy and Josephine Brown for the illustrations, Chris Jarrett for the pottery, clay tobacco pipe and glass reports, Kevin Hayward for the building materials report, Märit Gaimster for the metal and small finds report and Kevin Rielly for the animal bone report. Thanks are also expressed to the site supervisor Paw Jorgensen and to the field team consisting of Danni Parker, Lucy Robinson, Gary Reid, Hannah Finn, Tomas Shanley, and Stuart Stokes.

13 BIBLIOGRAPHY

Written Sources

- Brennand, M. (ed.), 2006. *An Archaeological Framework for North West England: Volume 1 Resource Assessment*. ALGAO/CBA North West.
- Brennand, M. (ed.), 2007. *An Archaeological Framework for North West England: Volume 2 Research Agenda and Strategy*. ALGAO/CBA North West.
- Butler, J. and Turner, A., 2017. *74-88 Great Ancoats Street, Manchester M4 5AG: Assessment of an Archaeological Excavation*. Pre-Construct Archaeology unpublished report.
- Engels, F., 1845. *The Condition of the Working Class in England* (2009 reprint). Oxford University Press.
- Cundall, 2016. *Plot 8 First Street, Manchester: Geotechnical and Geoenvironmental Assessment*. Cundall unpublished report.
- Gregory, L., 2007. "Under Slate Grey Victorian Sky": *Housing the Workers of Ancoats. An Archaeological Study into the Housing and Social Development of the World's First Industrial Suburb*. University of Manchester, Unpublished Masters Dissertation.
- Hunter, J., 2002. *Block B, Little Ireland, Manchester*. CgMs
- Jorgensen, P., 2016. *First Street Plot 11 (8) Manchester M15 4Fn: A Summary of an Archaeological Evaluation*. Pre-Construct Archaeology unpublished report.
- Mayo, C., 2016. *First Street Plot 11 (8) Manchester M15 4FN: Written Scheme of Investigation for Archaeological Mitigation*. Pre-Construct Archaeology unpublished report.
- Margary, I. D., 1967. *Roman Roads in Britain*. London: Phoenix House Limited.
- Nevell, M., Hradil, I., and Little, S. 2000. *Little Ireland, Manchester: An Archaeological Survey of Part of the Chorlton New Mills Textile Complex*. University of Manchester Archaeological Unit.
- Nevell, M. and McNeil, R., 2000. *A Guide to the Industrial Archaeology of Greater Manchester*. Association for Industrial Archaeology.
- Nevell, M., and Hradil, I. 2001. *Little Ireland, Chorlton-on-Medlock, Manchester*. University of Manchester Archaeological Unit.
- Nevell, M., 2008. *Manchester. The Hidden History*. Stroud: The History Press.
- Nevell, M., 2011. Living in the Industrial City: Housing Quality, Land Ownership and the Archaeological Evidence from Industrial Manchester, 1740-1850. *International Journal for Historical Archaeology* 15 (4), 594-606.
- Nevell, M., 2014. Legislation and Reality: The Archaeological Evidence for Sanitation and Housing Quality in Urban Workers' Housing in the Ancoats Area of Manchester between 1800 and 1950. *Industrial Archaeological Review* 36 (1), 48-74.

PCA, 2016. 'Archaeology' within *First Street South, Plot 8: Environmental Statement*. Deloitte Real Estate 2016

Redhead, N., 2011. Archaeological Investigations of Workers' Housing in Manchester. *North West Labour History* 35, 53-57.

Street, R., 2014. *Land Adjacent to Chorlton New Mill, Cambridge Street, Manchester: Archaeological Desk-based Assessment*. Oxford Archaeology North unpublished report.

The Manchester Guardian, 1921. Evictions from Houses on Verge of Collage: Scenes in Hulme, *The Manchester Guardian*, 16 February 1921, p7.

The Manchester Guardian, 1923. The Worst of the Hulme Houses: A Partial Demolition in one of Manchester's Slum Areas, *The Manchester Guardian*, 10 January 1923, p9.

The Manchester Guardian, 1932. Slum Clearance in Hulme: A Tenement Plan, *The Manchester Guardian*, 4 May 1932, p11.

The Manchester Guardian, 1933. Hulme Slum Clearance: Corporation Scheme Confirmed by Ministry of Health – Some Properties Excluded, *The Manchester Guardian*, 4 October 1933, p13.

Tunncliffe, M., 2016. *Assessment of Archaeological Investigations at the Former BBC Site, Oxford Road, Manchester*. Pre-Construct Archaeology: unpublished report.

Wild, C., 2008. George Leigh Street, Ancoats, Manchester. Oxford Archaeology North unpublished Excavation Report.

Cartographic Sources

William Green's Map of Manchester and Salford, 1794

W. Johnson's Plan of the Parish of Manchester, 1818-19

J. Pigot's New Plan of Manchester and Salford, 1819

W. Swire's Map of Manchester and its Environs, 1824

J. Pigot's New Plan of Manchester and Salford, 1824

Banks & Co's. Plan of Manchester and Salford, 1831

J. Pigot's Plan of Manchester and Salford with Vicinities, 1836

Ordnance Survey Map, 1844-1849

Ordnance Survey Map, 1888-89 (revised 1894)

Ordnance Survey Map, 1905

Ordnance Survey Map, 1908

Ordnance Survey Map, 1915

Ordnance Survey Map, 1922

Goad Fire Insurance Map, 1931

Ordnance Survey Map, 1932

Manchester Bomb Damage Map, 1940

Ordnance Survey Map, 1956

Ordnance Survey Map, 1965

Online Sources

British Geological Survey (a): Geology of Britain viewer

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

British Geological Survey (b): Borehole Scans

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html?mode=boreholes>

Chartered Institute for Archaeologists (CIfA). *Standard and guidance for historic environment desk-based assessment*, 2014

http://www.archaeologists.net/sites/default/files/node-files/CIfAS&GDBA_2.pdf

English Heritage 2011: The Setting of Heritage Assets. English heritage Guidance

<http://www.english-heritage.org.uk/publications/setting-heritage-assets>

Greater Manchester Lives:

<http://www.gmlives.org.uk/index.html>

APPENDIX 1: CONTEXT INDEX

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
1	Fill	Backfill of 19th century brick cellar [2]	3.67	4.44				2
2	Masonry	19th century brick wall capped by concrete	4.44	0.23				2
3	Masonry	Jones Street - 19th century cobbled road	4.44	3.41				2
4	Masonry	20th century basement wall	13.47	0.42				3
5	Fill	Backfill of basement formed by [4], [6], and [20]	14.78	7.4				3
6	Masonry	20th century basement wall	14.78	0.63				3
7	Masonry	Ebenezer Street - 19th century cobbled road	38.29	1.58		33.79	33.51	2
8	Fill	Backfill covering air raid shelter [9]	11.26	3.81				3
9	Other	WWII air raid shelter	11.26	3.81				3
10	Masonry	Air raid shelter entrance	1.96	1.67		33.7		3
11	Layer	Demolition layer/levelling after demolition of 19th century housing	18.53	3.48				3
12	Masonry	Brick drain with York stone slab cover	0.6	0.6				2
13	Masonry	Possible 19th century wall						2
14	Masonry	Air raid shelter entrance wall						3
15	Masonry	Air raid shelter entrance wall						3
16	Masonry	Air raid shelter entrance wall						3
17	Masonry	York stone slabs thought to form a box drain						2
18	Masonry	19th century brick wall; seen in section						2
19	Natural	Natural sand with sandy gravel lenses						1
20	Masonry	Wall of basement formed with [4] and [6]	10.54	0.36				3
21	Fill	Top fill of large pit [23]						3
22	Fill	Basal fill of pit [23], composed of loose brick rubble						3
23	Cut	Large pit only seen in section						3
24	Other	WWII Air raid shelter	5.96	2.06				3
25	Masonry	Large concrete blocks atop of WWII air raid shelter [24]						3
26	Masonry	19th century brick cellar wall	2.6	0.2				2
27	Masonry	19th century brick and York stone box drain	3.49	0.3				2

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
28	Fill	Infill of box drain [27]	3.49	0.1				2
29	Masonry	19th century brick wall; only seen in section						2
30	Masonry	19th century brick wall only seen in section						2
31	Masonry	19th century brick wall forming square structure						2
32	Masonry	19th century brick wall						2
33	Masonry	19th century brick wall	4.5	0.22				2
34	Masonry	York stone slabs forming pavement between wall [33] and cobbles [35]	4.5	0.6				2
35	Masonry	Cobbled road, likely courtyard area between 19th century houses	4.5	1.47				2
36	Fill	Infill of box drain [37]	4.47	0.1				2
37	Masonry	19th century box drain	4.47	0.3				2
38	Masonry	19th century brick wall	1.41	1.15				2
39	Masonry	19th century brick wall	1.82	0.24		33.33		2
40	Masonry	Entrance to air raid shelter	1.57	0.4		33.38		3
41	Masonry	19th century box drain	0.76	0.35		33.47	33.41	2
42	Masonry	19th century brick wall	0.86	0.23		33.34	33.34	2
43	Masonry	19th century brick wall	0.9	0.26		33.49	33.46	2
44	Masonry	19th century brick wall	1.54	0.29		33.52	33.36	2
45	Masonry	Entrance to air raid shelter	3.37	0.34		33.74	33.65	3
46	Fill	Fill of pit [47]	1	0.7		33.45	33.45	2
47	Cut	Unexcavated pit	1	0.7		33.45	33.45	2
48	Layer	Demolition rubble	1.91	0.92		33.45	33.45	2
49	Layer	Demolition rubble	0.88	0.19		33.45	33.45	2
50	Fill	Backfill of cut [51] related to air raid shelter construction	2.01	0.8		33.54	33.54	3
51	Cut	Cut related to air raid shelter construction	2.01	0.8		33.54	33.54	3
52	Layer	Internal 19th century occupation layer	1.6	0.4		33.52	33.52	2
53	Layer	19th century yard surface	3.7	1.4		33.52	33.52	2
54	Fill	Backfill within entrance to air raid shelter [45]	3.02	1.07		33.55	33.46	3
55	Cut	Construction cut for drain [41]	0.76	0.35		33.43	33.42	2
56	Cut	Construction cut for wall [43]	0.9	0.26		33.43	33.42	2
57	Fill	Infill of ash pit [58] for 19th century houses	0.7	0.24	0.35	34.09	34.06	2
58	Masonry	19th century ash pit	0.93	0.44	0.35	34.09	33.68	2
59	Masonry	Base of 19th century ash pit	0.7	0.24		33.68	33.68	2

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
60	Fill	Backfill of construction cut [61] for 19th century ash pit	1.1	0.5		34.09	34.06	2
61	Cut	Construction cut for 19th century ash pit	1.1	0.5		34.09	34.06	2
62	Masonry	19th century brick wall	1.45	0.11	0.15	34.31	34.23	2
63	Fill	Backfill of construction cut [64] for 19th century brick wall	1.45	0.08		34.23	34.23	2
64	Cut	Construction cut [64] for 19th century brick wall	1.45	0.19		34.23	34.23	2
65	Layer	Coal and clinker layer above occupation layer [66]	1.5	1.5	0.06			3
66	Layer	Possible yard surface	3.3	1.5				2
67	Fill	Backfill of coal chute [68]	1.65	0.37				2
68	Masonry	19th century brick coal chute	1.65	0.37				2
69	Masonry	19th century brick wall	0.9	0.2		33.59		2
70	Cut	Construction cut for 19th century brick wall	1.6	0.25		33.57		2
71	Fill	Backfill of construction cut for 19th century brick wall	1.6	0.25		33.57		2
72	Masonry	19th century brick surface	0.4	0.34		33.61	33.57	2
73	Layer	Demolition layer	6	1.5		33.62	33.62	2
74	Masonry	19th century brick tank wall	1.4	0.12		33.64	33.59	2
75	Masonry	York stone lining to 19th century brick tank formed of [74], [76], and [77]	1.8	0.85		33.62	33.52	2
76	Masonry	19th century brick tank wall	1.3	0.12		33.62	33.52	2
77	Masonry	19th century brick tank wall	0.66	0.23		33.62	33.62	2
78	Fill	Backfill of cut [90]	1.6	1.5		33.62	33.62	3
79	Fill	Infill of tank formed by [74], [75], [76], and [77]	1.6	1.5		33.62	33.59	2
80	Layer	Void						
81	Layer	Void						
82	Cut	Void						
83	Masonry	Void						
84	Cut	Void						
85	Layer	Void						
86	Layer	Void						
87	Masonry	Void						
88	Cut	Void						
89	Natural	Void						
90	Cut	Possibly related to the construction of the gas main	1.6	1.5		33.62	33.62	3
91	Masonry	Void						

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
92	Masonry	Void						
100	Cut	Construction cut for air raid shelter [102].	10.26	2.78		33.41		3
101	Fill	Demolition backfill of air raid shelter [102].	10.26	2.78		33.41		3
102	Other	WWII air raid shelter	10.26	2.78		33.41		3
103	Masonry	Brick wall of air raid shelter entrance	3.11	4.06	0.33	33.74	33.73	3
104	Masonry	Brick wall of air raid shelter entrance	3.11	4.06	0.33	33.74	33.73	3
105	Masonry	Short brick wall section	0.46	0.21	0.2	33.61	33.61	3
106	Masonry	Brick surface/infilling of air raid shelter entrance	0.55	1.7	0.07	33.72	33.65	3
107	Masonry	Brick wall of air raid shelter entrance	0.99	0.38	0.3	33.74	33.74	3
108	Masonry	Brick wall of air raid shelter entrance	0.49	0.32		33.78	33.76	3
109	Masonry	Brick wall of air raid shelter entrance	0.49	0.41		33.72	33.71	3
110	Masonry	Brick wall of air raid shelter entrance	4.58	0.28		33.74	33.72	3
111	Masonry	19th century brick wall	0.79	0.29		33.64	33.63	2
112	Masonry	Brick wall of air raid shelter entrance	3.25	0.11		33.65	33.55	3
113	Masonry	19th century brick wall	0.74	0.24		33.71	33.71	2
114	Masonry	Brick wall of air raid shelter entrance	0.66	0.26		33.68	33.68	3
115	Masonry	Brick wall of air raid shelter entrance	4.52	0.1		33.81	33.74	3
116	Masonry	Brick wall of air raid shelter entrance	4.57	0.2		33.81	33.79	3
117	Masonry	Brick surface/infilling of air raid shelter entrance	1.73	1.63	0.1	33.75	33.59	3
118	Masonry	Brick surface/infilling of air raid shelter entrance	2.29	1.36	0.1	33.71	33.62	3
119	Masonry	Brick wall of air raid shelter entrance	1.38	1.36		33.76	33.75	3
120	Masonry	Brick wall of air raid shelter entrance	0.62	0.49		33.5	33.5	3
121	Fill	Infill of air raid shelter entrance	5.23	1.61		33.66	33.5	3
122	Masonry	Brick lined drain	2.84	0.31	0.14	33.36	33.04	2
123	Cut	Construction cut for drain [122]	2.84	0.31	0.14	33.36	32.81	2
124	Fill	Silting inside drain [122]	4.21	0.12	0.05	33.1	32.95	2
125	Layer	External yard surface	3.84	1.68	0.1	33.4	33.38	2
126	Masonry	Coal chute	1.71	1.23	0.54	33.4	32.81	2
127	Fill	Fill of coal chute [126]	1.69	1	0.54	33.4	33.31	2
128	Cut	Construction cut for coal chute [126]	1.71	1.23	0.54	33.4	33.35	2
129	Masonry	South wall of northwestern building	5.69	0.18	0.47	33.51	33.49	2
130	Fill	Infilling of drain [122]	4.21	0.12	0.11	33.36	33.19	2
131	Cut	Construction cut for ceramic drain pipe	2	0.3	0.3	33.47	32.84	2
132	Fill	Backfill of construction cut [131]	2	0.3	0.3	33.47	33.13	2
133	Layer	External yard surface	2.68	1.68	0.2	33.3	33.28	2
134	Layer	Rammed earth floor	3.08	2.82	0.2	33.41	33.31	2
135	Masonry	Brick wall of air raid shelter entrance	5.69	0.36	0.36	33.77	33.76	3

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
136	Fill	Infilling of air raid shelter entrance	5.95	3.1	0.3	33.73	33.67	3
137	Masonry	Brick surface/infilling of air raid shelter entrance	5.67	2.95	0.07	33.76	33.67	3
138	Masonry	Brick wall of air raid shelter entrance	2.48	0.34	0.3	33.74	33.67	3
139	Masonry	Brick wall of air raid shelter entrance	2.76	0.36	0.3	33.73	33.73	3
140	Masonry	Brick lining of ash pit	1.12	0.16	0.41	33.35	33.11	2
141	Masonry	Brick wall of air raid shelter entrance	4.53	0.38	0.2	33.73	33.71	3
142	Masonry	Brick surface/infilling of air raid shelter entrance	4	1.2	0.07	33.68	33.63	3
143	Masonry	Brick wall of air raid shelter entrance	3.37	0.41	0.2	33.7	33.7	3
144	Masonry	Brick surface/infilling of air raid shelter entrance	1	1.4	0.07	33.64	33.5	3
145	Masonry	Brick surface/infilling of air raid shelter entrance	1	0.2	0.07	33.5	33.5	3
146	Masonry	Brick wall of air raid shelter entrance	7.5	0.4	0.2	33.73	33.73	3
147	Masonry	Brick surface/infilling of air raid shelter entrance	1.7	1	0.07	33.63	33.6	3
148	Masonry	Brick wall of air raid shelter entrance	4.8	0.4	0.2	33.79	33.78	3
149	Masonry	Brick wall of air raid shelter entrance	6	0.4	0.2	33.9	33.86	3
150	Masonry	19th century brick wall	2.1	0.24	0.1	33.86	33.85	2
151	Masonry	19th century brick wall	4.93	0.24	0.15	33.93	33.91	2
152	Other	Metal framed air raid shelter	11.32	4.88	2.18	33.8	33.77	3
153	Cut	Construction cut for air raid shelter [152]	11.32	4.88	2.18	33.8	33.62	3
154	Fill	Backfill of air raid shelter [152]	11.32	4.88	2.18	33.8	33.78	3
155	Masonry	South wall of ash pit [140]	0.86	0.24	0.24	33.71	33.3	2
156	Masonry	Brick wall of air raid shelter entrance	5.08	0.3	0.2	33.74	33.73	3
157	Masonry	Brick wall of air raid shelter entrance	4.04	0.35	0.2	33.74	33.73	3
158	Masonry	Brick surface/infilling of air raid shelter entrance	2.15	1.02	0.07	33.71	33.7	3
159	Masonry	Brick wall of air raid shelter entrance	5.08	0.3	0.2	33.74	33.73	3
160	Masonry	Brick wall of air raid shelter entrance	4.04	0.35	0.2	33.74	33.73	3
161	Masonry	Brick wall of air raid shelter entrance	5.08	0.3	0.2	33.74	33.73	3
162	Masonry	19th century brick wall	6.26	0.24	0.3	33.47	33.46	2
163	Masonry	19th century brick wall	1.43	0.23	0.3	33.43	33.43	2
164	Masonry	Brick lined drain	2.25	0.38	0.21	33.36	33.3	2
165	Masonry	19th century brick wall	1.9	0.23	0.1	33.33	33.33	2
166	Masonry	Brick surface/infilling of air raid shelter	5.12	2.64	0.07	33.82	33.77	3
167	Masonry	Brick surface/infilling of air raid shelter	5.12	2.64	0.07	33.82	33.77	3
168	Masonry	Brick wall of air raid shelter entrance	1.95	0.36	0.1	33.75	33.72	3
169	Masonry	Brick wall of air raid shelter entrance	1.95	0.36	0.1	33.75	33.72	3

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
170	Masonry	Brick wall of air raid shelter entrance	2.18	0.34	0.1	33.76	33.76	3
171	Masonry	Brick wall of air raid shelter entrance	2.18	0.34	0.1	33.76	33.76	3
172	Masonry	Brick wall of air raid shelter entrance	5.21	0.34	0.1	33.72	33.7	3
173	Masonry	Brick wall of air raid shelter entrance	5.21	0.34	0.1	33.72	33.7	3
174	Masonry	Brick wall of air raid shelter entrance	5.21	0.34	0.1	33.72	33.7	3
175	Masonry	19th century brick wall	5.21	0.34	0.1	33.72	33.7	2
176	Masonry	Brick wall of air raid shelter entrance	5.21	0.34	0.1	33.72	33.7	3
177	Masonry	19th century cellar wall	17.84	3.7	1.82	33.62	33.42	2
178	Masonry	Internal wall of cellars associated with [177]	0.23	0.23	1.42	33.62	33.62	2
179	Masonry	Internal wall of cellars associated with [177]	0.23	0.23	1.26	33.62	33.42	2
180	Masonry	Brick and York stone stairs	1.9	0.9	1.11	33.34	33.34	2
181	Masonry	Alteration to [180]	1.84	0.11	1.26	33.55	33.55	2
182	Masonry	Alteration to [180]	0.7	0.23	1.44	33.62	33.62	2
183	Masonry	Brick and York stone stairs	1.4	0.83	1.44	33.62	33.62	2
184	Masonry	Alteration to [183]	1.4	0.11	1.44	33.62	33.62	2
185	Masonry	Alteration to [183]	0.83	0.11	1.44	33.62	33.62	2
186	Masonry	Brick and York stone stairs	0.68	0.37	0.98	33.2	33.2	2
187	Masonry	Brick wall for stairs [186]	1.79	0.12	0.39	32.61	32.61	2
188	Masonry	Brick and York stone stairs	1.54	0.82	0.88	33.29	33.29	2
189	Masonry	19th century cellar wall	4.44	0.12	1.35	33.78	33.76	2
190	Masonry	Alteration to [177]	0.7	0.12	1.44	33.62	33.62	2
191	Masonry	Alteration to [177]	0.63	0.11	0.63	33.62	33.62	2
192	Fill	Demolition rubble	4.44	0.92	0.88	33.42	33.29	2
193	Layer	Burnt layer within [194]	0.7	0.3	0.05	33.4	33.36	2
194	Masonry	Possible threshold/base of steps built into wall [238]	1.16	0.59	0.1	33.35	33.35	2
195	Other	Metal framed air raid shelter	8.86	3.62	0.1	33.5	33.5	3
196	Other	Metal framed air raid shelter	9.39	1.98	0.1	33.61	33.52	3
197	Masonry	19th century brick wall	4.15	0.33	0.2	33.61	33.61	2
198	Masonry	19th century brick wall	1.11	0.35	0.2	33.61	33.61	2
199	Masonry	19th century brick wall	1.72	0.22	0.1	33.46	33.46	2
200	Masonry	19th century brick wall	1.48	0.22	0.58	33.46	33.44	2
201	Masonry	Coal chute	1.73	0.12	0.58	33.45	33.42	2
202	Masonry	19th century brick wall	1.68	0.21	0.13	33.54	33.54	2
203	Masonry	Cobbled surface of Ebenezer Street	38.3	3.48	0.25	33.88	33.62	2
204	Masonry	Brick lined drain	1.41	0.34	0.18	33.5	33.46	2
205	Fill	Silting inside drain [204]	1.41	0.13	0.13	33.45	33.41	2
206	Fill	Infilling of air raid shelter [195]	8.86	3.62	0.1	33.5	33.5	3
207	Cut	Construction cut for air raid shelter [195]	8.86	3.62	0.1	33.5	33.4	3
208	Fill	Infilling of air raid shelter [196]	9.39	1.98	0.1	33.61	33.52	3

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
209	Cut	Construction cut for air raid shelter [196]	9.39	1.98	0.1	33.61	33.42	3
210	Masonry	Brick lined drain	0.43	0.37	0.12	33.42	33.42	2
211	Masonry	Brick lined drain	0.43	0.37	0.12	33.42	33.42	2
212	Masonry	19th century brick wall	1.4	0.12	0.1	33.42	33.42	2
213	Fill	Infill of coal shed bound with wall [212]				33.43		2
214	Masonry	North-south running wall of dwelling	2.34	0.26		33.41		2
215	Masonry	19th century brick wall	2.55	0.28		33.41		2
216	Masonry	East-west running wall of dwelling	2.72	0.23		33.34	33.31	2
217	Masonry	East-west running wall of dwelling	0.31	0.11		33.35		2
218	Masonry	Brick surface partially covering WWII air raid shelter [219]				33.81	33.65	3
219	Other	WWII air raid shelter	10.33	3		33.41	33.39	3
220	Cut	Construction cut for air raid shelter [219]	10.33	3		33.71	33.29	3
221	Fill	Backfill of construction cut for WWII air raid shelter	10.33	3		33.71	33.71	3
222	Masonry	York stone slab possibly forming base of cupboard below stairs	0.63	0.72	0.04	33.51	33.51	2
223	Masonry	'U' shaped brick structure forming an ash pit with fill [224]	1.2	0.9		33.35		2
224	Fill	Fill of an ash pit within post-med dwelling	1.01	0.32	0.43	33.35		2
225	Masonry	East to west running wall abutting ash pit [223]	1.16	0.11		33.35		2
226	Cut	Investigative slot through fill [227]	0.75	0.62	0.71	33.35		2
227	Fill	Backfill recorded within investigative slot [226]	0.75	0.62	0.71	33.35		2
228	Masonry	19th century brick wall				33.87	33.87	2
229	Masonry	19th century brick wall	1.61	0.14		33.87	33.87	2
230	Masonry	19th century brick wall	0.46	0.25				2
231	Masonry	19th century brick wall	1.16	0.26		33.87	33.87	2
232	Masonry	19th century brick wall	0.66	0.22		33.86	33.86	2
233	Masonry	19th century brick wall	0.46	0.25		33.84	33.84	2
234	Masonry	VOID						
235	Masonry	19th century brick wall	0.62	0.13		33.45	33.42	2
236	Masonry	19th century brick coal store extending from cellar wall [177]	1.36	1.11		33.34	33.19	2
237	Masonry	19th century brick coal store extending from cellar wall [177]	1.32	0.12		33.29	33.14	2
238	Masonry	19th century brick cellar wall	3.27	0.22		33.38		2
239	Masonry	19th century brick cellar floor	14.2	3.7	0.07	32.27	32.12	2

Context	Type	Context Interpretation	Length	Width	Depth	Levels High	Levels Low	Phase
240	Masonry	Ground floor brick surface of 19th century houses	0.72	0.4		33.37	33.37	2
241	Masonry	Ground floor brick surface of 19th century houses	0.6	0.44		33.41	33.41	2
242	Fill	Rubble backfill	2.02	1.09	0.82	33.25	33.25	2
243	Fill	Rubble backfill of cellar [177]	15.6	3.55	1.87	33.96	33.47	2
244	Other	WWII air raid shelter	9.38	2.17		33.64	33.4	3
245	Cut	Cut for WWII air raid shelter [244]	9.38	2.17		33.64	33.4	3
246	Fill	Backfill of construction cut [245] for WWII air raid shelter [244]	9.38	2.17		33.64	33.4	3
247	Fill	Void						
248	Cut	Void						
249	Masonry	Void						
250	Masonry	19th century brick wall fronting Park Street	4	0.24	0.26			2
251	Masonry	19th century brick wall; internal wall for terraces on Park Street	0.78	0.13				2
252	Masonry	19th century brick wall; internal wall for terraces on Park Street	2.51	0.12				2
253	Masonry	19th century brick wall; internal wall for terraces on Park Street	7.72	0.18	0.6			2
254	Masonry	19th century brick wall; later addition to [253]	2.11	0.2				2
255	Masonry	19th century brick wall for terraces fronting Park Street	2.08	0.22				2
256	Masonry	York stone floor paving	1.76	0.63				2
257	Masonry	Internal wall of cellars associated with [177]	3.56	0.14		32.22	32.21	2
258	Masonry	19th century internal partition wall	2.9	0.12	1.3			2
259	Masonry	19th century rear wall of cellars	15.16	0.12	0.98			2
260	Masonry	19th century wall separating stairs from cellar	1.36	0.12	0.98			2

APPENDIX 2: POTTERY ASSESSMENT

Chris Jarrett

Introduction

A small sized assemblage of pottery was recovered from the site (four boxes). The pottery dates entirely to the 19th century. None of the pottery is abraded or laminated or considered to be residual or intrusive, indicating that the majority of the pottery was deposited fairly rapidly after breakage and mostly under secondary circumstances. The state of fragmentation of the assemblage can be defined as mostly sherd material, although four vessels are intact, and 32 are present with complete profiles. The pottery was quantified by sherd count (SC), estimated number of vessels (ENV's), besides weight. Pottery was recovered from ten contexts and the sizes of the groups of the pottery are all small (fewer than 30 sherds), except for two medium sized groups (30-100 sherds) and one large group (more than 100 sherds).

In total the assemblage consists of 270 sherds, 115 ENV, 18.793kg (of which two sherds/2 ENV/16g was unstratified). The assemblage was examined macroscopically and microscopically using a binocular microscope (x20), and recorded in a database format file by fabric, form and decoration. The pottery is discussed by its distribution and types. The pottery types have been classified according to the coding system used by the Museum of London (2014) or suitable alphabetical codes were cross referenced to this.

The pottery types

The range of pottery types and their quantification, additionally showing the forms present in the different ware types, is displayed in Table 1.

Local pottery

The only identifiable form recorded in the black wares is deep bowls, with a flared example noted in context [79] and a rounded example found in context [183].

Pottery type	FABRIC	Date range	SC	ENV	Wt (g)	Forms
Local						
Post-medieval redware	PMRED	1480-1900	18	7	1550	Deep flared bowl, flower pot
Britain						
Blackware	BLACK	1600-1900	7	3	483	Deep flared and deep rounded bowls, toy chamber pot
Bone china	BONE	1794-1900	3	3	15	Figurine, saucer
Bone china with under-glaze painted decoration	BONE PNTD	1794-1900	1	1	9	Saucer
Bone china with under-glaze blue transfer-printed decoration	BONE TR	1807-1900	16	3	223	Breakfast-shaped, porringer-shaped and other tea cups. egg cup
Bone china with under-glaze transfer-printed and over-glaze painted decoration	BONE TR6	1810-1900	2	1	56	Saucer
English brown salt-glazed stoneware	ENGS	1700-1900	9	8	1956	Brunswick-type blacking, cylindrical (including squat examples), ginger beer bottles

Pottery type	FABRIC	Date range	SC	ENV	Wt (g)	Forms
English stoneware with Bristol glaze	ENGS BRST	1830-1900	35	17	6927	Ale, cylindrical and ginger beer bottles, cylindrical and shouldered jars
Majolica	MAJO	1850-1900	2	2	250	Teapot lid
Pearlware	PEAR	1770-1840	1	1	70	Bowl
Pearlware with slip decoration	PEAR SLIP	1775-1840	11	2	628	Medium carinated bowl
Pearlware with transfer-printed decoration	PEAR TR	1770-1840	1	1	4	Tea cup
Late refined red earthenware	REFRL	1800-1900	1	1	67	Teapot lid
Refined white earthenware	REFW	1805-1900	46	11	1938	medium rounded bowl, chamber pot, rounded dish, cylindrical (including squat) jars, tea cup, cylindrical jug, lid
Refined white earthenware with under-glaze polychrome-painted decoration in 'chrome' colours	REFW CHROM	1830-1900	8	3	670	small cylindrical mug (1/2 pint), soup plate
Refined white earthenware with enamelled decoration	REFW ENML	1805-1900	2	1	135	chamber pot
Refined white earthenware with slip decoration	REFW SLIP	1805-1900	27	7	1295	barrel-shaped jug, cylindrical mug
Refined white earthenware with sponged or spattered decoration	REFW SPON	1805-1900	8	2	224	saucer
Rockingham ware with mottled brown glaze	ROCK	1800-1900	1	1	6	?tea pot
Refined whiteware with under-glaze transfer-printed decoration	TPW	1780-1900	40	14	730	Medium rounded bowl, dinner plate, Hamilton-, London-, porringer-shaped and other tea cup shapes, saucer
Refined whiteware with under-glaze blue transfer-printed stipple and line decoration	TPW2	1807-1900	6	1	409	Octagonal jug
Refined whiteware with under-glaze brown or black transfer-printed decoration	TPW3	1810-1900	13	19	541	Coffee cup, medium cylindrical jar, porringer-shaped tea cup, saucer
Refined whiteware with under-glaze colour transfer-printed decoration (green, mulberry, grey etc)	TPW4	1825-1900	8	3	110	Dinner plate, saucer
Midlands						
Derbyshire stoneware	DERBS	1700-1900	3	2	255	Small rounded jug, knobbed money-box
Unknown						
Coarse post-medieval redware	PMRED COAR	1480-1900	1	1	232	

Table 1: FSS16 post-medieval pottery types (and their forms) quantified by sherd count (SC), estimated number of vessels (ENV) and weight

British wares

This group of pottery consists of those types that were made in several locations across Britain, although Staffordshire and the Potteries, as one of the closest sources, was most likely to have provided the industrial finewares, such as the bone china, creamware, pearlware and refined whiteware. However, none of these wares show any evidence for the presence of makers' marks to confirm the assumption for the source of these wares. The forms in the industrial finewares include kitchen, table and tea wares, besides the occasional sanitary form.

A number of items are of interest. Amongst the bone china is a saucer with a black-transfer printed design augmented with red glaze (BONE TR6) and the festive design consists of a central robin sat on a holly tree branch, while a border of holly leaves and berries occurs on the rim (context [127]). In green-glazed majolica (MAJO) is noted a mostly complete large teapot lid with a deep footring (context [192]).

Two medium sized carinated bowls occur in pearlware with slip decoration (PEAR SLIP) and are decorated with blue slip bands and lines (context [57]). These occurred with slip-decorated refined whiteware ware (REFW SLIP) vessels, all featuring broad blue band decoration and in the form of two largely complete (but fragmentary) barrel-shaped jugs and additionally decorated with either brown or sage green lines, as well as three cylindrical mugs, two of which are part of a set and a furthermore have brown slip lines. Refined white earthenware with 'chrome' colour under-glaze polychrome-painted decoration are noted as a small or toy cylindrical mug decorated with blue and orange floral motifs and augmented with pink lustre (context [127]), besides a soup plate with a plain rim and impressed shell-edge decoration highlighted with a blue line and dated c. 1840-70. The latter item dated context [183] in which it was found.

The blue transfer-printed refined white earthenwares includes only a saucer (context [213]) decorated with the Willow pattern, although a variant of this pattern, elsewhere found on vessels usually marked 'Stone China', is quite frequent and found in the form of different shaped teacups: Hamilton-type (context [127]), London-shape (context [57]) and a porringer type (context [48]). The Asiatic Pheasant design, dated to the mid 19th century, is found on three items: a bowl (context [57]) and two plates (contexts [57] and [183]). Perhaps the most interesting item in the assemblage is a medium rounded bowl with a deliberately printed, upside down blue pattern consisting of internal and external knotted rope geometrical borders in an interlacing pattern. The border on the exterior has a roundel with a 'belt' surround containing 'ROYAL NAVY' and the number '8' is in the centre of the roundel (Plate 34). This item represents a privately bought, mid to late 19th-century dated mess trap (as opposed to an official Naval issue item) and has the name of the specialist retailer printed on the underside of the footring base: 'WILLIAM MILLER/37 BUTCHER STREET/PORTSEA/- · -/ALL DESCRIPTION OF MESS TRAPS'. This vessel shape is referred to as a basin in official naval rate books and the 8 refers to a specific numbered mess on a ship. The item would have been used by the ratings and non-commissioned and lower ranking commissioned officers (Jarrett and Thompson 2013). The item was found in context [57].

Blue transfer-printed stipple and line decoration (TPW2) is represented solely by an octagonal jug with a European scenery design (Context [57]) and was found with brown transfer-printed designs, present on a coffee cup depicting two Regency period women, one of which is reclining on a couch, besides a porringer shaped-tea cup with geometrical borders restricted to the rim. A cylindrical jar for 'JAMES KEILLER & SON'S/MARMALADE/DUNDEE' has a black print (TPW3) that additionally proclaims the product won an award at the 1862 International Exhibition (context [127]) and occurs with a mid 19th-century black-printed 'fibre' type design present on a saucer. Also found in context [127] was a dinner plate with a purple geometrical design (TPW 4) featuring a twisted ribbon around a linear stem with discrete bouquets of flowers and dated to the late 19th-early 20th century.

Stonewares are a notable component of the generic English stonewares, which can be salt-glazed (ENGS) or Bristol-glaze (ENGS BRST) and all occur in the form of either bottles (found in context [57] unless otherwise stated) (Plates 36-37) or jars, some of the bottles being salt-glazed on the exterior and glazed on the interior. An ale bottle with a complete profile has 'YOU LIS/LONDON STOUT'

stamped around the base (ENGS BRST) and a Brunswick-type blacking bottle has the manufacturers name of J. Bourne (of the Denby Pottery, Derbyshire) stamped above the base (ENGS]). Two generic cylindrical bottle shapes have names also stamped above the base, firstly for 'KENNINGTON/GRIMSBY' (ENGS BRST) and a later example for J. Bourne which incorporates '& Sons' in the stamp (ENGS). Six of the ginger beer bottles are also stamped with the manufacturer of the drink or for the pottery company and were found in context [57] unless otherwise stated. One item is stamped above the base with the name of James Calvert of the Langley Mills Pottery, near Nottingham (ENGS), another base has stamped 'TOWNSEND'S/SUPERIOR GINGER BEER/SALFORD' (ENGS) and two examples, one of which is intact, are marked 'H & E. WILKINSON, MANCHESTER' above the base (ENGS BRST: context [183]). A small sherd of an ENGS BRST probable ginger beer bottle has a black printed oval mark on the wall and part of the manufacturer's name, with the letters 'G' and 'M.../B...' surviving and this item dates to after c. 1890. It was found in context [213]. The stoneware jars occur as cylindrical, preserve types (ENGS: context [127]; ENGS BRST: context [192]) or as large shouldered jars (ENGS BRST: context [53]).

Red earthenwares occurs as a deep flared bowl made in a high-fired fine fabric with an internal clear glaze, that appears brown (context [183]) and fragments of eight flower pots, all found in context [183].

Midlands

The only pottery from a specific Midlands source is Derby stoneware and found as two vessels. Firstly, there is the rim and shoulder of a small rounded jug with bands of rouletted decoration and an internal Bristol glaze (context [192]). Secondly, and of note there is the complete profile of a knobbed money box with a 19th-century 'bellied' profile and part of a horizontal slot occurs on the shoulder (context [127]).

Unknown source

The complete profile of a flat lid, consisting of a disc, with combed lines and a central rounded knob and a brown 'semi-metallic glaze' was recovered from context [183]. The item is made in a high-fired, coarse, pale pink coloured, coal measures-type clay (coded PMRED COAR) and usually associated with ceramic building materials. Indeed, the item is likely to represent a cover for a 19th-century vertical ceramic drain pipe with a lid-seated finish on one end.

Distribution

The distribution of the pottery is displayed in Table 2 and shows the contexts containing pottery, the size, number of sherds, ENV and weight, the earliest and latest date of the most recent pottery type (Context ED/LD) and a considered (spot) date for the group.

Context	Assem. size	SC	ENV	Wt (g)	Context ED	Context LD	Fabrics (forms)	Context considered date
46	S	17	4	185	1805	1900	BONE (saucer), REFW (cylindrical jar, cylindrical jug), TPW (porringer-shaped tea cup)	Late 19th-early 20th century
48	S	2	2	4	1805	1900	TPW (plate, tea cup)	Late 19th-early 20th century
53	S	11	2	2139	1830	1900	ENGS BRST (shouldered jar)	1830-1900
54	S	1	1	4	1794	1900	BONE (toy chamber pot)	19th-20th century
57	L	131	40	9375	1820	1900	BLACK, BONE PNTD (saucer), BONE TR (breakfast-shaped tea cup), ENGS (bottles: Brunswick-type blacking, cylindrical, ginger beer), ENGS BRST (bottles: ale, cylindrical, ginger beer), PEAR (bowl), PEAR SLIP (medium carinated bowl, barrel-shaped jug, cylindrical mug), REFW SPON (saucer), TPW (medium rounded bowl, plate, saucer, London-shaped tea cup), TPW2 (octagonal jug), TPW3 (coffee cup, porringer-shaped tea cup), TPW4 (saucer)	Late 19th century
79	S	3	1	159	1600	1900	BLACK (deep flared bowl)	1600-1900
127	M	35	30	2579	1810	1900	BLACK, BONE TR (porringer-shaped tea cup), BONE TR6 (saucer), DERBS (knobbed money-box), ENGS (squat cylindrical jar), REFW (chamber pot, squat cylindrical jar), REFW CHROM (half pint/small cylindrical mug), REFW SLIP, ROCK (?teapot), TPW (Hamilton-shaped tea cup), TPW3 (medium cylindrical jar, saucer), TPW4 (dinner plate)	1862-1900
183	M	37	20	3737	1830	1900	BLACK (deep rounded bowl), BONE (figurine), BONE TR (egg cup), ENGS BRST (ginger beer bottle), PEAR TR (tea cup), PMRED (deep flared bowl, flower pot), PMRED COAR (flat lid), REFW (chamber pot), REFW CHROM (soup plate), REFW ENML (chamber pot), REFW SLIP, TPW (dinner plate)	1840-1870
192	S	10	6	505	1850	1900	DERBS (small rounded jug), ENGS BRST (cylindrical jar), MAJO (teapot lid), REFRL (teapot lid), REFW (medium rounded bowl, rounded dish)	Late 19- early 20th century
213	S	8	7	70	1830	1900	ENGS BRST (ginger beer bottle), MAJO, REFW (tea cup), REFW CHROM, TPW (saucer, tea cup)	1890-1950

Table 2: FSS16 Distribution of the pottery showing for each context the phase it occurs in, its quantification by sherd count (SC), estimated number of vessels (ENV), weight and estimated vessel equivalents (EVEs) as well as the date range of the latest pottery type (Context ED/LD), the pottery types and forms present and a suggested spot date for the deposition of the deposit.

Significance, potential and recommendations for further work

The pottery has some significance at a local level. The pottery is likely to relate to the residents of the 19th-century terraced streets located on the study area and demonstrates the material culture of the people living there, while the stoneware bottles are a good indication of what they were drinking. Of particular interest is the naval mess trap basin found in context [57], which indicates that one of the residents was in service with the Royal Navy and almost certainly in a low ranking position. Other pottery assemblages in the Greater Manchester can be used for comparison with the First Street assemblage: Greengate Towers, Salford (Hughes 2007; Bradley 2014), the Greengate Railway station (Jarrett 2015a), 16 Chapel Street, Salford (Jarrett 2015b) and Great Ancoats Street (Jarrett 2017).

The pottery has the potential to date the deposits it was recovered from. A number of items require illustrating or photographing. Of interest are the groups of pottery associated with the residents of the streets located on the study area. It may be possible through documentary research to link the naval trap vessel with an actual individual resident on the study area.

A publication on the pottery assemblage is recommended, concentrating on groups that can be related to specific households. It is recommended that at least ten items are photographed or illustrated to complement the publication text. Time should be made available to reconstruct some of the more fragmentary groups of pottery in order for them to be photographed. Time should also be made available to research who the possible owner of the naval basin was and compile a short biography on the individual.

Bibliography

Bradley, J., 2014. Greengate Towers, Salford. Archaeological analysis (issue 2). Oxford Archaeology North unpublished report.

Hughes, V., 2007. Greengate Towers, Salford, Greater Manchester, archaeological investigation. Oxford Archaeology North unpublished report.

Jarrett, C., 2015a. 'Pottery Assessment', in J. Taylor, Assessment of Archaeological Investigations at 16 Chapel Street, Salford, Greater Manchester. Pre-Construct Archaeology Limited unpublished report.

Jarrett, C., 2015b. 'Pottery', in A. Goode and J. Proctor, An Archaeological Excavation at The Exchange, Greengate Embankment, Salford, Manchester. Assessment Report. Pre-Construct Archaeology Limited unpublished report.

Jarrett, C., 2017. 'Pottery Assessment', in A. Turner and J. Butler, An Assessment of an Archaeological Excavation at 74-88 Great Ancoats Street, Ancoats, Manchester M4 5AG. Pre-Construct Archaeology Limited unpublished report.

Jarrett, C. and Thompson, G., 2012. 'A group of early 20th-century naval victualling finds from Royal Clarence Yard, Gosport, Hampshire', *Post-Medieval Archaeology* 46/1, 89-115.

MOLA, 2014. Medieval and post-medieval pottery codes. Accessed June 27th, 2016.
<<http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes>>.

APPENDIX 3: CLAY TOBACCO PIPE ASSESSMENT

Chris Jarrett

Introduction

A small sized assemblage of clay tobacco pipes was recovered from the site (less than one box). Most fragments are in a fragmentary, although good condition indicating that the majority of the material was deposited soon after breakage. Clay tobacco pipes were found in three contexts, as only small sized (under 30 fragments) groups.

All of the clay tobacco pipes (eleven fragments, of which none are unstratified) were entered in to a database format file and classified using Oswald's (1975) typologies: prefixed OS for his general types. The pipes are further coded by decoration and quantified by fragment count. The tobacco pipes have been discussed by their types and distribution.

The Clay Tobacco Pipe Types

The clay tobacco pipe assemblage from the site comprises two bowls and eight stems. The pipe bowl dates to the period c. 1840-1910.

The bowl types

1840-1910+

OS28: The bowl type is defined as having neither a spur nor heel and survives only as the base and stem. The base of a bowl is decorated on the underside with a rib embellished with crude, small leaves, while the stem has four beaded linear borders on each side, that continue on to the bowl. The item was found in context [57].

OS30: Environmental sample <1> from context [57] produced a bowl fragment that probably belongs to the OS30 bowl and has on the back of the item a large rib with an oval surround, a leaf on the left side of the bowl and evidence for another leaf or a surround on the front of the bowl: all of the edges of these borders and leaves are beaded.

The stems

These can only be broadly dated c. 1730-1910. The stems found in context [57] are either medium-thin or of a thin thickness and have a medium-fine or fine bore. The six stems found in context [213] all have a medium-thin thickness and a fine bore. The single stem found in context [127] is thin and has a fine bore and probably dates to the 19th century. All of the stems are plain.

Distribution

The distribution of the clay tobacco pipes is shown in Table 1.

Context	No. of fragments	Bowl type/part	Spot date
57	4	X1 OS28, x3 stem	1840-1910
127	1	Stems	1730-1910
213	6	Stems	1730-1910

Table 1: FSS16 Distribution of the clay tobacco pipes.

Significance, potential and recommendations for further work

The clay tobacco pipes have no significance as they occur in such a small quantity and fragmentary state. The only potential of the clay tobacco pipes is to broadly date the contexts they were recovered from. There are no recommendations for further work on the assemblage.

Bibliography

Oswald, A., 1975. *Clay pipes for the archaeologist*. BAR 14, Oxford.

APPENDIX 4: GLASS ASSESSMENT

Chris Jarrett

Introduction

A small quantity of glass was recovered from the excavation (one box) and dates mostly to the 19th and 20th century. The material consists of mostly fragmentary material, although the majority of the assemblage could be assigned to a vessel shape, while two vessels are intact and a small number of vessels may have been whole prior to excavation. The material is therefore in a good condition and was most likely to have been deposited soon after breakage. The assemblage was quantified by fragment count, minimum number of vessels (ENV) and weight and consists of 101 fragments/49 ENV/2.665kg, of which one fragment/1 ENV/89g was unstratified. The material was recovered from seven contexts. The terminology used to describe the glass is according to that used by the Society of Historical Archaeology Historic Glass Bottle Identification & Information Website (Lindsey 2017). The information was recorded in a database format and it is discussed by form and distribution. The glass occurs as mostly small sized groups (fewer than 30 fragments) except for one medium (30-100 fragments) sized group.

The glass forms

All the glass forms date to the mid-late 19th-early 20th century unless otherwise stated.

Bottle: 8 fragments, 5 ENV, 31g

Fragments of bottle that could not be confidently assigned to a specific type are recorded in contexts [57], [127] and [192] and are present as mostly soda glass in clear, blue- and green-tinted colours.

Bottle, cylindrical: 21 fragments, 8 ENV, 315g

This category consists of largely fragmentary vessels made mainly in clear, pale green or blue-green-tinted soda glass and was all of moulded manufacture. Non-descript fragments were found in contexts [57] and [127]. More notable fragments consist of an item with a poorly applied patent-type rim finish (context [127]), while other fragments are embossed with the names of manufacturers of probable drinks: vertically '...LME/[MANC]HESTER' (unstratified); embossed at the top of the wall '[J]OHN DYS[ON]' (context [183]); horizontally above the base '[MA]NCHEST[ER]' and the latter was possibly from a Codd-type bottle (context [183]).

Bottle, flat octagonal-section type: two fragments, 2 ENV, 91g

This form is represented by very fragmentary moulded vessels and made in soda glass as a base made in blue-tinted glass (context [57]) or a green-tinted thick walled fragment (context [127]).

Bottle, ginger beer-type: 1 fragment, 1 ENV, 343g

The vessel was made in green-blue soda glass and it is complete except for the missing base. The item has an applied blob rim and has embossed on the wall 'J. MOORHOUSE/HULME' (context [57]) (Plate 32).

Bottle, oval-section: 10 fragments, 5 ENV, 451g

These moulded vessels occur as fragmentary examples made in soda glass, and consist of a clear shard (context [57]) and a pale blue item with a patent-type rim (context [127]) being noted. Additionally, a medium sized example with a grooved rim finish was made in green-tinted glass, while a blue-tinted base has embossed on one side '[MAN]CHESTER/.... ROYAL/.. MARY' and both items were found in context [57] (Plate 33).

Bottle, oval-section, union type: 1 fragment, 1 ENV, 139g

The vessel shape is defined as having a noticeably wider shoulder than the base and the item was made in green tinted glass and was complete, except for the missing rim (context [57]).

Bottle, sauce-type: 1 fragment, 1 ENV, 11g

This square section bottle type is represented solely by a wall sherd with a bevelled, recessed panel embossed '...[S]AUCE' and was made in green-tinted soda glass (context [127]).

Bottle, square-section: 1 fragment, 1 ENV, 333g

The vessel is moulded and made in blue-tinted soda glass and has a complete profile with a patent-type rim finish, a short cylindrical neck, a rounded shoulder, square section body with rounded corners and a convex base with embossed on the underside a 'W' within an elongated octagonal panel (context [186]).

English cylindrical wine bottle, late-type: 3 fragments, 3 ENV, 110g

The three moulded vessels were all made in high-lime low-alkali glass and occur as base fragments, firstly in black/dark amber brown (context [57]), (green: context [192]), besides a dark olive green wall fragment (context [127]).

Jar, bellied: 1 fragment, 1 ENV, 42g

The vessel is a branded item, although for which company is at this stage unknown. The jar is made in clear soda glass and survives as a convex base with a straight sided wall that flares and becomes a bulbous shoulder (Plate 31). The vessel is decorated with twelve evenly spaced vertical ribs that continue on the underside of the base, although on the wall is a wide oval recessed roundel for a now missing paper label (context [57]).

Jar, cylindrical: 3 fragments, 1 ENV, 142g

The item is mould made in clear cylindrical glass and the rim has an external squared flange profile (context [192]).

Jar, shouldered: 7 fragments, 3 ENV, 455g

Two examples were found in context [192] and one is intact, while another vessel was present in deposit [57] and all have the same shape, consisting of a beaded rim, a very short cylindrical neck, a narrow, rounded shoulder, a cylindrical wall and a rounded base. All of them were made in clear soda glass and date to the late 19th-early 20th century. The items resemble modern jam and other food storage jars.

Melted glass: 1 fragment, 1 ENV, 1g

A small fragment of discoloured melted glass occurred in context [57], sample <1>.

Phial, cylindrical: 2 fragments, 1 ENV, 17g

The item was mould made in clear soda glass and has a patent-type rim finish, a short cylindrical neck and the start of the shoulder, while the base is recessed and embossed on the underside '442' (context [127]).

Stopper: 1 fragment, 1 ENV, 15g

The stopper (for a bottle) is intact and was mould made and consists of a disc with a slightly concave top and bevelled edge and is attached to a spike. The stopper was made in clear soda glass (context [54]) and dated to the late 19th-20th century.

Tumbler: 1 fragment, 1 ENV, 14g

The only alcoholic consumption vessel in the assemblage is represented by a moulded tumbler base made in clear lead glass and found in context [57], sample <1>.

Vessel glass: 17 fragments, 1 ENV, 21g

All of the vessel glass was recorded in context [57] and mostly derived from sample <1> (which was not given an ENV value) and was very fragmentary. The material consists of mostly clear soda glass.

Window pane: 17 fragments, 8 ENV, 43g

Fragments of clear soda glass window panes, of an uncertain manufacturing technique, were found in contexts [54], [57], [192] and [213] and are broadly dated to the 19th and 20th century.

Window pane, patterned: 2 fragments, 2 ENV, 41g

Both fragments of patterned window glass occurred in context [50] and date to the 20th century. The patterns are confined to one surface and the largest example, made in clear glass, has fine ribbing, while a small shard in turquoise coloured glass is embossed with small hexagons.

Distribution

The distribution of the glass is shown in Table 1, which demonstrates for each context producing glass, the phase that it occurs in, the size of the group, the number of fragments, estimated number of vessels (ENV), weight, the forms present and a spot date.

Context	Group size	No. frags	ENV	Wt (g)	Forms	Spot date
54	S	7	6	74	Bottle: sectioned, stopper window glass, plain and patterned	20th century
57	M	61	22	1391	Bottles: cylindrical-, section, flat octagonal-, oval- (and union-type) sectioned types, ginger beer, English wine bottle, cylindrical, late type, jar: bellied and shouldered types, tumbler, vessel glass, window pane	Mid 19th-20th century
127	S	13	8	172	Bottles: cylindrical-, section, flat octagonal-, oval-sectioned types, sauce bottle, English wine bottle, cylindrical, late type, phial	19th century
183	S	2	2	70	Bottle, cylindrical-section	19th-20th century
186	S	1	1	333	Bottle, square-section	19th-20th century
192	S	14	7	527	Bottle, English wine bottle, cylindrical, late type, jars: cylindrical and shouldered-types, window pane	Mid 19th-20th century
213	S	2	2	9	Window pane	19th-20th century

Table 1: FSS16 Distribution of the glass showing, the phase that it occurs in, the size of the group, the number of fragments, estimated number of vessels (ENV), weight, the vessel shapes present and a spot date.

Significance, potential and recommendations for further work

The glass has some significance at a local level. The material is important for understanding the material culture of the residents of the terraced houses living on the streets within the study area. Glass assemblages from other excavations in Manchester and Salford are comparable to that from this excavation, e.g. The Exchange, Greengate Embankment, Salford (Jarrett 2015b), 16 Chapel Street, Salford (Jarrett 2015a) and 74-88 Great Ancoats Street (Jarrett 2017).

The glass has the potential to date the contexts in which it was found. There are vessels of interest, particularly those with Manchester area businesses embossed upon them. The glass also has great potential to inform upon site activities.

It is recommended that a publication report is produced on the glass assemblage and that group photos of the bottles embossed with Manchester and Salford businesses are photographed to supplement the text. Time should be set aside to research the names of the companies embossed on the bottles, in order to understand the nature of the businesses and their histories.

Bibliography

Jarrett, C., 2015a. 'Glass Assessment', in J. Taylor, Assessment of Archaeological Investigations at 16 Chapel Street, Salford, Greater Manchester. Pre-Construct Archaeology Limited unpublished report.

Jarrett, C., 2015b. 'Glass', in A. Goode and J. Proctor, An Archaeological Excavation at The Exchange, Greengate Embankment, Salford, Manchester. Assessment Report. Pre-Construct Archaeology Limited unpublished report.

Jarrett, C., 2017. 'Glass and hardened rubber stopper assessment', in A. Turner and J. Butler, An Assessment of an Archaeological Excavation at 74-88 Great Ancoats Street, Ancoats, Manchester M4 5AG. Pre-Construct Archaeology Limited unpublished report.

Lindsey, B., 2017. Historic Glass Bottle Identification & Information Website. <<https://sha.org/bottle/>>. [Accessed February 22nd 2017].

APPENDIX 5: BUILDING MATERIALS ASSESSMENT

Kevin Hayward

Introduction and Aims

Four whole crate and 16 loose bags of stone, brick and mortar were retained from the evaluation (Jorgensen 2016) and excavations at First Street South. This moderate sized assemblage (59 examples 179kg) was assessed in order to:

- Identify (under binocular microscope) the fabric and forms of the whole post medieval brick and mortar retained from cellar walls relating to the 19th-century First Street South Buildings and any later alterations.
- Whether from the geological literature e.g. (Tonks *et al.* 1931) it was possible to determine any potential sources of clay for the brick?
- Identify the fabric of the worked stone in order to determine what the material was made of and where it was coming from.
- Make any comparison with stone and brick fabric from the nearby site at Greengate Embankment GSM14, Chapel Street CPS14 and 74-88 Great Ancoats Street GAS16.
- Reference should also be made to the access catalogue for the building material (FSS16bm.mdb).
- Made recommendations for further study.

Methodology

In accordance with Pre-Construct Archaeology sampling regulations, two whole bricks were removed from each structure. The application of a 1kg mason's 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). As there was no existing Salford reference collection of building material fabrics, the decision was made with the brick to prefix each one with SAL. Thus SAL 1; SAL 2 etc (see also Hayward 2014; 2015a; 2017). The local geological 1:50,000 maps (2011a; 2011b) and an early 20th-century memoir (Tonks *et al.* 1931) were consulted to identify sources of suitable quarried stone and brick-clay.

Ceramic Building Material 57 examples 168kg

The assemblage contains only later post-medieval construction materials, solely bricks and mortar obtained from a number of structures along First Street South. Away from Salford (Hayward 2014; 2015a) there was no Roman or medieval ceramic building material or stone.

Later Post-Medieval

Brick 57 examples 168kg

Given the expansion of this part of mid-18th to 19th-century industrial Manchester, it is perhaps not surprising that all the ceramic building material identified from these excavations consisted of later post-medieval and early post-modern brick and mortar. The focus of this assessment then is on brick form, fabric and mortar type.

Construction Brick SAL1a; SAL1; SAL3 56 examples 164kg

Brick Fabric

SAL1 As with GSM14, CPS14 and GAS16 low density red brick fabric SAL1 was a common construction brick. General comments on their composition and association are listed below.

Two sub-types can be identified:

SAL1a Low density orange fabric with frequent silty inclusions (40 examples 115kg)

Associated with bricks having the dimensions 9 inches x 4½ inches x 2¾ inches (230mm x 110mm x 70mm). These are well-made unfrosted bricks pointed either in a brown gravel mortar (T3) for primary use in 19th-century structures, black concretionary mortar T9 in air raid shelters and hard grey Portland type cement (T11) in localised Phase 2 modifications to housing. One or two examples have a slit-like frog [239].

SAL1b A finer vitrified variant of SAL1a (8 examples 23.6kg)

Associated with bricks having the dimension 9 inches x 4½ inches x 2¾ inches (230mm x 110mm x 70mm). These are well-made unfrosted bricks pointed either in a brown gravel mortar (T3) for primary use and reused in black concretionary mortar T9 in air raid shelters and hard grey Portland type cement (T11) in later localised repairs to Phase 2 housing.

SAL3 Well made very silty bricks 6 examples 19.1kg

The third type is the one associated with the bricks with the sharpest arrises and so are probably late 19th to 20th-century modifications – verified by the fact that many are pointed in the latest cement like black mortar 9 or light grey mortar 11. These were identified in structures [129] [135] [139] [142] which are mainly classed as Air Raid Shelters.

In hand specimen – all of these rather earthy low density friable brick fabrics are more typical of glacial clays that blanket much of the Carboniferous and Triassic cover for this region e.g. Flixton and Urmston – 4km south of Salford (Tonks *et al.* 1931, 203) rather than dense red Carboniferous shale clays with blaes (or coal waste) e.g. *NORI* stamped bricks from Accrington or the pale yellow low alumina (kiln

bricks). Both of these clay-types were also extracted from the Lower and Middle Coal Measures from this region (Tonks *et al.* 1991, 203).

This would also have made practical and economic sense, as it would have been cheaper and easier to extract clays from the underlying Quaternary cover rather than delve deeper into the bedrock of the Carboniferous 2km to the north of Salford at Pendlebury. Furthermore, prior to the urbanisation of this part of Salford, boulder clay brick pits would have provided a ready and cheap source of clay. In the absence of any brick-stamps however, it is impossible to ascertain what clay pits/companies were supplying the clay. Examples of bricks made from boulder clay in the Manchester area are many and include the pits and brickfields at Crofts Bank, Cheetham and Cheetwood Pits, Outwood Brickworks, Longford Road Brickworks (Tonks *et al.* 1931, appendix III, 221-224).

3033 1 example 4kg

A thick unstamped 9 1/8 x 4 1/2 x 3 (235mm x 110mm x 80mm) bull-nosed red brick with inclusions of *blaes* or coal shale fragments reused in an air raid shelter [170] is comparable in fabric with construction bricks, dug from coal measure clays identified from Glasgow (Hayward 2015b). Given the identification of a kiln brick manufactured from Glenboig (see below) at this site, then it seems likely that consignments of red construction bricks from the second city of the empire may have supplied other industrial centres too.

3261 1 example 4.6kg

One example of a dense, high-alumina yellow refractory brick was recovered pointed in the later dark grey mortar Type 9. These bricks were manufactured out of local Upper Carboniferous (Namurian) clays associated with the Coal Measures (Hayward 2015). Their strength and resistance to heat made them suitable for commercial and industrial properties requiring high temperature processes, large ovens, fireplaces and even paving slabs from the mid-19th century. The example reused in an air raid shelter [142] is stamped *STARWORKS GLENBOIG*, a kiln brick manufactured in the village of Glenboig to the north-east of Glasgow in huge quantities for national and international distribution between 1875 and 1950 (Hayward 2015b; Nevell 2016).

This assemblage consists of hand-made, poor quality unfrosted bricks probably extracted from clay in the underlying boulder clays. This to meet the exponential demand for brick building materials and housing needs of a rapidly growing population in Victorian Manchester.

Mortar, Cement & Plaster

A summary of the post-medieval mortar types as well as their period of use from the excavations at FSS16 are given below (Table 1). The decision was made to continue with the existing nomenclature for mortar types in the Salford-Manchester Area (Hayward 2014; 2015a; 2017). However, only one of these mortar types (hard black Type 9 - from GAS16) was seen at FSS16. This was associated with the air raid shelter constructions (see below) The sequence is dominated by a light brown pebbly mortar (Type 3) associated with the 19th-century residential development including coal chutes, latrines, wall

foundations and drains whilst another new mortar type (Type 11 a grey chalky hard mortar had a more localised use mainly in Phase 2 repairs to stairs and brick foundations [139] [177] [179] [181] [182] [191] [194]. The predominance of these hard concrete hydraulic mortars that only became widely used from the mid-late 19th century onwards, would suggest that much of the housing at First Street South is 19th century to 20th century in date.

Mortar/Concrete Type	Description	Use at FSS16
Type3 Brown pebbly mortar with occasional chaff inclusions	Brown quite hard pebbly mortar	1850-1900 Extremely common associated with the less well made brick structures, chute, drains associated with 19th-century slum housing in the area [43] [44] [57] [62] [68] [72] [76] [87] [122] [128] [136] – [138] [162] [199] [214] [215]
Type 9 Black very hard hydraulic mortar	Black very hard hydraulic mortar	1890-1950 Common associated with better made SAL3 bricks and slit frogged many relate to air raid shelters SAL1a brick [120] [135] [136] [139] [168] [170] [200] [201] [202] [212] [217] [235] [244]
Type 11 Hard brown-grey chalky mortar	Hard brown-grey chalky mortar	1875-1950 localised use in Phase 2 works associated with repairs to extant Victorian fabric [139] [177] [179] [181] [182] [191] [194]

Table 1: list of mortar types identified from the excavation FSS16

Stone 2 examples 10.5kg

3108 York stone (local variant)

A fine pale olive-green laminated micaceous sandstone - (Elland Flags) Lower Coal Measures Leeds-Bradford-Elland District or local equivalent, e.g. Woodhead Hill Rock or Crutchman Sandstone (Tonks et al. 1931, 205) – York stone as with GSM14 (Hayward 2014) and CPS14 (Hayward 2015) is always present. The rocks ability to split into large slabs and accessible outcrops account for its frequent use in Victorian Manchester .Like GAS16 (Hayward 2017) it is fashioned into a stone drain [233].

3130 Millstone Grit, (Namurian) *Upper Carboniferous Pennines and Peak District*

This is a fine-medium grained quartz grit stone. An unstratified paving slab represents the sum total. Rough Rock e.g. Gorses Quarry (Tonks et al. 1931, appendix III, 221) from the Namurian (Upper Carboniferous) 6km to the east of Salford has been used as construction material in this region as have numerous sandstones from the Bolton-Bury-Oldham area 5-10km to the north. River Irwell would have cut through economic units of rock at Bury.

Distribution

Structures (where known) in bold

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
0	3130	Fine Millstone Grit Paving stone	1	50	1960	50	1960	1750-1900+	No mortar
41	SAL1a	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch no mortar	1	1850	1950	1850	1950	1850-1900+	No mortar
43	SAL1b; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850	1950	1850	1950	1850-1950	1850-1900
44	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850	1950	1850	1950	1850-1950	1850-1900
57	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850	1950	1850	1950	1850-1950	1850-1900
62	SAL1a; SAL1b	Large thick poorly made bricks 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	2	1850	1950	1850	1950	1850-1950	1850-1900
68	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850	1950	1850	1950	1850-1950	1850-1900
69	SAL1a	Large thick poorly made brick 4.5 inch x 2 inch No mortar	1	1850	1950	1850	1950	1850-1900+	No mortar
72	SAL1a; SAL1b; 3101	Large thick poorly made bricks 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	2	1850	1950	1850	1950	1850-1950	1850-1900
74	SAL1a	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch No mortar	1	1850	1950	1850	1950	1850-1900+	No mortar
76	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850	1950	1850	1950	1850-1950	1850-1900
77	SAL1b	Large thick poorly made brick 4.5	1	1850	1950	1850	1950	1850-1900+	No mortar

Context	Fabric	Form	Size	Date range of material	Latest dated material		Spot date	Spot date with mortar
		inch x 2 inch No mortar						
87	SAL1b; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850	1950	1850-1950	1850-1950
120	SAL1a; SAL3; 3101	Two Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar one fabric early SAL1a one later mottled clay T9 black concretionary mortar	2	1850 1950	1900	1950	1900-1950	1890-1950+ Latest mortar
122	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850	1950	1850-1950	1850-1900
128	SAL1a; 3101	Large thick poorly made bricks 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	2	1850 1950	1850	1950	1850-1950	1850-1900
129	SAL3; 3101	Later thick 9 inch x 4.5 inch x 2 inch bricks Type 9 black concretionary mortar	2	1900 0 1950	1900	1950	1900-1950	1890-1950
135	SAL3; 3101	Later thick 9 inch x 4.5 inch x 2 inch brick slit frog Type 9 black concretionary mortar	1	1900 1950	1900	1950	1900-1950	1890-1950
136	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850	1950	1850-1950	1850-1900
137	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850	1950	1850-1950	1850-1900
138	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850	1950	1850-1950	1850-1900
139	SAL3; 3101	Two later thick 9 inch x 4.5 inch x 2 inch brick slit frog	2	1900 1950	1900	1950	1900-1950	1890-1950

Context	Fabric	Form	Size	Date range of material	Latest dated material	Spot date	Spot date with mortar
		Type 9 black concretionary mortar and T11 hard brown mortar chalky inclusions					
141	SAL1a	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch 1 No mortar	1	1850 1950	1850	1950	1850-1900+ No Mortar
142	3261; SAL3	Two Later thick 9 inch x 4.5 inch x 2 inch brick; Starworks Glenboig kiln brick from Glasgow No mortar	2	1873 1950	1900	1950	1900-1950 No mortar
151	SAL1b	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch No mortar	1	1850 1950	1850	1950	1850-1900+ No mortar
162	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850	1950	1850-1950 1850-1900
168	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch possibly reused in T9 black concretionary mortar	1	1850 1950	1850	1950	1850-1950 1890-1950
170	3033 ; 3101	Bull nosed very thick Glaswegian type stock brick in T9 black concretionary mortar	1	1850 1925	1850	1925	1850-1925+ 1890-1950
177	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T11 hard grey chalky mortar	1	1850 1950	1850	1950	1850-1950 1875-1950
179	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T11 hard grey chalky mortar	1	1850 1950	1850	1950	1850-1950 1875-1950
181	SAL1a; 3101	Large thick poorly made bricks 9 inch x 4.5 inch x 2 inch T11 hard grey chalky mortar	2	1850 1950	1850	1950	1850-1950 1875-1950
182	SAL1a ; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch	1	1850 1950	1850	1950	1850-1950 1875-1950

Context	Fabric	Form	Size	Date range of material	Latest dated material	Spot date	Spot date with mortar
		T11 hard grey chalky mortar					
191	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T11 hard grey chalky mortar	1	1850 1950	1850 1950	1850-1950	1875-1950
194	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T11 hard grey chalky mortar	1	1850 1950	1850 1950	1850-1950	1875-1950
199	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850 1950	1850-1950	1850-1900
200	SAL1a ; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch 1 T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
201	SAL1a ; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
202	SAL1a ; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
204	SAL1a	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch No mortar	1	1850 1950	1950 1950	1850-1900+	No mortar
212	SAL1a ; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
214	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
215	SAL1b ; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T3 brown gravel mortar	1	1850 1950	1850 1850	1850-1950	1850-1900

Context	Fabric	Form	Size	Date range of material	Latest dated material	Spot date	Spot date with mortar
217	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
235	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950
239	3108; SAL1a	York stone drain; narrow slit frogged poorly made brick 9 inch x 4.5 inch x 2 inch No mortar	2	1600 1950	1850 1950	1850-1900	No mortar
244	SAL1a; 3101	Large thick poorly made brick 9 inch x 4.5 inch x 2 inch T9 black concretionary mortar	1	1850 1950	1850 1950	1850-1950	1890-1950

Summary and Recommendations

It is clear from the form, fabric and mortar type that most of the brick structures recovered at evaluation (Jorgensen 2016) and assessment phases are associated the mid 19th-century residential development of this part of Manchester. There is a great deal of standardisation by fabric and form of the bricks and mortar type suggesting one single large residential development. The exclusive use of locally acquired glacial clay (Fabrics SAL1a and SAL1b) for the manufacture of large 9 inch by 4½ inch x 2¾ inch unfrogged construction bricks is widespread in foundation walls, partition walls, drains, coal chutes and communal lavatories. They are all pointed in brown pebble gravel mortar.

One area of the excavations centred around [177] [179] [181] [182] [191] [194] is pointed in a harder Portland type cement (Type 11) and relates to repairs or modifications.

Finally, there is the black concretionary mortar (Type 9) which is almost always associated with the air raid shelters. What is particularly revealing here is the variety of reused Victorian brick (Fabric SAL 1a and SAL1b) and fresh 20th-century brick (Fabric SAL3), coupled with reused Glaswegian Kiln Brick (Starworks Glenboig) and very thick Glaswegian stock bricks (80mm). This shows that these buildings were constructed rapidly (for obvious reasons) using all available brick materials but bonded in a hard Roman concrete.

Comparable brick fabrics and sizes are found at Salford at both GSM14 and CPS14 0.5-1.5km further west as well as at GAS16 as the widespread use of York stone which may need to be looked into at publication stage. This centralised period of building using locally available brick, mortar and stone in this part of Manchester (and indeed Salford) (Hayward 2014; 2015a; 2017) is in contrast to 19th-century

Glasgow where a large numbers of different brick makers were in competition with each other (judging from the large number of different brick stamps (Hayward 2015b).

The value of this assemblage though lies in the ability of the brick (and especially mortar) to date the sequence into an early Victorian build, and much later 20th-century and WWII modifications.

Bibliography

British Geological Survey, 2011a. Sheet 85 (Manchester - Bedrock and Superficial Deposits) Geological map. 1:50,000 scale (Keyworth, Nottingham: British Geological Survey).

British Geological Survey, 2011b. Sheet 85 (Manchester - Bedrock) Geological map. 1:50,000 scale (Keyworth, Nottingham: British Geological Survey).

Hayward, K.M.J., 2014. The building materials. Greengate Embankment, Salford, Manchester (GSM14). Pre-Construct Archaeology Unpublished Report.

Hayward, K.M.J., 2015a. The building materials .Chapel Street, Salford, Manchester (CPS14). Pre-Construct Archaeology Unpublished Report.

Hayward, K.M.J., 2015b. Identifying geological materials from nineteenth-century residential and industrial properties in south Glasgow: the M74 excavations. *Scottish Journal of Geology*. 51(1), 81-94.

Hayward, K.M.J., 2017. The building materials, in A. Turner and J. Butler, An Assessment of an Archaeological Excavation at 74-88 Great Ancoats Street, Salford, Manchester (GAS16) Pre-Construct Archaeology Unpublished Report.

Nevell, M., 2016. *The Birth of Industrial Glasgow: The Archaeology of the M74*. Society of Antiquaries of Scotland.

Jorgensen, P., 2016. First Street Plot 11 (8), Manchester M15 4FN: A summary of an archaeological evaluation. Pre-Construct Archaeology Unpublished Report.

Tonks, L.H., Jones, R.C.B., Lloyd, W. & Sherlock, R.L., 1931. The Geology of Manchester and the South-East Lancashire Coalfield, *Memoir Geological Survey of England and Wales Explanation of Sheet 85*.

APPENDIX 6: METAL AND SMALL FINDS ASSESSMENT

Märit Gaimster

Nine metal or small finds were recovered from the excavations; they are listed in the table below. The finds are all likely to date from the 19th century or later, and in some cases were associated with pottery of this date. The earliest dateable object may be a small unstratified copper-alloy button, with a construction design characteristic for the mid- to late 18th century (cf. Noël Hume 1969, 90 and fig. 23 Type 8). The button may be residual or represent old and outdated clothing. Other dress accessories are seen in a moulded glass button from context [127] and associated with late 19th-century pottery. A few household objects were also retrieved, including an unstratified teaspoon of electro-plated nickel silver, a manufacturing technique that was first patented in Birmingham in 1840 (Brown 2001, 125), and a desiccated conical rubber fitting that is likely a furniture foot. A small copper-alloy implement, found with the glass button above, consists of a now fragmented disc with a short handle; the function of this object is still to be established. The fragment of a slate pencil was found with pottery dating from 1840-1870. Besides these identifiable objects, two heavily corroded iron objects may be remnants of straps, mounts or binding. Both came from a context with pottery dating from the end of the 19th and the first half of the 20th centuries.

Significance of the finds and recommendations for further work

Metal and small finds potentially provide key elements of domestic material culture and activities related to the investigated site. At First Street South, they relate to worker's housing in the 19th and early 20th centuries, a period where this element of the finds have often been neglected in archaeological literature (but see Crewe 2012; License 2015). Here the small assemblage includes some elements of dress, in the form of two buttons, and household-related objects as seen in the teaspoon, the slate pencil and a fragmented copper-alloy implement of unknown function. These finds should be included in any further publication of the site. For this purpose, it is recommended that the copper-alloy implement is x-rayed to enable further identification. To aid identification, the stamps on the electroplated spoon would benefit from cleaning by a conservator, and the two iron objects from context [213] could be x-rayed. Following publication, the iron nail and any undiagnostic or fragmented metal objects may be discarded before the site is archived with a designated repository.

Bibliography

- Brown, P. (ed.), 2001. *British Cutlery. An illustrated history of design, evolution and use*. York Civic Trust.
- Crewe, V., 2012. "Ancient luxury and modern filth": new insights into 19th-century life at Sheffield Manor Lodge'. *Post-Medieval Archaeology* 46/2, 333-41.

License, T., 2015. *What the Victorians Threw Away*. Oxford: Oxbow Books.

Noël Hume, I., 1969. *A Guide to Artifacts of Colonial America*. Philadelphia: University of Pennsylvania Press.

Catalogue

context	SF	description	pot date	recommendations
0	bulk	Copper-alloy button; small blazer/livery type with iron loop for fastening, set in raised cone; diam. 16mm	n/a	
	bulk	Copper-alloy tea spoon; electroplated nickel silver; complete with elongated bowl and handle with plain rounded, down-turned end; corroded but stamps visible; L 143mm	n/a	Clean stamp for ident.
101	bulk	Rubber furniture foot; conical with central hole for fixing; diam. (upper) 40mm; diam. (lower) 25mm	n/a	
	bulk	Iron nail; incomplete and heavily corroded; L 85mm+	n/a	discard
127	bulk	Copper-alloy implement; short flat-section handle attached to disc, now present in numerous pieces; handle L 30mm; disc diam. c. 33mm; heavily corroded	1862-1900	x-ray and further identify
	bulk	Glass button; cast with domed base; front with raised centre and two eyes; diam. 15mm	1862-1900	
183	bulk	Slate pencil; incomplete; gauge 5mm; L 40mm+	1840-1870	
213	bulk	Iron ?strap; flat-section of substantial thickness; W 15mm; L 135mm+; 5mm thick	1890-1950	x-ray
	bulk	Iron ?strap; heavily corroded with expanded ends; L 65mm	1890-1950	x-ray

APPENDIX 7: ANIMAL BONE ASSESSMENT

Kevin Rielly

Introduction

Small quantities of animal bones were found in both the evaluation and excavation stages of the site, the former from a single sample and the latter from a few deposits associated with Phases 1 and 2. All of the bones were well preserved and, with the exception of the sample collection, were only moderately fragmented.

Methodology

The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered.

Description of faunal assemblage

A total of just 20 bones were recovered from the evaluation and excavation stages, the former taken from a sample and the latter hand recovered from 3 deposits, all dated to the 19th century. The sample from the fill [57] of pit [58] provided a chicken femur and a fish (possibly herring) vertebra. Notably the fish and indeed a few of the sheep-size fragments had been burnt, perhaps signifying the remains of hearth sweepings. The sheep-size and small mammal fragments most probably belong to sheep and dog respectively. Amongst the hand recovered bones there is a sheep scapula from [127] (the fill of a masonry coal chute [128]) and a rabbit femur from a deposit associated with staircase [183]. Otherwise, there is a selection of sheep-size rib fragments (most probably identifiable as sheep), from each of the latter two deposits as well as from demolition rubble [192]. Two of these ribs were chopped through, no doubt with the intention of producing rib joints. Notably the age and size information is limited; the sheep scapula is fused, while there are no measurable bones. However, there is no obvious indication of juvenile, i.e. 1st year, animals, plus the sheep bones (including the ribs) are all from relatively small individuals. This essentially demonstrates an absence of the larger 'improved' types, these developed in the 18th century and then extensively used from the start of the 19th century (after Rixson 2000, 215).

Eval/Excav	Excav			Eval	
Area:	Phase 1	Phase 2		Tr 5	Total
Context:	127	183	192	57	
Species					
Sheep/Goat		1			1
Sheep-size	1	4	1	7	13
Rabbit		1			1
Small mammal				3	3
Chicken				1	1
Fish				1	1
Grand Total	1	6	1	12	20

Table 1: Species distribution by excavation, area and context, noting that the bones were recovered by hand with the exception of those from the evaluation (representing the contents of a single bulk soil sample).

Conclusions and recommendations for further work

These few bones can be essentially interpreted as food waste (sheep, rabbit, chicken and fish) with some inclusion of pet animals (the probable dog bones). There is insufficient evidence to suggest the age range of the species exploited. However, it would appear that sheep is best represented amongst the food remains and with the absence of lamb that there may have been a preference for mutton. It is also of interest that a variety of food species were available. As previously stated the sheep were rather small indicative of the use of as yet 'unimproved' types or indeed of one or more of the less robust 'breeds' bred within this general area as for example the Swaledale (Hall and Clutton-Brock 1995, 122). The quantities are perhaps too small to warrant any comparisons with contemporary Manchester bone assemblages. A somewhat larger collection from The Exchange, Greengate Embankment in Salford provided an assemblage with approximately equal quantities of cattle and sheep bones, the latter again generally rather small and essentially adult signifying mutton animals. In addition there was evidence for the exploitation of chicken as well as rabbit (Rielly 2014).

The information given here should be incorporated into any later work, however, no further work can be recommended for this small collection.

Bibliography

Hall, J.G. and Clutton-Brock, J., 1995. *Two hundred years of British farm livestock*. The Natural History Museum. London:HMSO.

Rielly, K., 2014. Report on the animal bone and marine shells recovered from the evaluation and later excavation at The Exchange, Greengate Embankment, Salford (GSM14), Pre-Construct Archaeology Unpublished Report.

Rixson, D., 2000. *The History of Meat Trading*. Nottingham University Press.

APPENDIX 8: ENVIRONMENTAL ASSESSMENT

Kate Turner

Introduction

This report summarises the findings of the rapid assessment of one bulk sample taken during the excavation of land at the site of the proposed First Street South development, Manchester. This sample was taken from the fill of a brick lined cesspit, the context information for which is given in Table 1. The aim of this assessment is to:

1. Give an overview of the contents of the assessed sample;
2. Determine the environmental potential of this sample;
3. Establish whether any further analysis is necessary.

Context No.	Feature No.	Trench	Phase	Category
57	58	5	Undated	Fill of a brick lined cess pit

Table 1: Context information for environmental samples, FSS16

Methodology

One bulk sample, 27 litres in volume, was processed by wet sieving. The sample was gently washed between 10mm, 5mm and 2mm metal sieves, and the clean residues then dried and sorted to extract artefacts and ecofacts. The abundance of each category of material was recorded using a non-linear scale where '1' indicates occasional occurrence (1-10 items), '2' indicates occurrence is fairly frequent (11-30 items), '3' indicates presence is frequent (31-100 items) and '4' indicates an abundance of material (>100 items).

The flot residue was retained using 300µm mesh. This, once dried, was scanned under a low-powered binocular microscope to quantify the level of environmental material, such as seeds, chaff, charred grains, molluscs and charcoal. Abundance was recorded as above. A note was also made of any other significant inclusions, for example roots and modern plant material.

Results and Discussion

Residues

Apart from a moderate amount (30-100 pieces) of wood charcoal, the heavy residue contained little in the way of environmental material. Low frequencies of small mammal and fish bone were reported, but no more than ten specimens of each type were present. A small number of bone fragments were also found, though these were poorly preserved and of modest size. A single broken shell was identified; however, species could not be determined due to the lack of diagnostic features.

In terms of cultural artefacts, brick and pottery was common, as was broken glass. A small amount of mortar was additionally discovered, along with a minimal number of clay pipe fragments. Clinker was abundant, with over one hundred large chunks being extracted from this sample, along with a small amount of fragmented copper and glass, which may be indicative of industrial activity.

All the material collected from the heavy residue has been catalogued and passed to the relevant specialists for further assessment.

Sample No.	1
Context No.	57
Feature No.	58
Number of buckets	27
Method of processing	W/S
Charcoal	
Charcoal <2mm	
Charcoal 2-4mm	
Charcoal >4mm	3
Frag. of ID size	✓
Bone	
Small animal bone	1
Fish bone	1
Bone fragments	1
Shell	
Shell fragments	1
Building material	
Brick	3
Mortar	1
Other	
Clay pipe	1
Clinker	4
Copper fragments	1
Glass	3
Iron fragments	1
Pottery	3

Table 2: Assessment of environmental residues, FSS16

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant

Flots

Sample <1> produced over 1300 millilitres of flot material. The bulk of this was comprised of industrial by-products, including a large amount of fragmented slag, clinker and coal. Considering the size of the light residue, the relative concentration of environmental remains was moderate; between 30 and 100 seeds were identified, the majority of which were from grapes (*Vitis* sp.) or figs (*Ficus carica*). Lesser concentrations of weed seeds, of the genera *Rubus* sp. (brambles), *Leontodon* sp. (hawkbits) and *Hypochaeris* sp. (cat's-ears) were also reported, along with a small number of arboreal specimens, specifically birch (*Betula* sp.) and spruce (*Picea* sp.). Wood charcoal was common, with over 100 fragments recorded, some of which were of a suitable size for species to be determined (>2mm in length/width). As with the heavy residue, low to moderate amounts of small mammal and fish bones were reported, as well as a minimal amount of cremated bone (<5 pieces). Low concentrations of insect remains were also found.

As mentioned previously, the main part of the deposit was made-up of industrial material, which was present in very high concentrations. Various slag types were reported, as was coal and large amounts of clinker. Globules of glassy residue and a small amount of burnt clay were also found.

Sample No.	1	
Context No.	57	
Feature No.	58	
Volume of flot (millilitres)	1300	
Charcoal		
Charcoal >1mm	3	
Charcoal <1mm	3	
Fragms. of ID size	✓	
Seeds		
<i>Betula</i> sp.	Birch	2
<i>Ficus carica</i>	Fig	3
<i>Holcus</i> cf. (spikelets)	Soft-grasses	1
<i>Hypochaeris</i> sp.	Cat's-ears	1
<i>Leontodon</i> cf.	Hawkbits	1
<i>Picea</i> sp.	Spruce	1
<i>Rubus</i> sp.	Brambles	2
<i>Vitis</i> sp.	Grapevines	3
Unknown		1
Other plant macrofossils		
Stamen fragments (misc)	1	
Charred seeds (no ID)	1	

Sample No.	1
Context No.	57
Feature No.	58
Bone	
Small animal bone	2
Fish bone	1
Burnt bone fragments	1
Industrial residue	
Slag	4
Clinker	4
Vitreous globules	4
Coal	3
Iron (?) slag fragments	2
Tin (?) slag fragments	3
Glass (?) slag fragments	4
Burnt/fired clay (?)	2
Other material	
Slate	1
Insect remains	2

Table 3: Assessment of environmental flots, FSS16

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant

Discussion

Based on the composition of context [57] it is probable that the containing feature was used as a rubbish dump. As the bulk of the remains are likely to be the product of high-temperature combustion, it is also reasonable to suggest that some form of industrial activity was being carried out during the period of use, possible smelting based on the amount of slag reported. Whilst the environmental assemblage does not give a complete picture of the nature of subsistence on the site, an indication of the type of diet enjoyed by the occupants may be hinted at in the presence of seeds from fruits such as fig, grape and blackberry (*Rubus* sp.), and the small amount of fish bone that was discovered.

Conclusions and Recommendations for Further Work

To summarise, the sample taken from First Street South contained a moderate amount of environmental material. Seeds and wood charcoal were present in frequent to abundant concentrations, and preservation of these remains was generally good. No further analysis is however recommended at this stage, as the size of the seed assemblage is not significant (>100 specimens), and the diversity of taxa is relatively limited. Identification of the wood charcoal found may be warranted, as it could shed light

on the types of wood that was being used for industrial purposes during this period. However, in terms of the environment of the site itself this archive is likely to represent only a partial sample of the species that were locally available.

A summary of this assessment should be included in any subsequent site publication.

Bibliography

Cappers, R.T., Bekker, R.M. and Jans, J.E., 2012. Digitale Zadenatlas van Nederland/Digital seed atlas of the Netherlands (Vol. 4). *Barkhuis*.

APPENDIX 9: OASIS FORM

OASIS ID: preconst1-285462

Project details

Project name	First Street Plot 11 (8), Manchester, M15 4FN: An Assessment Report of an Archaeological Excavation
Short description of the project	Following an archaeological evaluation in October 2016 an excavation was conducted between 24th October and 18th November 2016 on land bound by Hulme Street, Wilmott Street, Chester Street, and Medlock Street, Manchester. This revealed a series of cellars and other building remains which dated from the early to mid 19th century, as well as a series of air raid shelters and associated entrances from WWII. The 19th century buildings were primarily residential in nature; commercial/industrial buildings replaced the terraced housing after slum clearance of the early 20th century.
Project dates	Start: 24-10-2017 End: 18-11-2017
Previous/future work	Yes / No
Any associated project reference codes	FSS16 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	BACK TO BACK TERRACE Post Medieval
Monument type	TERRACE HOUSE Post Medieval
Monument type	AIR RAID SHELTER Modern
Monument type	CELLAR DWELLING Post Medieval
Monument type	ROAD Post Medieval
Significant Finds	POT Post Medieval
Significant Finds	GLASS Post Medieval
Significant Finds	CTP Post Medieval
Significant Finds	CBM Post Medieval
Significant Finds	SMALL FINDS Post Medieval
Significant Finds	BONE Post Medieval
Investigation type	"Open-area excavation"
Prompt	Planning condition

Project location

Country	England
Site location	GREATER MANCHESTER MANCHESTER MANCHESTER First Street Plot 11 (8)
Postcode	M15 4FN
Study area	1.6 Hectares

Site coordinates SJ 83794 97218 53.471193774338 -2.244172881247 53 28 16 N 002 14
 39 W Point

Height OD / Depth Min: 33.46m Max: 34.09m

Project creators

Name of Pre-Construct Archaeology Ltd.
 Organisation

Project brief Chris Mayo
 originator

Project design Chris Mayo
 originator

Project Chris Mayo
 director/manager

Project supervisor Paw Jorgensen

Type of Developer
 sponsor/funding
 body

Name of Arcadis
 sponsor/funding
 body

Project archives

Physical Archive Manchester Museum of Science and Industry
 recipient

Physical Archive ID FSS16

Physical Contents "Animal Bones","Ceramics","Environmental","Glass","Metal"

Digital Archive Manchester Museum of Science and Industry
 recipient

Digital Archive ID FSS16

Digital Contents "Animal Bones","Ceramics","Environmental","Glass","Metal"

Digital Media "Database","Images raster / digital
 available photography","Spreadsheets","Survey","Text"

Paper Archive Manchester Museum of Science and Industry
 recipient

Paper Archive ID FSS16

Paper Contents "none"

Paper Media "Context sheet","Miscellaneous Material","Plan","Section","Unspecified
 available Archive"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title An Assessment of an Archaeological Excavation at First Street Plot 11 (8),
 Manchester, M15 4FN

Author(s)/Editor(s) Banens, R.

Other bibliographic PCA report
 details

Date	2017
Issuer or publisher	Pre-Construct Archaeology Ltd.
Place of issue or publication	London
Description	A4 report
Entered by	archive (archive@pre-construct.com)
Entered on	19 May 2017

APPENDIX 10: FINDS PHOTOGRAPHS

Glass



Plate 31: Clear soda glass moulded, bellied jar made for a branded commodity, late 19th-early 20th century. Context [57]



Plate 32: Green-blue soda glass ginger beer-type bottle embossed 'J. MOORHOUSE/HULME', mid 19th-early 20th century. Context [57]



Plate 33: Soda glass oval-section bottles embossed '[MAN]CHESTER/... ROYAL/...MARY', mid 19th-early 20th century. Context [57]

Pottery



Plate 34: Refined whiteware with under-glaze transfer-printed decorated naval mess basin (rounded bowl), mid-late 19th century, rim diameter: 170mm. The '8' refers to a mess number. Context [57]



Plate 35: Refined white earthenware with sponge decorated intact saucer, c. 1830–1900, rim diameter: 152mm. Context [57]



Plate 36: Mid late 19th-century English stoneware with Bristol glaze cylindrical bottles. Right, intact ale-type bottle, height: 215mm; left, stamped 'KENNINGTON/GRIMSBY'. Context [57]



Plate 37: Nineteenth-century English salt-glazed stoneware bottles. Left, Ginger beer bottle with a variant rim type and an internal Bristol glaze. Centre, a tall Brunswick-type blacking bottle, stamped '... BOTT[LE] WARRANTED NOT TO ABSORB/J. BOURNE/-/PATENTEE'. Joseph Bourne owned several Nottinghamshire potteries from c. 1812 onwards. Right, ginger beer bottle, stamped '*JAMES CALVERT*/NORTH SHIPLEY POTTERY,/<>/LANGLEY MILLS/NEAR NOTTINGHAM/VITRIFIED STONEWARE/MANUFACTUR...'. James Calvert owned this pottery c. 1863–70. Context [57]

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

