

Archaeological Investigations at The Royal Arsenal, Woolwich. Crossrail Station Box

Interim Statement

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SUMMARY

From 20th September to 16th December 2011 Oxford Archaeology undertook a watching brief on the diversion of utilities and a targeted watching brief (strip, map and sample excavation) on the site of a new Station Box for Crossrail at The Royal Arsenal, Woolwich. The work was commissioned by Berkeley Homes Plc.

The remains of a series of buildings relating to the historic development of the site as The Royal Arsenal were recorded across the area. These remnants of buildings for the most part consisted of foundations, structures and subterranean services that had survived previous remediation and demolition episodes on the site. Towards the western end of the site intact floor surfaces and internal features of a range of buildings labelled as 'Officers' Quarters'/'Official Residences' on historic maps (1749-1930s) were revealed. The intact internal floor surfaces of this semi-basemented building survived as they were considerably lower than the ground floor levels of surrounding structures where more significant truncation had occurred. This residential area was bordered to the east and south by a curtain wall. The lower level of the construction of these buildings may be due to the presence of an ancient palaeochannel, which underlies them and crosses the site from south to north in this location. The approximate extent and upper levels of this feature were investigated and it will be the subject of further work during bulk excavation of the site in 2012.

Moving across the site to the east, the footings of a 'Pattern Room' building and substantial associated drainage culverts and tanks as well as the base of a Water Tower and the remains of Police Barracks were recorded. These structures can be identified on historic maps dating from the 19th century.

At the eastern extent of the site two further historic buildings were recorded, both retaining elements relating to industrial processes. To the north the southernmost parts of Gunnery Terrace were investigated and to the south, a similarly northwest-southeast orientated building of unknown function present on the site from approximately 1845 until the 1930s was recorded.

The natural gravel was revealed extensively across the site but it had been truncated by the activity in the post medieval period and no evidence for earlier archaeological deposits was observed.

1 INTRODUCTION

1.1 Scope of work

- 1.1.1 From 20th September to 16th December 2011 Oxford Archaeology (OA) undertook a general watching brief on the diversion of utilities and a targeted watching brief (strip, map and sample excavation) on the site of a new Station Box for Crossrail at The Royal Arsenal, Woolwich. The work was commissioned by Berkeley Homes Plc.
- 1.1.2 The proposals comprised a station box (approximately 14–16m deep x 22–27m wide and 256m long internally) and shafts at both ends to ground level. The station box is being constructed using diaphragm walls and piling. Significant ground reduction adjacent to the box and de-watering of the site will also be required in order to enable the construction. It should be noted that when heights on this project are given as Tunnel Datum (ATD) these equate to Ordnance Datum +100.
- 1.1.3 Historic building recording of structures on the site (Gunnery Terrace) which have been demolished was undertaken by Museum of London Archaeology (MOLA). OA were tasked with carrying out a general watching brief on the diversion of utilities and a targeted watching brief (strip, map and record) on the stripping and bulk excavation of the main area.
- 1.1.4 Details of the project, background, outline methodologies and scopes of work are contained in *Woolwich Station. Site-Specific Archaeological Written Scheme of Investigation* (SSWSI document ref.: CR-PN-GRE-EN-SP-00001 version 7) (MOLA 2011). In response to the SSWSI OA produced a *Site Specific Method Statement for Archaeological Fieldwork* (OA 2011) providing information on OA site-specific methodologies and practices and company procedures to be employed on the project.
- 1.1.5 This report is an Interim Statement in line with Crossrail specifications and is intended to be a brief statement outlining the work undertaken and a summary of the results.

1.2 Location, geology and topography

- 1.2.1 The Woolwich Station site is located immediately north of Plumstead Road and extends in an east west direction across Arsenal Way, in the London Borough of Greenwich. The area is crossed by Arsenal Way and Cornwallis Road and includes remains of the Woolwich Arsenal, which is currently in the process of regeneration. The site is located 220m north of the existing Woolwich Arsenal Station, which is located on the Southeastern mainline service to Gravesend and Dartford; and on the Docklands Light Railway (DLR) service from Woolwich Arsenal to Bank. The site is located c 400m south of the River Thames (Fig.1 Plate1).
- 1.2.2 Historically the site has been in a military area since the 16th-century, armaments manufacture and associated logistical facilities had extended onto the site by the early 18th-century and the first barracks were built in 1719. By the 19th-century the site had been entirely covered by military and industrial buildings associated with the Royal Arsenal. The former Royal Arsenal is now being regenerated with housing and other amenities.

- 1.2.3 Woolwich lies on a promontory of bedrock (Thanet Beds) protruding into the floodplain (alluvium). This higher and dryer ground would have made the area attractive for settlement throughout prehistoric and historic times. The site is situated on river terrace sand and gravel which has been truncated by post medieval and modern activity and overlain by deposits of made ground and demolition material. The ground level slopes very gently down from 108.8m Above Tunnel Datum (ATD) in the west to 107.5m ATD in the east.

1.3 Archaeological background

- 1.3.1 The archaeological and historical background to the site, past archaeological investigations and potential and relevant background documents are outlined in the SSWSI and are not reproduced here.

2 INVESTIGATION METHODOLOGY

- 2.1.1 This section sets out the specific methods which were applied during the archaeological works.
- 2.1.2 Specific methods for the excavation, specific health and safety issues, programme and lines of communication were discussed and agreed, and generally working relations established between Berkeley Homes, O'Keefe Construction and OA, at the start of the works.
- 2.1.3 The programme for excavation works was led by O'Keefe Construction who conducted the ground works on the site. The main excavation area was divided into 20m square boxes forming a site grid. These boxes were numbered and related to the development grid and were used to reference activity and progress on the site. Progress and order of excavation were determined by various site constraints in particular the need to maintain adequate access and the procedures for dealing with spoil.
- 2.1.4 There was constant liaison and communication at a site level between OA and O'Keefe in order to facilitate the day to day site work and Berkeley Homes were kept fully informed of progress. Berkeley Homes operated a Permit to Dig system with O'Keefe and a sign off system also operated between OA and O'Keefe to monitor archaeological progress and completion on a 'box by box' basis.
- 2.1.5 Excavations started at the west end of site and worked eastwards in 20m wide strips using the grid of 20m square boxes. The excavation was conducted as a 'strip, map and record' excavation rather than full archaeological excavation, the essence of which is that deposits are investigated at a level determined by their relative nature and importance and the amount of archaeological work carried out is that which will be required to adequately understand them.
- 2.1.6 Overburden deposits were removed in stages by O'Keefe using 360° tracked excavators fitted with toothless grading buckets. Excavation proceeded in level spits determined by and supervised by OA. Machine excavation subject to archaeological monitoring proceeded until archaeological remains in the form of structures or other features were revealed or the top of natural geology was discovered, whichever was encountered first.

- 2.1.7 Any archaeological horizons or features were then cleaned as necessary to achieve clear definition of archaeological features and deposits. Spoil from around foundations and structural deposits were removed by the ground works contractor using a machine or hand tools as directed by OA.
- 2.1.8 Hand investigation, survey and recording of archaeological features was then undertaken by OA using the methodologies outlined in the SSWSI and the OA Method Statement. Investigation was at a level appropriate to the remains and was sufficient to characterise and understand them.
- 2.1.9 While any hand excavation was carried out by OA the stripping of overburden continued in subsequent 20m boxes. Stripping, bulk excavation and archaeological investigation ran concurrently.
- 2.1.10 When archaeological investigation or recording in a box had been completed an assessment was made as to whether further archaeological remains or information could be revealed at lower depth in that area. If yes, further machine excavation took place under OA supervision and the process above was repeated. This continued within a box until all archaeological remains had been dealt with at which point OA 'signed off' that box and O'Keefe proceeded to excavate to formation level.
- 2.1.11 As anticipated, in much of the site a single strip to the first significant horizon was all that was required with further observations of foundation character / depth etc being made when obstructions were removed.
- 2.1.12 The excavation formation level for this phase of works was 105m ATD which generally meant approximately 3m depth of bulk excavation from the existing ground level. Excavation edges were battered for safety where necessary. At the 105m level there were a small number of deeper foundations which were 'tested' with machine investigation sufficient to characterise them for the archaeological record.
- 2.1.13 Historic maps and a borehole survey previously undertaken had indicated the possible presence of two palaeochannels at depth running roughly north south at either end of the site. At the eastern end of the area no evidence for a channel was identified but at the western end a wide feature was recorded in the base of the excavation at the 105m ATD level. It was investigated within a pair of discreet slot trenches, excavated to a maximum depth of 1m by machine under archaeological supervision in order to determine its extent. The upper section of the channel was then archaeologically cleaned to reveal its profile and determine the nature of the deposits. For logistic and health and safety reasons the full depth of what appears to be a deep channel could not be excavated at this stage but a further targeted investigation is planned in conjunction with the bulk excavation programme during 2012.
- 2.1.14 A watching brief was also undertaken on excavations below 1m depth in a trench which extended around the eastern end of the site for the diversion of services. OA investigated and recorded any archaeological remains in this area to the same standard as the main excavation but did not supervise the machining. OA recording was undertaken within the programme and scope of the trenching.

2.1.15 The archaeological works were monitored by Berkeley Homes Plc, Nick Elsdon (MOLA) their Archaeological Consultant and Mark Stevenson from the Greater London Archaeology Advisory Service who advise Greenwich Borough Council on archaeological matters. Regular meetings were held on site to discuss and review findings and progress during the works.

3 AIMS AND OBJECTIVES

3.1 General

3.1.1 The aims and objectives of the investigations are presented in the SSWSI and are reproduced below. The overall objectives of the investigation were to identify, excavate and record any archaeological remains on the site, which would be adversely impacted by the Woolwich Station works.

3.2 Specific aims and objectives

3.2.1 The general watching brief had the potential to recover:

- Evidence of the construction and development of non-listed historic buildings on the site
- Remains of previously demolished buildings associated with earlier phases of the Royal Arsenal.

3.2.2 The targeted watching brief during the removal of the made ground had the potential to recover:

- Remains of previously demolished buildings associated with earlier phases of the Royal Arsenal. This could include evidence of foundations and unusual practices (eg the use of former gun carriages as foundation base plates which has been noted elsewhere at the site).
- Any post-medieval convict burials.
- Any evidence of the post-medieval buildings on the site prior to the construction of the Arsenal.

3.2.3 The targeted watching brief (strip, map and record) following removal of the made ground had the potential to recover:

- Burials associated with the Roman cemetery on the Arsenal site.
- Evidence of the former watercourse crossing the site, and whether it is natural or manmade.
- Any evidence of outlying settlement or activity associated with the Iron Age possible oppidum or subsequent Roman occupation.
- Any evidence of the Roman road, if it is present on the site.
- Any evidence of the pre-Arsenal later medieval and post-medieval use of the site.

4 FINDS SUMMARY

4.1.1 Finds of particular note consisted of 3 naval cannon, one cannon ball and a small assemblage of pottery retrieved from the backfill of the palaeochannel. The cannon were retained on site by Berkeley Homes Plc and the remainder of the finds were removed to storage at OA offices in Oxford. It is anticipated that the cannon will be retained by Berkeley Homes and incorporated into the landscape design for the Royal Arsenal site.

- 4.1.2 The cannon (324, 325 and 326) were all 32 pounders and of sea service issue. They dated from 1834 to the late 1850s and had their muzzles truncated as part of their decommissioning from active service. Cannon 324 (Plate 8) featured a V.R. inscription uppermost = Victoria Regina (pers.comm. Paul Evans, Library and Archives: Firepower Museum).
- 4.1.3 A 24lb/12kg, 8" diameter cannon ball was retrieved from the ground reduction works around Structure 73. It was hollow with an open filler sprue and dated from c.1789-1815. (Pers. comm.-Allan Marcuson, Explosive Ordnance Supervisor: Macc International).
- 4.1.4 Pottery retrieved from backfill 242 of the Palaeochannel has been dated to 1720-1780 (Pers. Comm. J.Cotter, OA) and is consistent with the infilling of the upper levels of the palaeochannel and the subsequent construction of the Officer's Quarters in that area from 1749 onwards.

5 RESULTS

5.1 General soils and ground conditions

- 5.1.1 The main features recorded on the site are described below and illustrated on the site plan (Fig.2).
- 5.1.2 Natural river terrace mid orange sand and gravel was observed throughout the site. This was overlain by 18th and 19th century made ground deposits which in turn were overlain by 20th century demolition layers and the make up and concrete and tarmac surfaces of the modern temporary car park. The upper horizon of the natural gravel was extensively truncated by the post medieval activity and with the exception of the channel described below no earlier features pre-dating the Royal Arsenal were identified. The natural was generally approximately 1-1.5m below the current ground surface although at the western end of the site the truncation was more extensive and the natural horizon was 3-3.5m below current ground level, roughly coinciding with the 105m ATD formation level for this phase of works.

5.2 Palaeochannel

- 5.2.1 Towards the western end of the site a NE-SW aligned feature (239) was revealed cutting through the natural sand and gravel at approximately the 105 ATD formation level (Plate 2).
- 5.2.2 This roughly 40m wide feature corresponds with a channel shown on historic mapping and indications of channel deposits recorded in a borehole (WP142R) just to the north of the excavation which suggest the presence of an ancient watercourse running across the site. This area had been heavily truncated by the construction of Royal Arsenal buildings but the surviving uppermost deposits of this feature were recorded. A brick culvert in the upper fills appears to represent an attempt to contain the water from the channel prior to Arsenal related construction. A further stage of work is planned to take place during the further bulk reduction of the area in 2012 to examine earlier fills of the channel. The results of this future investigation will be reported in a further interim statement following completion of the work.
- 5.2.3 A possible second palaeochannel suggested from the results of boreholes at the eastern end of the site was not observed during the works.

5.3 Officers' Quarters (Structures 171, 174 and 176)

- 5.3.1 Situated towards the west of the site the remains of buildings referred to as 'Officers Quarters' were revealed. These buildings were remodelled and extended over a period of years following the initial construction of the complex in the mid 1700s. The buildings were aligned NE-SW and appear to have been constructed with floors at slightly lower levels than other buildings in the general area which may be a consequence of a natural depression caused by the presence of the underlying palaeochannel (239). The existing stream was culverted (117) as part of the foundation (176) construction of this building. The base of the outer walls of the foundation (119) was recorded at a depth of 1.8 metres below the formation level of the present site (105 m ATD) presumably to account for the softness of the underlying ground. The interior cross walls were of a lesser depth at 0.4m below the formation level. Pottery retrieved from the backfill of the foundation construction is of a date range 1720-1780.
- 5.3.2 The building was recorded in two separate stages of excavation as it was revealed by the site strip. The southern part is referred to as Structure 174 with the northern revealed area being Structure 171 (Plates 3 and 4). The building continued beyond the limit of excavation to the north.
- 5.3.3 Structure 174 was recorded as being 10m in width NW-SE, directly over the footprint of foundation 119 and for the most part was constructed of red brick with a lime mortar bonding. The average level of the revealed walls and floors was between 105.6 and 105.76m ATD. All interior partition walls ran parallel or at right angles with the outer walls except dog-legged wall 17 which may have served as a stairwell. The floor surfaces were probably all originally of yellow Flemish brick, laid on edge, aligned with the outer walls (floors 14, 19, 20, 24 and 26) or in a herringbone pattern (16) or as gullies (15 and 25). At a later date these floors had mainly been overlain or replaced with concrete screed floors or concrete floor tiles.
- 5.3.4 On the eastern side two probable thresholds were observed constructed of granite block (7) and Greensand block (13), although no external yard surfaces were evident relating to these features.
- 5.3.5 A 5m wide external yard area was formed to the west of Structure 174 between its outer westernmost wall (36) and the eastern extent of a further block in the complex, Structure 328. This yard featured a mixture of cobbled and flag-stoned surfaces on either side (46, 47 and 48) which sloped towards a central gully. In common with the inside of the building the surfaces had been patched with and in some places overlain by concrete screed. At the northern extent of the yard a rectangular coal store was observed with a brick floor (44) with a threshold leading into the western side of Structure 174.
- 5.3.6 The northern area of the Officers' Quarters (Structure 171) showed more evidence of remodelling of the building over time. Mixtures of floor surfaces, often within the same room, were observed: Flemish brick (172), possibly original, granite setts (131, 132 and 133), flagstones (128 and 147), 'chocolate block' concrete tiles and patches and whole floors of concrete screed. Three hearth/fireplaces were observed (134, 145 and 152) as were three toilet cubicles (137, 148 and 161).

- 5.3.7 The northern extent of the building (171) was 7.5m wider in plan to the west than the central/southern extent (174). It seems likely that this is a result of extensions being made to the original footprint over time, although interpreting the progression of walls or even the original layout is complicated by the fact that the main load-bearing walls (124, 126, 127, 130, 151 and 167) differ from both each other, in terms of brick size and colour and bonding mortars, and from the underlying foundation (176).
- 5.3.8 A quadrangle formed by walls 60, 69 and 78 and on the east side 55, 60 and 66 was recorded as Structure 328 and is shown as a yard-like area on James' plan of 1860-63. The rectangular building within its north eastern corner (67) is clearly visible on the historic plan as are those to the south (Structure 177) and north (Structure 178).
- 5.3.9 Structure 180 in the north-western corner of the current site comprised a basemented and flagstone floored room (90) accessed by a stairwell at its northern edge. A small building (Structure 179) lay immediately to the east of Structure 180 and was not visible on the historic map progressions and yet appeared to be constructed of broadly contemporary materials with later additions.
- 5.3.10 To the east of the area of 'Official Residences' formed by the complex of structures described above Wall 51 ran across site and returned at its southern end towards the south-west forming an eastern perimeter to the domestic ranges. Wall 51 was buttressed and stepped on its eastern side and faced towards the Residences to the west. It was surmounted by later Wall 52.

5.4 Pattern Room, Water Tower and Police Barracks (Structures 73, 190, 334 and 331)

- 5.4.1 In the central area of the site a number of structures which could be recognised on historic mapping were recorded. Structure 73 ('Pattern Room'), orientated NW-SE, measured 68m in length by 18m in width and consisted of a stepped brick foundation laid on a concrete footing. No interior walls or floors survived previous site remediation. The northern side of this building was abutted by Structure 181, a likely 20th century addition which consisted of a concrete floored sub-basement room accessed by a stairwell at its eastern side.
- 5.4.2 A similarly aligned Structure (190), to the east of Structure 73, can be seen as a later unattached addition to it and probably performed a similar function.
- 5.4.3 A series of culverts ran on the north side of Structures 73 and 190 and linked with two large brick-built settling tanks, (183 and 186). Both tanks measured 16 x 3m and featured vaulted roofs with access hatches. They were approximately 2m deep (Plate 5).
- 5.4.4 Immediately to the east of Structure 190 the remains of an octagonal Water Tower were revealed (Structure 334). This measured 10.6m in diameter and consisted of 2 concentric octagonal yellow brick walls overlying a concrete footing (Plate 6).
- 5.4.5 To the south of Structure 190 brick Structure 331 was constructed of red/yellow bricks on a concrete base. Walls 199 and 200 appear to form the footprint of the northern wing of the 'Police Barracks' as depicted on the 1860-63 historic plan with Wall 193 fitting the alignment of the northern wall of the main building.

5.5 Southern extent of Gunnery Terrace (Structures 332 and 333)

- 5.5.1 Structure 332 comprised the remains of a building of uncertain function located to the south of Gunnery Terrace. Two walls greater than 60m in length and 8m apart on a NW-SE alignment were recorded. Neither the western nor the eastern extent of the building could be established: The western extent had been truncated by a large NW-SE aligned sewer pipe trench of probable late 20th century date with the eastern extent continuing beyond the eastern site boundary.
- 5.5.2 A roughly 'T'-shaped structure between the walls, measuring 4.5 x 5.1m consisted of yellow brick walls surrounding a concrete floor (275) which was covered in metal (Fe) working debris. Apart from a patch of concrete relating to a service pipe (268) no other internal features remained between the walls but the southern wall was abutted on its southern side by a series of brick-built hearths (269, 270, 271 and 278) which contained charcoal/ash and a similar hearth-like feature (272) stood alone 5m to the south. It is probable therefore that this area was also internal to the overall structure.
- 5.5.3 Structure 333 to the north of Structure 332 consisted of a large rectangular building (Structure 282) with a later extension (297) abutting its south-western corner. Structure 333 represents the southern extent of Gunnery Terrace.
- 5.5.4 The bases of several walls representing earlier phases of Gunnery Terrace were recorded within the footprint of Structure 333. All were aligned NE-SW or SE-NW.
- 5.5.5 A series of furnace/hearth structures (283 - 286, 302, 315 and 316) (Plate 7) were recorded along the southern wall of Structure 282. These were all similar in form, having an apsidal northern end and a sloping stoke-hole to the east and measured 2 x 1.5m in plan. All contained a black clinker-like deposit. Structure 313, partially revealed beneath later concrete and Structure 293, partially exposed at the northern limit of excavation, are likely to have been similar features. A larger furnace-like construction (Structure 317) was also partially uncovered in the south-western corner of the building. A series of concrete, probable machine bases, some displaying fixing bolts were recorded. The most interesting of these contained a row of 3 naval cannon, aligned NW-SE. The Cannon (324 (Plate 8), 325 and 326) had been set vertically within a 4m deep block of concrete with their muzzles uppermost and level with each other.
- 5.5.6 The southern extension to the building (297) contained several concrete machine bases and an alignment of 5 hearths which abutted the inner face of the southern wall. Hearths 303 - 307 were constructed on concrete bases with yellow bricks that were blackened internally.

5.6 Utilities trench

- 5.6.1 A utilities trench encircled the eastern portion of the site, in a 'U'-shape, diverting services from Arsenal Way to the north, around the Station Box and then back to Arsenal Way at the junction with Plumstead Road to the south. The northern run of the trench revealed a series of brick structures beneath the extant concrete floor surface of Gunnery Terrace., including a large, east-west aligned flue (215). In the north side of the trench a series of NW-SE walls and buttresses with elements of remodelling formed an earlier internal partition wall to Gunnery Terrace.

- 5.6.2 In the eastern and southern areas of the utilities trench fairly modern make-up deposits overlaid a continuation of wall 260, the building to the south of Gunnery Terrace. A feature (252) with silt-rich fills was initially thought to be a ditch/channel but is now thought to be a discreet pit, possibly a gravel quarry, as it was not observed continuing into the main excavation area immediately to the west.

6 REPORTING

- 6.1.1 This report is an Interim Statement in line with Crossrail specifications and is intended to be a brief statement outlining the work undertaken and a summary of the results. Summaries have also been prepared and will be submitted to London Archaeologist, Museum of London and other appropriate journals.
- 6.1.2 It has been agreed by Crossrail, Berkeley Homes and English Heritage that further post excavation work, analysis and publication which may be appropriate for this site will be included in the overarching framework (EH 2004) which exists to take the accumulated archaeological investigations undertaken at the Royal Arsenal forward to publication.

7 CONCLUSION

- 7.1.1 The archaeological investigation established that the site area had been subject to extensive disturbance and truncation relating to the construction of buildings forming part of the Royal Arsenal. With the possible exception of an ancient palaeochannel, which will be subject to further investigation, any deposits or features which might have been present from earlier phases of activity have been removed. The buildings of the Royal Arsenal have in turn been subject to demolition and remediation and have survived to varying degrees. The lower lying floors and surfaces of the Officers' Quarters complex at the western end of site showing the best levels of preservation. Evidence for both the domestic life of the Arsenal and its industrial function as exhibited in the hearths and furnaces recorded in the remains of the southern extent of Gunnery Terrace has been collected. Many of the structures revealed can be traced on historic maps of the site dating from 1749-1930 and the archive will add to the wealth of historic information collected from the wider, extensive redevelopment of the site.

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
1	Wall	2	0.46	3	Yellow/Pink Brick 210x102-105 x60mm (8¼x4-4½x2⅜") Off-white Lime Mortar	E-W aligned Wall at northern edge of Cellar 327 (continuation of 92).	180
2	Wall	1.5	0.2	3.2	Yellow/Pink Brick 210x105x64mm (8¼x4½x2½") White Lime Mortar	E-W aligned Wall of Cellar 327, western continuation of Wall 2 and 92?	180
3	Wall		0.46	1	Red Brick 215x100x60mm (8½x4x2⅜") White Lime Mortar	Stairwell Wall at north of Cellar 327.	180
4	Steps	0.45	0.3	1	Green Sand Block 1000x300x450mm (39¾x11¾x17¾")	Staircase into Cellar 327	180
5	Wall	0.3	0.23	2.07	Red/Orange/ Yellow Frogged Brick 230x116x70mm (9x4¼x2¾") Portland-rich Mortar	NE-SW external Wall. On eastern edge of structure. Butting Wall 6 along western edge.	174
6	Wall	0.12	0.17	2.64	Granite Sets 300-360x170-180x 90-120mm (11¼-14x6¾-7x 3½-4¾") Portland-rich Mortar	NE-SW Wall. Internal face of Wall 5.	174
7	Block	0.2	0.35	2.59	Granite Block 2590x355x200mm (103x14x8") Portland-rich Mortar	NE-SW aligned threshold	174
8	Floor		3.08	8.97	Granite Setts 205x95x?mm (8x3¾x?) Portland-rich Mortar	Floor Surface with a T-shaped concrete lined central aperture of unknown function	174
9	Post	0.45			330mm (13") Diameter	Timber Post	174
10	Wall		1.8	2.18	Red/Yellow Brick 220x100x?mm (8⅝x4x?) Lime Mortar	External chimney base?	174
11	Wall	0.32	0.12	3.49	Red/Yellow Brick 220x90x70mm (8⅝x3½x2¾") Lime Mortar	NE-SW Wall butted by chimney base 10	174

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
12	Wall	0.44	0.34	4.18	Red Brick 230x100x80mm (9x4x3 ¹ / ₈ "") Lime Mortar	NE-SW Wall at east of structure	174
13	Block	0.2	0.39	1.42	Green Sand Block 1420x390x200mm (56x15 ¹ / ₄ x8"") Lime Mortar	Threshold on the eastern edge of the structure	174
14	Floor		3	5.24	Yellow Flemish Brick 150x70x40mm (6x2 ³ / ₄ x1 ¹ / ₂ "")	Bricks laid NE-SW	174
15	Gully		0.29	5.27	Yellow Flemish Brick 160x70x40mm (6 ¹ / ₄ x2 ³ / ₄ x1 ¹ / ₂ "")	NW-SE Floor Gully	174
16	Floor		1.7	5.29	Yellow Flemish Brick 160x70x40mm (6 ¹ / ₄ x2 ³ / ₄ x1 ¹ / ₂ "")	Herringbone Pattern within single brick edging	174
17	Wall		0.32	4.29	Orange/Red/ Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Hard white Mortar	Dog Legged Wall, possibly part of stairwell, leading to doorway at western end of Wall 30	174
18	Wall	0.34	0.68	5.18	Red Brick 230x95x60mm (9x3 ³ / ₄ x2 ¹ / ₂ "") Compact Lime Mortar	NE-SW Wall, part of outer eastern wall of structure	174
19	Floor		1.16	1.35	Yellow Flemish Brick 160x70x40mm (6 ¹ / ₄ x2 ³ / ₄ x1 ¹ / ₂ "")	Herringbone Pattern, butting Wall 23	174
20	Floor		0.98	1.3	Yellow Flemish Brick 155x70x40mm (6 ¹ / ₈ x2 ³ / ₄ x1 ¹ / ₂ "") 230x80x70mm (9x3 ¹ / ₄ x2 ³ / ₄ "")	NE-SW aligned Flemish Bricks bordered by larger bricks at western edge	174
21	Wall	0.48	0.6	2.7	Red Brick 223x100x70mm (8 ³ / ₄ x4x2 ³ / ₄ "") Compact Lime Mortar	NE-SW Wall, part of eastern exterior edge. Continuation of Wall 18	174
22	Wall	0.15	0.45	2.52	Red Brick 165x100x70mm (6 ¹ / ₂ x4x2 ³ / ₄ "") Compact Lime Mortar	NW-SE Wall, possible insertion between Walls 18 and 21	174
23	Wall		0.22	1.65	Red Brick 203x? x56mm (8x? x2 ¹ / ₄ "") Compact Lime	NE-SW Wall, internal partition wall of structure	174

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Mortar		
24	Floor		1.32	5.18	Yellow/Red Brick 230x70mm (9x2 ³ / ₄) Compact Lime Mortar	Bricks laid on edge NE-SW	174
25	Gully		0.25	4.69	Yellow Flemish Brick 150x70x40mm (6x2 ³ / ₄ x1 ¹ / ₂)	NW-SE Floor Gully, incorporating drain with Iron Screen on top between floors 24 and 26/164	174
26	Floor		3.36	4.43	Yellow Flemish Brick 160x70x40mm (6 ¹ / ₄ x2 ³ / ₄ x1 ¹ / ₂) Compact Lime Mortar	Bricks laid on edge NE-SW. Same as 164	174
27	Wall		0.3	4	Purple/Orange Unfrogged Brick (Unable to Measure)	NW-SE Wall. Internal partition within structure	174
28	Wall		0.58	2.92	Red Brick (Unable to Measure)	NE-SW Wall. Internal partition wall within structure	174
29	Floor		1.15	2.6	Frogged Bricks 235x110x60mm (9 ¹ / ₄ x4 ¹ / ₄ x2 ³ / ₈)	Bottom of Stairwell formed by Wall 17	174
30	Wall		0.36	5.9	Pink/Red Brick 224x102x60mm (8 ⁷ / ₈ x4x2 ³ / ₈) Hard Mid Cream Lime Mortar	NW-SE Wall. Internal partition wall with a 1.2m wide doorway at western end	174
31	Wall		0.28	5.34	Pink/Red Brick 224x102x60mm (8 ⁷ / ₈ x4x2 ³ / ₈) Hard Mid Cream Lime Mortar	NE-SW Wall. Internal partition wall. Appears to butt Wall 35 at southern end	174
32	Hearth		0.35	0.45	Pink/Red Brick 224x102x60mm (8 ⁷ / ₈ x4x2 ³ / ₈) Hard Mid Cream Lime Mortar	Wall stubs on western edge of Wall 31. Possibly forming base of hearth	174
33	Wall		0.22	1.75	Yellow/Purple/ Pink Brick 120x110x60mm (4 ³ / ₄ x4 ¹ / ₄ x2 ³ / ₈) Hard Grey-White Mortar	NE-SW Wall. Short stretch wall possibly related to Hearth 32	174
34	Wall		0.23	6.42	Yellow Frogged Brick 220x107x60mm	NE-SW Wall. Internal partition of structure. Parallel to Wall 31.	174

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					(8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ " Grey Friable Mortar	Butts Wall 35 at southern end	
35	Wall		0.36	9.1	Purple/Orange Brick 224x102x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ " Hard Mid Cream Lime Mortar	NW-SE Wall. Internal dividing wall. Butting Wall 36 to the West and Wall 12 to the East	174
36	Wall		0.52	18.04	Orange/Red/ Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ " Hard white Mortar	NE-SW Wall. Original external western wall of structure. Corresponds with original foundation footing	174
37	Wall		0.38	3.09	Pink/Yellow/Red/ Orange Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ " Cream Lime Mortar	NW-SE Wall. Internal partition wall towards the south of the structure	174
38	Wall		0.33	6.32	Mid Purple Brick 215x100x60mm (8 ¹ / ₂ x4x2 ³ / ₈ " Cream Lime Mortar	NW-SE Wall. Continues to the west as Wall 37. Internal partition wall	174
39	Wall		0.5	3.94	Pink/Red Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ " Off White Lime Mortar	NE-SW Wall. Underlying Floor 31 and a concrete floor to the east	174
40	Wall	0.07	0.33	1.5	Pink/Red Brick 210x70x70mm (8 ¹ / ₄ x2 ³ / ₄ x2 ³ / ₄ " Off White Lime Mortar	E-W Wall. Truncated to the east. Probably forming internal partition of structure	174
41	Floor				Red Brick 225x110x65mm (8 ⁷ / ₈ x 4 ¹ / ₄ x 2 ¹ / ₂ " Off White Lime Mortar	Fragmented Brick Surface.	174
42	Wall		5.1	8.76	Red Brick 210x100x50mm (8 ¹ / ₄ x4x2" Lime Mortar	Original western wall of structure. The same as Wall 163	174
43	Wall		0.4	1.51	Yellow/Red Brick 210x100x60mm (8 ¹ / ₄ x2x2 ³ / ₈ " Lime Mortar	NW-SE Wall. External to Structure 174 on the west side. Dividing Wall between Floor 44 to the north and 46/47/48 to the south. Continues to the west as Wall 45	175
44	Floor		3	5	Yellow Brick 220x60x60mm	Brick Surface. Floor of coal cellar overlain by	175

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					(8 ⁵ / ₈ x2 ³ / ₈ x2 ³ / ₈ "	layer of in situ coal	
45			0.4	2	Yellow/Red Brick 210x100x60mm (8 ¹ / ₄ x2x2 ³ / ₈ " Lime Mortar	NW-SE Wall. Forming northern limit of yard area. Butts Wall 50. Continues to the east as Wall 43	175
46	Floor		2.08	2.45	Flagstone 600-740x450mm Granite Setts ?	Flagstone/Granite Sett Surface. Forming part of yard surface to west of Structure 174. Sloping towards yard gully to the east	175
47	Floor		2.4	15.07	Granite Setts ?	Granite Sett Surface. Forming part of yard surface to west of Structure 174. Sloping towards yard gully to the east	175
48	Floor		2.25	10	Granite Setts Random Sized Portland-rich Mortar	Granite Sett Surface. Area of yard to the north was covered in concrete. Forming part of yard surface to west of Structure 174. Both portions slope towards central gully to the west.	175
49	Floor		1.38	4.57	Yellow Flemish Brick 160x70x45mm (6 ¹ / ₂ x2 ³ / ₄ x1 ³ / ₄ "	Flemish Brick Surface. Internal floor structure formed by Walls 54 and 57	175
50	Wall		0.34	9.23	Red/Pink Brick 215x130x60mm (8 ¹ / ₂ x5 ¹ / ₈ x2 ³ / ₈ " Hard Lime Mortar	NE-SW Wall. Parallel to Walls 42 and 163. Forms western wall of coal cellar (Floor 44). Probably western extension to Structure 171/174. Probably continues to north as Wall 130 and south as Wall 55/56	328
51	Wall	1.58	0.93	21.67	Yellow/Red Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ " Soft Lime Mortar	NE-SW/NW-SE Wall. Overlain by Wall 52. Buttress on eastern edge. Delineates area of Officers Quarters to the north and west (Building 16)	175
52	Wall		0.82	18.02	Orange/Red Brick 220x105x70mm (8 ⁵ / ₈ x4 ¹ / ₈ x2 ³ / ₄ "	NE-SW Wall. Repair/rebuild of Wall 51. Earlier wall has	175

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Portland-rich Mortar	been re-patched with this later brick work and surmounted with new wall	
53	Void	Void	Void	Void	Void	Void	Void
54	Wall		0.3	8.35 NW - SE	Pink/Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Hard White Lime Mortar	Wall enclosing Flemish Brick Floor 49. Same as 57	175
55	Wall	0.8	0.45	10.83	Red Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Off White Lime Mortar	NE-SW Substantial Wall. Forms part of eastern wall of Structure 328. Continuation of 50 and 56 to the north. Forms western edge of outer yard to the west of Structure 174	328
56	Wall	0.16	0.39	1.6	Yellow/Red Frogged and Unfrogged Brick 220x95x50mm (8 ⁵ / ₈ x3 ³ / ₄ x2"") Portland-rich Mortar	NE-SW Wall. Rebuilt portion of wall between Wall 50 and 55	328
57	Wall				Pink/Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Hard White Lime Mortar	Wall enclosing Flemish Brick Floor 49. Same As 54	175
58	Wall		0.26	1.81	Yellow/Red Brick 220x100x55mm (8 ⁵ / ₈ x4x2 ¹ / ₈ "") Lime Mortar	NE-SW Wall. Spur wall for a doorway. Connects Wall 60 to the north, Walls 54 and 57 to the south	177/328
59	Floor		1.53	2.3	Yellow/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Unmortared	Brick Surface. Possible cellar?	177/328
60	Wall		0.33-0.45	23.42	Yellow/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Off White Lime Mortar	NW-SE Wall. Main southern wall of structure	177/328
61	Wall	0.25	0.22	2.46	Yellow/Red Brick 230x110x60mm (9x4 ¹ / ₄ x2 ³ / ₈ "") Off White Lime Mortar	NE-SW Wall. Encloses the room containing Floor 59 with 58 to the east and 60 to the north	177/328
62	Wall		0.23	1.2	Yellow/Red Brick 230x110x60mm (9x4 ¹ / ₄ x2 ³ / ₈ "")	NW-SW Wall. Short length of wall bonded to the west side of Wall 61	177/328

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Off White Lime Mortar		
63	Service	0.14	0.4	11.98	Red Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Off White Lime Mortar	NW-SE Culvert/Drain. Parallel to and to the north of Wall 60	328
64	Wall		0.4	1.3	Red Brick 240x110x70mm (9 ¹ / ₂ x4 ¹ / ₄ x2 ³ / ₄ "") Hard Off White Lime Mortar	NE-SW Wall. Additional wall built to house water pipe	328
65	Service		0.7	2.4	Red/Purple Brick 210x100x70mm (8 ¹ / ₄ x4x2 ³ / ₄ "") Beige Lime Mortar	Culvert recorded at western edge of L.O.E. Block 16	328
66	Service		0.29-0.85	4.4	Yellow/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Off White Lime Mortar	Snaking Drain within structure	328
67	Wall		0.26-0.60	7.06 NW-SE 2.55 NE-SW	Yellow/Red Brick 220x120x70mm (8 ⁵ / ₈ x4 ³ / ₄ x2 ³ / ₄ "") Lime Mortar	Rectangular internal partition in NE corner of structure	178/328
68			0.33	0.51	Yellow/Red Brick 220x120x70mm (8 ⁵ / ₈ x4 ³ / ₄ x2 ³ / ₄ "") Lime Mortar	Internal partition within room formed by Wall 67	178/328
69	Wall	2	0.28-0.8	31.24	Yellow/Red Brick 220x110x70mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₄ "") White Wash (on southern face)	NW-SE Wall. Coursing of wall 10-20° from horizontal with scars of former partitions visible on northern face	178/328
70	Wall	1	0.32	3.39	Yellow Brick 220x100x70mm (8 ⁵ / ₈ x4x2 ³ / ₄ "") Portland-rich Mortar	NE-SW Wall. Fairly modern brick wall with return to NW as Wall 76	178
71	Wall		0.36	7.72+ 2.38+ 10.37	Yellow Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Unpointed White Lime Mortar	Dog-legged Wall. North of and parallel to Structure 328	178
72	Brick Pads	0.3	0.23	0.34	Red Brick 220x110x70mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₄ "") Off White Lime Mortar	Foundation Pads. Use unknown	328
73	Struct		17.9	68.94	Yellow Brick 230x70x100mm	Large rectangular building. Building 15:	184

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					(9x2¾x4") Hard Off White Lime Mortar	Pattern Room and Stores. Appearing in map regressions 1867-1952. Stepped foundation sat on concrete footing	
74	Floor	0.07	1.86	1.93	"Chocolate Block" 100x100x70mm (4x4x2¾") Portland-rich Mortar	Blocked floor between Walls 28 and 30	174
75	Wall	0.09	0.5	0.75	Red Brick 220x110x60mm (8⅝x4¼x2⅜") Hard White Lime Mortar	Wall Foundation?	328
76	Wall		0.26	5.67	Yellow Brick 230x110x70mm (9x4¼x2¾") Portland-rich Mortar	NW-SE Wall. Western return of Wall 70	178
77	Wall		1.14	1.76	Yellow/Orange Frogged Brick 220x110x60mm (8⅝x4¼x2⅜") Hard White Lime Mortar	Small internal partition/alcove	178/328
78	Wall		0.45	4.04	Orange/Red Brick Degraded	NE-SW Wall. Forming western external wall of structure	178/328
79	Service		0.47	2.97	Pinkish/Yellow Frogged Brick 210x110x60 (8¼x4¼x2⅜") Friable Cream Lime Mortar	NW-SE probable Drain butting north side of Wall 69	178
80	Wall		0.25	1.8	Yellow Frogged Brick 220x110x? (8⅝x4¼x?) Yellowish Lime Mortar	NW-SE Wall. Partition wall?	178
81	Wall	0.25	0.33- 0.56	176+ 2.18+ 1.44	Yellow Frogged Brick 210x110x60mm (8¼x4¼x2⅜") Cream Lime Mortar	Internal L-Shaped partition	178
82	Structure		2.5	3.5	Brown/Red Brick 220x110x60mm (8⅝x4¼x2⅜") Off White Lime Mortar	Walls forming room encasing Floor 83	178

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
83	Floor		1.78	2.92	Yellow Frogged Brick 220x90x60mm (8 ⁵ / ₈ x3 ¹ / ₂ x2 ³ / ₈ "") Unbonded	Brick Surface encased by Wall 82	178
84	Wall	0.63	0.3	3.87	Yellow Frogged Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Lime Mortar	NE-SW Wall. Bonded to Wall 112 at northern limit	178
85	Wall	0.18	0.56	2.73	Orange/Purple Frogged Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Hard White Lime Mortar	NE-SW Wall. Continuing alignment of Wall 78 to the south	178
86	Wall	0.16	0.8	6.1	Orange/Purple Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") White Lime Mortar	NE-SW Wall. Wall heading north on the western edge of Wall 69. Faced by Wall 113 to western edge	178
87	Service		1.6	1.95	Red/Pink Frogged Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Portland-rich Mortar	Man Hole	
88	Footing	0.13	0.63	2.01	Purple Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Yellowish Lime Mortar	Foundation	180
89	Walls		0.70-0.98	4.96-5.75	Purple Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Yellowish Lime Mortar	Internal Partition Walls. Part of Structure 180	180
90	Floor		6.72	7.63	Flagstone ≤870x640x40mm	Flagstone Surface within Possible Kitchen 327.	180
91	Wall		0.24	3.9	Yellow/Red Brick 230x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	NW-SE Wall. Internal dividing wall. Room blackened through use	178/180
92	Wall		0.21-0.72	4.30+6.6	Yellow/Red Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Off White Lime Mortar	Wall of Possible Kitchen 327, part of Structure 180	180
93	Hearth		0.63	1.13	Sandstone/Red/Yellow Brick	Fireplace set within Wall 108. Consisting of	180

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					230x120x80mm (9x4 ³ / ₈ x3 ¹ / ₈ "")	Sandstone hearth overlain/replaced by later bricks.	
94		0.06	0.65	1.5	Flagstone 1500x650x60mm	Flagstone fronting Hearth 93	180
95	Hearth	0.25	0.7	2.5	Yellow/Red Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Off White Lime Mortar	Fireplace set within Wall 89	180
96	Slab	0.09	0.45	0.62	Purbeck Marble? 620x450x90mm	Purbeck Marble? Slab of unknown use. Butts southern side of Drain 97	
97	Service		1.05	1.3	Yellow Frogged Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Hard Grey White Lime Mortar	Drain/Manhole	
98	Wall		0.40- 0.9	9.09	Orange/Pink/Red Brick 230x100x60mm (9x4x2 ³ / ₈ "") Off White Lime Mortar	NE-SW Wall. Western wall of Structure 179. May have linked to Wall 85 to the south	179
99	Service		0.4	1.42	Yellow/Red Brick 150x100x60mm (6x4x2 ³ / ₈ "") Grey White Lime Mortar	Curving Drain	178
100	Floor		0.72	1.84	Yellow/Red/Purple Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Beige White Lime Mortar	Brick Surface with concrete resurfacing. Presence of coal dust indicates use as coal store in both phases of use.	179
101	Floor		2.58	2.62	Yellow/Red/Purple Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Beige White Lime Mortar	Floor of a probable coal store	179
102	Walls		0.27- 0.46	3.16+ 3.4	Red Brick 230x100x60mm (9x4x2 ³ / ₈ "") Off White Lime Mortar	Outer wall surrounding Floor 101. Probable coal store combined with Wall 98	179
103	Wall		0.42+0.	1.68+1.4	Orange/Red Brick	Fairly modern wall with	179

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
			58	2	230x100x80mm (9x4x3 ¹ / ₈ "") Portland-rich Mortar	Portland-rich renders on internal faces	
104	Wall	1.3	0.39	6.23	Orange/Red Brick 230x100x60mm (9x4x2 ³ / ₈ "") Off White Lime Mortar	NW-SE Wall. Southern wall of structure	179
105	Service		0.3	1.12	Yellow Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Off White Lime Mortar	Remains of Drain?	179
106	Wall	0.6	0.66	3.16	Purple Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Hard Lime Mortar	NE-SW Wall. Eastern element of structure	179
107	Service	0.5	1.4	2	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Portland-rich Mortar	Fairly modern culvert that appears to truncate south east corner of Structure 179	
108	Wall		0.5-0.6	4.75+ 4.85	Purple/Orange Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Yellowish Lime Mortar	Part of structure. Incorporating Fireplace 93	180
109	Floor		1.12	2.24	Soft Yellowish Mortar	Lime mortar surface	180
110	Wall		0.23	1.87	Brown/Purple Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Off White Lime Mortar	NW-SE Wall. Partition wall	180
111	Wall		0.23	3.45	Purple Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Yellow Lime Mortar	NW-SE Wall. Partition wall	180
112	Wall	0.9	0.36	7.57	Purple/Yellow Frogged Brick 230x100x60mm (9x4x2 ³ / ₈ "") Cream Lime Mortar	NW-SE Wall. Northern most wall of structure	178
113	Wall		0.23	5.27	Yellow Frogged Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Yellowish Lime Mortar	NE-SW Wall	178

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
114	Service		0.4-0.89	13.73	Yellow/Red Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Off White Lime Mortar	NW-SE Culvert. Truncating structure	176
115	Struct		1.88	2.05	Yellow Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Portland-rich Mortar	Aperture and Floor	176
116	Walls		1.17	2.67	Yellow/Pink/Brown Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") White Lime Mortar	Probable chimney base	176
117	Service		0.92	1.2	Yellow/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Grey Lime Mortar	Main NE-SW Culvert/Culvert intersection	176
118	Service		0.34	0.9	Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Beige Lime Mortar	Small N-S Culvert	176
119	Walls		10.59	21.35	Orange/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Hard Lime Mortar	Foundation Walls of southern portion of Building 16 . Circa 1845?	176
120	Wall	1.2	0.47	4.06	Purple/Orange/Red Frogged Brick 210x110x60mm (8 ¹ / ₄ x4 ¹ / ₄ x2 ³ / ₈ "") Grey White Lime Mortar	NW-SE Wall at northern edge of Block 44	
121	Walls		1.92	3.36	Orange/Red Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Grey Lime Mortar	Rectangular Brick Structure at northern edge of Block 44	
122	Struct		1.54 Exter Diam 1.10 Intern Diam		Red Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈ "") Grey White Lime Mortar	Well	
123	Wall	0.4	0.55	2.06	Orange/Purple/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Unpointed Beige Lime Mortar	N-S Wall abutted by Well 122	
124	Wall	0.4	0.6	5.81	Orange/Purple/	NW-SE Wall	171

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Red Brick 230x110x65mm (9x4½x2½") Whiteish Lime Mortar		
125	Wall	0.2	0.45	2.84	Yellow/Red Brick 223x110x60mm (8¾x4¼x2¾") Beige White Lime Mortar	NE-SW Wall	171
126	Wall	0.6	0.35	4.9	Yellow/Red Brick 210x110x60mm (8¼x4¼x2¾") Beige White Lime Mortar	NW-SE Wall. Continuation of Wall 124	171
127	Wall		0.5	7.22+ 0.85	Yellow/Red Brick 220x100x70mm (8⅝x4x2¾") Creamy White Lime Mortar	NW-SE Wall	171
128	Floor		0.95	1.6		Flagstone Surface	171
129	Walls		1.08	1.84	Yellow/Purple/Red Brick 220x110x60mm (8⅝x4¼x2¾") Off White Lime Mortar	Fire surround	171
130	Walls		5.64	8.53+ 4.57	Yellow/Red Brick 220x110x65mm (8⅝x4¼x2½") Creamy White Lime Mortar	Inner room of structure. With entrance in NW corner and rendered inner face	171
131	Floor		2.05	6.58	Granite Sett 170x120x?mm (6¾x4¾x?)	Granite Sett Surface. Partially overlain by concrete. Between Walls 126 and 160	171
132	Floor		0.86	2.9	Granite Sett 190x120x?mm (7½x4¾x?)	Granite Sett Surface. Partially overlain by concrete. Between Walls 130 and 160	171
133	Floor		0.13	0.75	Granite Sett 180x130x145mm (7⅞x5⅞x5¾")	Granite Sett Surface north of Fireplace 134	171
134	Walls	0.15	0.72	1.22	Yellow/Red Brick 230x110x70mm (9x4¼x2¾") Lime Mortar	Fire surround butting Wall 135	171
135	Wall	0.31	0.23	10.86	Yellow Brick 230x115x70mm (9x4½x2¾")	NE-SW Wall at western edge of structure	171

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Lime Mortar		
136	Wall	0.31	0.46	3.25	Red Brick 230x100x70mm (9x4x2 ³ / ₄) Lime Mortar	NW-SE Wall parallel to and south of Wall 124	171
137	Wall		1.2	3.75	Yellow Frogged Brick 230x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄) Beige White Lime Mortar	Toilet Block	171
138	Wall		0.37	0.96	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x4 ¹ / ₈ x2 ³ / ₄) Grey White Lime Mortar	NE-SW Wall. Internal partition wall	171
139	Service	0.7	0.37	1.92	Yellow/Red Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂) Lime Mortar	Curvilinear Drain	171
140	Floor		3.16	3.93	"Chocolate Block" 100x100x70mm (4x4x2 ³ / ₄) Portland-rich Mortar	Blocked floor sloping to drain. Partially overlain with concrete	171
141	Wall		0.46	4.2	Orange/Purple/Red/ Yellow Brick 210x100x60mm (8 ¹ / ₄ x4x2 ³ / ₈) Beige Lime Mortar	NW-SE Internal Wall	171
142	Wall	0.1	2.15	2.24	Yellow/Red Brick 215x100x60mm (8 ¹ / ₂ x4x2 ³ / ₈) Creamy White Lime Mortar	One course of NE-SW Partition Wall	171
143	Wall	0.06	0.22	0.6	Yellow Brick 220x100x60mm (8 ⁵ / ₈ x4x2 ³ / ₈) Portland-rich Mortar	Small NE-SW Partition Wall	171
144	Wall		0.23	1	Yellow Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂) Portland-rich Mortar	Small NW-SE Internal Partition Wall	171
145	Floor	0.07	0.82	1.28	Yellow/Red Brick 230x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄) Unmortared	Fireplace	171
146	Floor		2.31	4.46	Concrete	Concrete Surface	171
147	Floor		5.06	5.87	Flagstone	Surface	171
148	Floor		1.06	1.39	Concrete	Surface of toilet cubicle	171

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
149	Wall		0.27	2.47+ 4.07	Yellow/Red Brick 210x100x65mm (8¼x4x2½") Creamy White Lime Mortar	L-Shaped Internal Partition Wall	171
150	Wall		0.28	8.87	Yellow/Red Brick 210x105x65mm (8¼x4½x2½") Lime Mortar	NW-SE Internal Partition Wall	171
151	Wall		7.9	14.08	Orange/Red/ Purple Brick 220x100x60mm (8⅝x4x2⅜") Creamy White Lime Mortar	Load Bearing Wall	171
152	Floor	0.01	0.5	0.98	Black/Yellow Tiles 150x100x75mm (5⅞x4x3") Red Brick 105x105x10mm (4⅛x4⅛x⅜")	Probable Hearth	171
153	Floor		4.07+4. 97	5.5	Concrete	Concrete Surface	171
154	Floor		0.77	1.61	Concrete	Concrete Surface	171
155	Floor		1.5	6.8	Concrete	Concrete Surface	171
156	Floor		3.25	6.4	Concrete	Concrete Surface	171
157	Floor		3.11	5.42	Concrete	Concrete Surface	171
158	Floor		3.04	4.57	Concrete	Concrete Surface	171
159	Floor		0.38	1.3	Yellow Tile 150x80x10mm (5⅞x3⅛x⅜") Grouted	Remnants of Tiled Surface. Overlying Floor 156	171
160	Wall		1.02	5.05	Yellow Sand Ashlar Block 1012x320x?mm 39¼x12½X?) Yellow/Purple Frogged Brick 220x110x60mm (8⅝x4¼x2⅜") Creamy Lime Mortar	Possibly earlier entrance way/portico to Building 16?	171
161	Floor		0.95	1.55	Concrete	Concrete Surface	171
162	Wall	0.6	0.35	2	Yellow/Red Brick 220x100x60mm (8⅝x4x2⅜") Lime Mortar	NE-SW Wall at the north of the structure	171
163	Wall		5.1	8.76	Red Brick 210x100x50mm (8¼x4x2")	Original western wall of structure. The same as Wall 42	174

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Lime Mortar		
164	Floor		3.36	4.43	Yellow Flemish Brick 160x70x40mm (6¼x2¾x1½") Compact Lime Mortar	Bricks laid on edge NE-SW. Same as 26	171
165	Wall		0.22	1.6	Purple/Yellow Brick 220x110x60mm (8⅝x4¼x2⅜") Cream Lime Mortar	NE-SW Internal Partition Wall	174
166	Wall		0.23	1.63	Yellow/Red Frogged Brick 220x110x60mm (8⅝x4¼x2⅜") Yellow Lime Mortar	NW-SE Internal Partition Wall	171
167	Wall		0.49	5.71	Sandstone Blocks 1270x450x40mm (50x17¾x1½") Yellow/Red Brick 220x100x65mm (8⅝x4x2½") Creamy White Lime Mortar	NE-SW Wall. External eastern edge of structure with sandstone detailing	171
168	Floor		2.45	7.88	Tarmac?	Tarmac like Surface	171
169	Floor		0.9	1.26	Yellow/Red Brick 215x100x60mm (8½x4x2⅜") Unmortared	Brick Surface	171
170	Floor	0.1	0.7	2.1	Granite Setts 280x130x100mm (11x5⅝x4") Unmortared	Granite Sett Surface	171
171	Group					Northern part of Building 16. Incorporates 124 - 172	
172	Floor		3.91	5.12	Yellow/Red Flemish Brick 150x70x40mm (5⅞x2¾x1½") Grey Lime Mortar	Flemish Brick Surface sloping towards drain in the NW	171
173	Wall	0.18	0.45	1.8	Yellow/Red/Purple Frogged Brick No dimensions Off White Lime Mortar	NE-SW Wall. Internal partition wall of structure	328
174	Group					Southern upper portion of Building 16. Observed in Blocks 15 and 16. Incorporates 5 – 42, 163/165	

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
175	Group					Number allocated to coal store and yard area to the west of Group 174. Incorporates 43 - 57	
176	Group					Lower level of foundations and culverts of Group 174. Incorporates 114-119/233-238. Circa 1818?	
177	Group					Collection of Walls etc to the south of Group 328. Incorporates 58 - 62	
178	Group					E-W Orientated series of Walls etc at north of Group 328. Incorporates 67 - 71/76 - 86/91/99/112-113. Poss 75	
179	Group					Group of structures in Blocks 43 and 44. Incorporates 98/100 - 105	
180	Group					Associated structures in the NW corner of site, Block 44. Incorporates 1-5/88 - 95/108 - 111	
181	Walls		3.53	8.25+ 9.47	Red Frogged Brick 225x110x70mm (8 ⁵ / ₈ x 4 ¹ / ₈ x 2 ³ / ₄ "") Portland-rich Mortar	Fairly modern, semi-basemented room abutting north side of Structure 73	184
182	Floor		3	8.64	Concrete	Concrete Surface	184
183	Service			62.12	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x 4 ¹ / ₈ x 2 ³ / ₄ "") Grey Lime Mortar	Settling tank?	184
184	Group					Group given to Structures 73/181 - 183	
185	Service		0.63	3.66	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x 4 ¹ / ₈ x 2 ³ / ₄ "") Grey White Lime Mortar	NE-SW Culvert	
186	Service		3.47	16	Red/Purple Frogged Brick 220x105x70mm (8 ⁵ / ₈ x 4 ¹ / ₈ x 2 ³ / ₄ "") Grey White Lime	Settling tank?	

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Mortar		
187	Service		0.97	5.95	Yellow/Red/Purple Frogged Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Grey White Lime Mortar	Curvilinear Culvert	
188	Service		0.41	1.39	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x4 ¹ / ₈ x2 ³ / ₄ "") Grey White Lime Mortar	Culvert	
189	Service		0.61	8.4	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x4 ¹ / ₈ x2 ³ / ₄ "") Grey White Lime Mortar	N-S Culvert	
190			7.92+8.27	34.81	Yellow Frogged Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Yellow Grey Lime Mortar	Eastern most of Buildings numbered as '15'. Pattern room and stores within WSI	
191	Service		0.91	5.06	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x4 ¹ / ₈ x2 ³ / ₄ "") Grey White Lime Mortar	N-S Culvert going into 186	
192	Service		0.76+0.98	6.42	Yellow/Red Brick 220x105x70mm (8 ⁵ / ₈ x4 ¹ / ₈ x2 ³ / ₄ "") Grey White Lime Mortar	NE- SW Culvert going into 186	
193	Wall	0.3	0.56	12.62	Yellow/Orange/Red Brick 230x110x65mm (9x4 ¹ / ₄ x2 ¹ / ₂ "") Cream Lime Mortar	E-W main Wall	331
194	Wall	0.08	0.25	1.98	Yellow/Red Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream Lime Mortar	E-W Partition Wall. Possibly later addition	331
195	Wall	0.15	0.48	0.48	Yellow Brick 240x100x65mm (9 ¹ / ₂ x4x2 ¹ / ₂ "") White Lime Mortar	N-S Wall	331
196	Wall	0.28	0.68	2.1	Yellow/Red/Purple 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream Lime Mortar	N-S Wall	331

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
197	Service		0.46	15	Red Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") White Lime Mortar	NW-SE Culvert	331
198	Service	0.38	0.44	4.7	Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Grey White Lime Mortar	Drain	331
199	Wall	0.18	0.24	1.45	Yellow Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream Lime Mortar	E-W Wall. Possibly associated with surrounding drains	331
200	Wall	0.19	0.45	2.1	Yellow/Red Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Grey White Lime Mortar	E-W Wall	331
201	Walls		0.24	0.92+ 1.24	Yellow Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Grey White Lime Mortar	L-Shaped Wall. Possibly formed part of drain/manhole	331
202	Wall	0.28	0.42	2.75	Yellow/Orange Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") White Lime Mortar	N-S Wall. Internal Partition Wall	331
203	Wall	0.16	0.43	2.2	Yellow/Red Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream White Lime Mortar	N-S Wall. Internal Partition Wall	331
204	Wall	0.18	0.23	2.07	Yellow/Purple/ Orange Brick 230x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Cream Lime Mortar	E-W Wall. Abutting Wall 196 at eastern end	331
205	Floor	0.23	0.35	2.2	Granite Setts 220-230x170- 220x120mm (8 ⁵ / ₈ -9x6 ³ / ₄ -8 ⁵ / ₈ x4 ³ / ₄ "") Unmortared	Granite Setts, originally part of a larger surface	Utilities Trench
206	Wall	0.23	0.14	7	Yellow/Red Brick 210x?x70mm (8 ¹ / ₄ x?x2 ³ / ₄ "") Cream Lime Mortar	NW-SE Wall	Utilities Trench
207	Wall	0.23	0.24	2	Orange/Yellow Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Grey White Lime	Curvilinear Brick Wall	Utilities Trench

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Mortar		
208	Wall	0.21	0.17	2	Orange/Yellow Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Cream Grey Lime Mortar	NW-SE Wall. Continuation of Wall 206?	Utilities Trench
209	Wall	0.18	0.22	2.6	Yellow/Red Brick 210x100x65mm (8 ¹ / ₄ x4x2 ¹ / ₂ "") Grey White Lime Mortar	NW-SE Wall. Short length of partition wall?	Utilities Trench
210	Tank	0.3	1.05	2.15	Cast Iron	Water Tank	Utilities Trench
211	Wall	0.48	0.44	2.1	Orange/Yellow Brick 220x110x70mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₄ "") Yellow/Cream Lime Mortar	NW-SE Partition Wall	Utilities Trench
212	Wall	0.66	0.52	1.15	Yellow Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Grey White Lime Mortar	NW-SE Wall	Utilities Trench
213	Wall	0.3	0.8	0.8	Yellow/Red/Purple Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream Lime Mortar	NW-SE Wall	Utilities Trench
214	Wall	0.55	0.23	6.3	Yellow/Orange Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream Brown Lime Mortar	NW-SE Wall. Possible continuation of Wall 212	Utilities Trench
215	Service	0.3	1.5	6.9	Yellow/Orange Brick 220-240x100- 120x55-65mm (8 ⁵ / ₈ -9 ¹ / ₂ x4-4 ³ / ₄ x2 ¹ / ₄ - 2 ¹ / ₂ "") Brown White Lime Mortar	NE-SW Flue	Utilities Trench
216	Wall	0.7	0.46	2.9	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Cream Portland-rich Mortar	NW-SE Wall/Buttress?	Utilities Trench
217	Wall	0.7	1.2	2.2	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Grey Portland-rich Mortar	NE-SW Buttress/Wall?	Utilities Trench

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
218	Wall	0.45	0.4+ 0.91	4.64	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Grey Cream Portland-rich Mortar	NW-SE Wall	Utilities Trench
219	Wall	0.6	0.22	3.05	Pink/Red Brick 205x102x60mm (8x4x2 ³ / ₈ "") Grey Portland-rich Mortar	NW-SE Wall	Utilities Trench
220	Wall		0.52	2.12	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Grey Cream Portland-rich Mortar	NW-SE Wall	Utilities Trench
221	Wall		0.26	1.09	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Grey Cream Portland-rich Mortar	NW-SE Wall	Utilities Trench
222	Wall		0.62- 0.88	1.7	Yellow Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Grey Cream Portland-rich Mortar	NW-SW Wall	Utilities Trench
223	Service	0.15	0.98	1.2	Yellow/Red Frogged Brick 238x110x70mm (9 ¹ / ₂ x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	Manhole	Utilities Trench
224	Service	0.15	1.23	1.3	Yellow/Red Frogged Brick 222x110x70mm (8 ³ / ₄ x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	Manhole	Utilities Trench
225	Wall	0.88	0.21	0.12	Yellow Frogged Brick 216x102x70mm (8 ¹ / ₂ x4x2 ³ / ₄ "") Portland-rich Mortar	NE-SW Wall	Utilities Trench
226	Wall	0.6	0.46	9.37	Yellow Frogged Brick 238x110x70mm (9 ¹ / ₂ x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	NW-SE Wall	Utilities Trench
227	Wall	0.52	0.23- 0.96	7.36+ 12.18	Yellow Frogged Brick 238x110x70mm (9 ¹ / ₂ x4 ¹ / ₄ x2 ³ / ₄ "")	NW-SE Wall. Wall abutted on south face by Wall 228	Utilities Trench

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Lime Mortar		
228	Wall	0.43	1.16	1.32+ 10.19	Red Froged Brick 222x102x65mm (8 ³ / ₄ x4x2 ¹ / ₂ "") Portland-rich Mortar	NW-SE Wall. Butts the south side of Wall 227	Utilities Trench
229	Wall		0.23	0.58+ 1.33	Yellow/Purple Brick 220x100x65mm (8 ⁵ / ₈ x4x2 ¹ / ₂ "") Cream Lime Mortar	L-Shaped Wall	331
230	Wall	0.69	0.1	8.37	Beige Froged Brick 216x102x70mm (8 ¹ / ₂ x4x2 ³ / ₄ "") Portland-rich Mortar	NW-SW Wall	Utilities Trench
231	Wall	0.56	0.42- 0.62	1.32+ 3.51	Yellow Brick 230x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Compact Lime Mortar	L-Shaped Wall	Utilities Trench
232	Service	0.41	0.91	3.64	Yellow Froged Brick 240x110x70mm (9 ¹ / ₂ x4 ¹ / ₄ x2 ³ / ₄ "")	NW-SE Culvert. Eastern edge butts Wall 231	Utilities Trench
233	Walls		4.7	10.4	Orange/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Lime Mortar	Outer eastern wall of foundations to Building 16 . Extant on 1818 plan, extended by 1860-3 plan. Officers Quarters	176
234	Wall		0.58	1.9	Purple/Red Brick 220x110x65mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ¹ / ₂ "") Lime Mortar	NE-SW Wall. Western wall of foundations to Building 16 .	176
235	Wall		1.6	2.15	Yellow/Orange Brick 210x110x?m (8 ¹ / ₄ x4 ¹ / ₄ x?) White Lime Mortar	Square structure abutting Wall 233	176
236	Floor		0.61	0.88	Yellow Froged Brick 220x110x60mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₈ "") Portland-rich Mortar	Surface within Wall 235	176
237	Service		0.62	1.2	Yellow/Pink/Purple Brick Not Recorded White Lime Mortar	E-W Culvert bonded with Wall 235	176
238	Wall		0.46	0.95	Yellow/Red/Purple Brick 210x80x65mm (8 ¹ / ₄ x3 ¹ / ₈ x2 ¹ / ₂ "") Lime Mortar	NE-SW Wall	176

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
239	Cut	>0.7	>2.6	>3.14		Eastern Edge of Paleochannel. Filled By 249	
240	Cut	>0.4	>2.6	>10.9		Western Unseen Edge of Paleochannel. Filled by 242 - 248/279-281	
241	Fill	>0.5				Fill of 240. Dirty natural with occasional CBM fragments. No finds	
242	Fill	>0.2				Fill of 240. Ash like backfill deposit. Pot, bone, flint and CBM retrieved	
243	Fill	>0.5				Fill of 240. Loose gravel backfill. No finds	
244	Fill	>0.4				Fill of 240. Silt, sand backfill deposit. No finds	
245	Fill	>0.08				Fill of 240. Silt, sand backfill deposit. No finds	
246	Fill	>0.5				Fill of 240. Orange/brown sand gravel. No finds	
247	Fill	>0.4				Fill of 240. Brown/yellow sand gravel. No finds	
248	Fill	>0.06				Fill of 240. Brown humic silt. No finds	
249	Fill	>0.7				Fill of 239. Dark brown silty sand. No finds	
250	Layer	0.24				Gravel Deposit Above 249. No finds	
251	Wall	0.53	0.48	57.81	Red Brick 228x114x70mm (9x4½x2¾") Lime Mortar	NW-SE Wall. Northern exterior wall of structure	332
252	Cut	0.88	14.69	2		Cut of Possible River Channel Filled By 253 - 258	Utilities Trench
253	Fill	0.47	3.39	2		Fill of 252. Mid blue grey, sandy clay. No finds	Utilities Trench
254	Fill	0.22	1.65	2		Fill of 252. Grey/yellow gravel. No finds	Utilities Trench
255	Fill	0.36	1.7	2		Fill of 252. Dark organic sand/gravel. No finds	Utilities Trench
256	Fill	0.52	3.51	2		Fill of 252. Dark orange brown, sandy silt. No finds	Utilities Trench
257	Fill	0.35	4.18	2		Fill of 252. Dark blue	Utilities

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
						grey, sandy silt. No finds	Trench
258	Fill	0.78	9.4	2		Fill of 252. Blue gray, sandy silt. No finds	Utilities Trench
259	Timber	0.12	0.14	0.9	Timber	Timber Beams	Utilities Trench
260	Wall	0.5	0.46	60.72	Red Brick 216x122x70mm (8½x4¾x2¾") Lime Mortar	NW-SE Wall. Southern exterior wall of structure	332
261	Layer	0.54	2	75.93		Backfill. No finds	Utilities Trench
262	Wall	0.31	0.74	2	Yellow/Red Brick 228x102x70mm (9x4x2¾") Portland-rich Mortar	NW-SE Wall	Utilities Trench
263	Wall	0.16	0.33		Yellow/Orange/ Pink Brick 215x?x56mm (8½x?x2¼") White Lime Mortar	Wall Foundation in utility trench	Utilities Trench
264	Wall	0.46	0.34		Yellow/Orange/ Pink Froged Brick 210x110x60mm (8¼x4¼x2⅝") White Lime	Wall in utility trench	Utilities Trench
265	Flue		0.5 Exter Diam 0.25 Inter Diam	2	Yellow/Purple Brick 210x110x60mm (8¼x4¼x2⅝") Lime Mortar	Probable Flue. Some evidence of internal scorching. Filled with 266	Utilities Trench
266	Fill	0.25	0.25	2		Fill of 265. Soot like deposit . No finds	Utilities Trench
267	Slab	0.12	0.3	1.41	Concrete	Concrete Slab	332
268	Surface	0.16	2.77	3.66	Cracked Brick Various Sizes No mortar	Cracked Brick Surface that butted Wall 251	332
269	Struct	0.7	0.79	0.96	Yellow Froged Brick 241x102x70mm (9½x4x2¾") Mid Brown Lime Mortar	Hearth? Butting southern face of Wall 260. Charcoal like fill	332
270	Struct	0.16	0.82	1.55	Yellow/Red Brick 248x110x67mm (9¾x4¼x2⅝") Mid Brown Lime Mortar	Consists of two rectangular Hearth? Structures. Butting southern face of Wall 260. Charcoal like fill	332

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
271	Struct	0.39	1.31	0.75	Yellow/Red Brick 228x80x67mm (9x3 ¹ / ₈ x2 ⁵ / ₈ "") Mid Brown Lime Mortar	Consists of two rectangular Hearths? Structures. Butting southern face of Wall 260. Charcoal like fill	332
272	Struct	0.15	0.58	0.7	Yellow Frogged Brick 235x110x70mm (9 ¹ / ₄ x4 ¹ / ₄ x2 ³ / ₄ "") Mid Brown Lime Mortar	Hearth?	332
273	Wall	0.4	0.38	3	Yellow Brick 235x108x70mm (9 ¹ / ₄ x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	NW-SE Wall. Buttes southern edge of Wall 274	332
274	Walls	0.32	4.49	4.73	Yellow/Red Brick 235x108x70mm (9 ¹ / ₄ x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	Metal working? structure	332
275	Floor		2.42	3.92	Concrete	Concrete Surface within Wall 274 and Wall 277	332
276	Wall	0.3	0.37	1	Yellow Frogged Brick 248x114x67mm (9 ³ / ₄ x4 ¹ / ₂ x2 ⁵ / ₈ "") Lime Mortar	NW-SE Wall. Butting southern edge of Wall 274	332
277	Wall	0.16	0.34+ 0.52	2.3	Yellow/Red Brick 228x102x70mm (9x4x2 ³ / ₄ "") Portland-rich Mortar	Internal Partition Wall within Wall 274	332
278	Struct				Yellow/Red Frogged Brick 234x105x?mm (9 ¹ / ₄ x4 ¹ / ₈ x?"") Mid Brown Lime Mortar	Probable hearth abutting southern face of Wall 260. Charcoal like fill	332
279	Fill					Fill of 240. Brown/yellow sand gravel. No finds	
280	Fill					Fill of 240. Firm grey/brown silt, sand.	
281	Fill	>0.5				Fill of 240. Compact blue/grey, clay silt with gravel inclusions.	
282	Wall	0.6	0.58- 0.92	6.86+ 64.17	Yellow/Red Frogged Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	Exterior southern wall of structure. Northern most of Building 11 structures	333
283	Hearth	0.47	1.9	2.03	Yellow/Red Brick	Industrial	333

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄) Lime Mortar	Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	
284	Hearth	0.16	1.9	2.03	Yellow/Red Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄) Lime Mortar	Industrial Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	333
285	Hearth	0.55	1.9	2.03	Yellow/Red Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄) Lime Mortar	Industrial Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	333
286	Hearth	0.38	1.9	2.03	Yellow/Red Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄) Lime Mortar	Industrial Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	333
287	Wall	0.11	1.72	2.3	Red Engineering Brick 220x110x70mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₄) Lime Mortar	Rectangular Cell surrounding Concrete Floor 288	333
288	Floor		1.23	1.85	Concrete	Concrete Surface within Rectangular Cell 287	333
289	Wall	0.15	1.72	2.3	Red Engineering Brick 220x110x70mm (8 ⁵ / ₈ x4 ¹ / ₄ x2 ³ / ₄) Lime Mortar	Rectangular Cell surrounding Concrete Floor 288	333
290	Floor		1.28	1.85	Concrete	Concrete Surface within Rectangular Cell 287	333
291	Wall	0.45	0.56	0.56	Yellow/Red Brick 216x102x70mm (8 ¹ / ₂ x4x2 ³ / ₄) Lime Mortar	Foundation/Buttress?	333
292	Wall	0.27	0.23	2.22	Red Brick 228x102x70mm (9x4x2 ³ / ₄) Lime Mortar	NE-SW Wall. Springing arch wall running north from 291	333
293	Hearth	0.08	0.58	1.2	Yellow/Red Brick 228x102x70mm (9x4x2 ³ / ₄) Mid Brown Lime Mortar	Brick Hearth	333

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
294	Wall	0.3	0.48	0.48	Red Brick 210x102x70mm (8¼x4x2¾") Lime Mortar	NE-SW Wall	333
295	Wall	0.1	0.52	0.6	Red Brick 210x102x70mm (8¼x4x2¾") Lime Mortar	Brick Wall Foundation	333
296	Wall	0.28	0.7	0.78	Yellow/Red Brick 216x102x70mm (8½x4x2¾") Lime Mortar	NE-SW Wall abutting 287	333
297	Wall	0.9	0.72-0.92	39.1	Yellow Frogged Brick 228x108x70mm (9x4¼x2¾") Portland-rich Mortar	Large Exterior Wall of presumed engine room abutting SW Wall 282. So probable extension of Building 11 as seen on Plan dated 1867. Room formed by wall contains engine bases and a series of hearths along inner face	333
298	Block	0.38	0.48	3.36	Marble/Granite?	Marble/Granite? Block Forming probable threshold for doorway into structure	333
299	Wall	0.48	0.56	3.22	Yellow/Red Brick 228x102x70mm (9x4x2¾") Lime Mortar	NW-SE Wall abutted and extended by Wall 300 on western edge. Encompasses by building extension 297	333
300	Wall	0.4	0.66	4.05	Yellow/Red Brick 235x102x65mm (9¼x4x2½") White Lime Mortar	NW-SE Wall extension to the west of Wall 299. Encompasses by building extension 297	333
301	Wall	0.46	0.38	1.06	Red Brick 228x108x70mm (9x4¼x2¾") Lime Mortar	NW-SE Wall abutted on western edge by Wall 308	333
302	Hearth	0.62	1.9	2.03	Yellow/Red Brick 228x110x70mm (9x4¼x2¾") Lime Mortar	Industrial Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	333
303	Hearth	0.64	0.08	1.66	Yellow Brick 207-228 x108x70mm (8½-9x4¼x2¾") Portland-rich Mortar	Hearth butting the inner face of Wall 297	333

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
304	Hearth	0.51	0.08	1.58	Yellow/Red Brick 228x108x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	Hearth butting the inner face of Wall 297	333
305	Hearth	0.52	0.08	1.1	Yellow/Red Brick 228x108x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	Hearth butting the inner face of Wall 297	333
306	Hearth	0.51	0.08	1.67	Yellow/Red Brick 228x108x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	Hearth butting the inner face of Wall 297	333
307	Hearth	0.67	0.08	1.68	Yellow/Red Brick 228x108x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	Hearth butting the inner face of Wall 297	333
308	Wall	0.54	0.44	0.47	Yellow/Red Brick 216x102x70mm (8 ¹ / ₂ x4x2 ³ / ₈ "") Mixture of Portland-rich and Lime Mortar	NW-SE Wall abutting western edge of Wall 301	333
309	Hearth	0.6	0.94	1.74	Yellow Brick 228x102x70mm (9x4x2 ³ / ₄ "") Portland-rich Mortar	Hearth abutting southern side of Wall 282 within structure formed by Wall 297	333
310	Plate	13mm	0.78	1.55	Steel/Wrought Iron	Manhole/inspection chamber? Over NW-SE aligned ceramic pipe running along inner face of Wall 282	333
311	Wall	0.5	0.6	2.42	Yellow/Red Froged Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	NW-SE Wall within 282. May have formed southern portion of a hearth. Same construction as 312	333
312	Wall	0.36	0.6	2.42	Yellow/Red Froged Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Portland-rich Mortar	NW-SE Wall within 282. May have formed southern portion of a hearth. Same construction as 311	333
313	Hearth	0.17	0.98	1.6	Yellow/Red Froged Brick 228x102x70mm (9x4x2 ³ / ₄ "") Portland-rich Mortar	Possible Remains of an Industrial Hearth/Furnace?. Brick dimensions and mortar differ from known hearths	333
314	Wall	0.15			Yellow/Red Froged Brick 228x102x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "")	Series of Walls that have been encased in concrete. Interior wall of unknown function	333

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
					Portland-rich Mortar		
315	Hearth	0.28	1.9	2.03	Yellow/Red Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	Industrial Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	333
316	Hearth	0.4	1.9	2.03	Yellow/Red Brick 228x110x70mm (9x4 ¹ / ₄ x2 ³ / ₄ "") Lime Mortar	Industrial Hearth/Furnace? Structures feature apsidal north wall and stoking? chute on eastern side	333
317	Wall	0.15	0.7		Yellow/Red Frogged Brick 228x102x70mm (9x4x2 ³ / ₄ "") Lime Mortar	Internal Dividing Walls in SW corner of building formed by Wall 282	333
318	Wall	0.07	0.23	0.82	Yellow Frogged Brick 228x102x70mm (9x4x2 ³ / ₄ "") Lime Mortar	NW-SE Wall. Internal partition wall within 282	333
319	Wall	0.15	0.23	0.78	Yellow Frogged Brick 228x102x70mm (9x4x2 ³ / ₄ "") Lime Mortar	NE-SW Wall. Internal partition wall within 282	333
320	Hearth?	0.15	1.2	2.1	Yellow Frogged Brick 228x102x70mm (9x4x2 ³ / ₄ "") Lime Mortar	Possible Hearth/Fireplace. Internal face of the bricks are scorched	333
321	Service	0.56	0.78	1.64	Yellow Frogged Brick 228x102x70mm (9x4x2 ³ / ₄ "") Portland-rich Mortar	Manhole structure incorporating Plate 210	333
322	Wall	0.34	0.45	0.47	Yellow Bricks 208x102x70mm (8 ¹ / ₄ x4x2 ³ / ₄ "") Lime Mortar	Foundation/Buttress? Similar to 291. Abutted by Wall 323 to the north and south	333
323	Wall	0.2	0.23	2.3	Red Brick 228x102x70mm (9x4x2 ³ / ₄ "") Lime Mortar	NE-SW Wall abutting 322. Similar to 292	333
324	Cannon				Cast Iron 2972mm (117")	Cannon used as stanchion/machine base. Navy 32lb cannon	333

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
						1834 to late 1850s. Victoria Regina crest on upper face. Vent hole blocked. Muzzle cut off in decommissioning	
325	Cannon				Cast Iron 2645mm (104½")	Cannon used as stanchion/machine base. Navy 32lb cannon 1834 to late 1850s. Vent hole open. Muzzle cut off in decommissioning	333
326	Cannon				Cast Iron 2640mm (104")	Cannon used as stanchion/machine base. Navy 32lb cannon 1834 to late 1850s. Vent hole open. Muzzle cut off in decommissioning	333
327	Group					Part of structure 180. Possible kitchen area	
328	Group					Building in SW corner of site in Block 16 of unknown function. Incorporates 50/55/56/58-69/72/75/77/78/173	
329	Drain?		0.78	0.93	Yellow/Red Frogged Brick 230x105x65mm (9x4½x2½") Unmortared	Drain/Manhole structure abutting north side of Wall 251	332
330	Hearth		0.52	0.92	Yellow Frogged Brick 230x105x65mm (9x4½x2½") Mid Brown Lime Mortar	Hearth base abutting southern face of Wall 260 near the eastern limit of site. Truncated at south. Charcoal/coal ash fill	332
331	Group					Building 12/13. Works departments offices/police quarters. In Blocks 5, 6 and 23. Incorporates 193 – 204/229	
332	Group					NW-SE aligned building. Between Building 11 in WSI map. Present in Blocks 27-29. Incorporates 251/260/267-278 329/330	
333	Group					NW-SE aligned building.	

Context	Type	Depth (m)	Width (m)	Length (m)	Building Material	Comments	Part of Structure
						Numbered as northernmost of Buildings 11 on WSI. Although appears to be machine rooms rather than sheds or barracks. Contains machine bases and hearths/furnaces. Incorporates 282-326	
334	Struct	0.3	6.43	10.65	Yellow/Red Frogged Brick 228x108x60mm (9x4¼x2¾") White Lime Mortar	Octagonal Water Tower, 1860-1863, shown as OA 90 in DBA. Consists of three separate walls:335,336,337	
335	Wall	0.15	0.86	0.86	Yellow/Red Frogged Brick 228x108x60mm (9x4¼x2¾") White Lime Mortar	Central wall of structure	334
336	Wall	0.26	0.57-0.75	4.57	Yellow/Red Frogged Brick 228x108x60mm (9x4¼x2¾") White Lime Mortar	Inner octagonal wall of structure	334
337	Wall	0.3	0.72-1.2	10.65	Yellow/Red Frogged Brick 228x108x60mm (9x4¼x2¾") White Lime Mortar	Outer octagonal wall of structure	334
338	Service	0.08	1.84-2.17	2.27-2.87	Yellow/Red Frogged Brick 228x108x70mm (9x4¼x2¾")	Manhole ? structure	
339	Service	0.07	0.77	1.82	Yellow/Red Frogged Brick 228x105x60mm (9x4⅙x2¾") Light Brown Lime Mortar	Manhole?	
340	Wall	0.5	0.56	8(NE-SW) 4(NW-SE)	Red Brick 220-225 x108x60mm (8¾x4¼x2¾") Whitish Lime Mortar	South Eastern quarter of 174/176. (Building 16), officers quarters	174/176

APPENDIX 2 REFERENCES

EH	2004	Royal Arsenal, Woolwich, Greenwich. Post-fieldwork reporting structure.
MOLA	2011	Crossrail Ltd. Woolwich Station – Site Specific Archaeological Written Scheme of Investigation
OA	2011	The Royal Arsenal, Woolwich. Crossrail Station Box - Site Specific Method Statement for Archaeological Fieldwork

APPENDIX 3 SUMMARY OF SITE DETAILS

Client name: Berkeley Homes Plc

Site name: The Royal Arsenal, Woolwich. Crossrail Station Box

Site code: RAW11

Grid reference: TQ 439 790

Type of investigation: Watching Brief / Strip, Map and Sample Excavation

Date and duration of project: 20th September - 16th December 2011. 13 weeks

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Museum of London in due course.

APPENDIX 4 OASIS DATA COLLECTION FORM: ENGLAND

OASIS DATA COLLECTION FORM: England

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OASIS ID: oxfordar1-119006

Project details

Project name Archaeological Investigations at The Royal Arsenal Woolwich.
Crossrail Station Box Interim Statement

Short description of the project During September to December 2011 Oxford Archaeology (OA) carried out a targeted watching brief and strip, map and record exercise on the excavation of a station box for a Crossrail connection at The Royal Arsenal Woolwich on behalf of Berkeley Homes plc. The remains of several buildings related to the historic development of the site as The Royal Arsenal were recorded. In addition the course of a Palaeochannel was located beneath the Officers Quarters at the western end of the site.

Project dates Start: 20-09-2011 End: 16-12-2011

Previous/future work Yes / Yes

Any associated project reference codes RAW 11 - Sitecode

Any associated project reference codes RAW 11 - Museum accession ID

Type of project Recording project

Site status Conservation Area

Current Land use Other 13 - Waste ground

Monument type PALAEOCHANNEL Palaeolithic

Monument type FOUNDATIONS Modern

Significant Finds CANNON Modern

Significant Finds CANNON BALL Modern

Significant Finds POTTERY Modern

Investigation type 'Part Excavation','Watching Brief'

Prompt Planning condition

Project location

Country England

Site location GREATER LONDON GREENWICH WOOLWICH The Royal Arsenal

Study area 1.20 Hectares

Site coordinates TQ 439 790 51.4911028413 0.07300483213140 51 29 27 N 000 04 22 E Point

Project creators

Name of Organisation Oxford Archaeology

Project brief originator MOLAA

Project design originator D Score

Project director/manager D. Score

Project supervisor	D Sykes
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Berkeley Homes plc

Project archives

Physical Archive recipient	Royal Arsenal
Physical Archive ID	RAW 11
Physical Contents	'Ceramics','Metal'
Physical Archive notes	Cannons retained on site
Digital Archive recipient	Oxford Archaeology
Digital Archive ID	RAW 11
Digital Contents	'Ceramics','Stratigraphic','other'
Digital Media available	'Images raster / digital photography','Text'
Paper Archive recipient	Museum of London
Paper Archive ID	RAW 11
Paper Contents	'Ceramics','Metal','Stratigraphic'
Paper Media available	'Plan','Report','Section','Survey ','Unpublished Text','Diary','Photograph','Context sheet'

Project bibliography 1

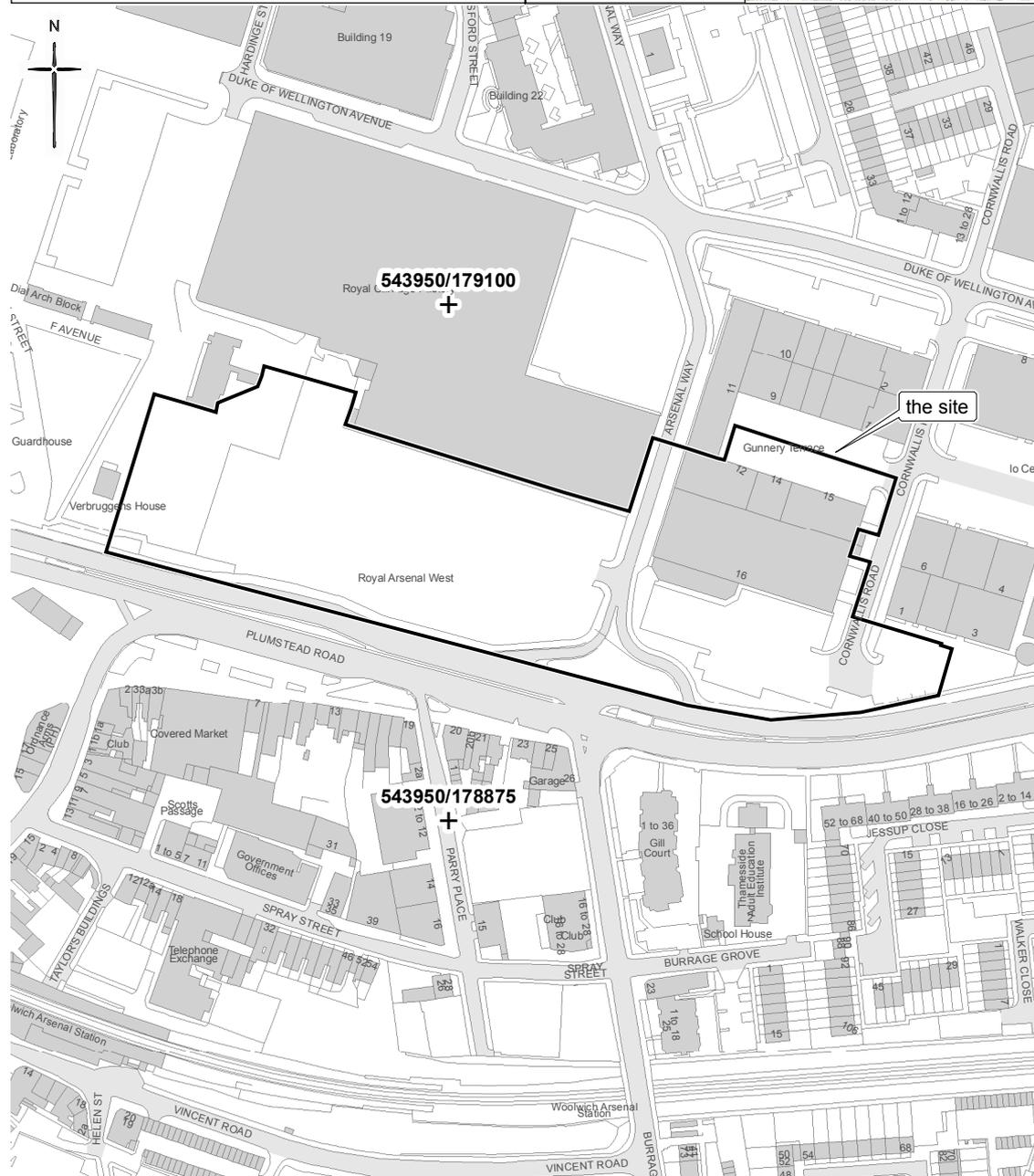
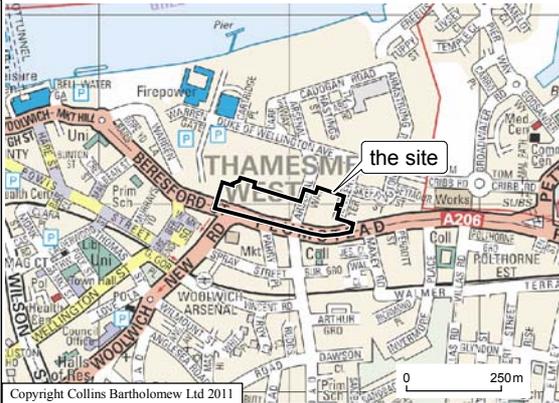
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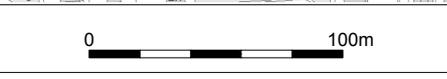
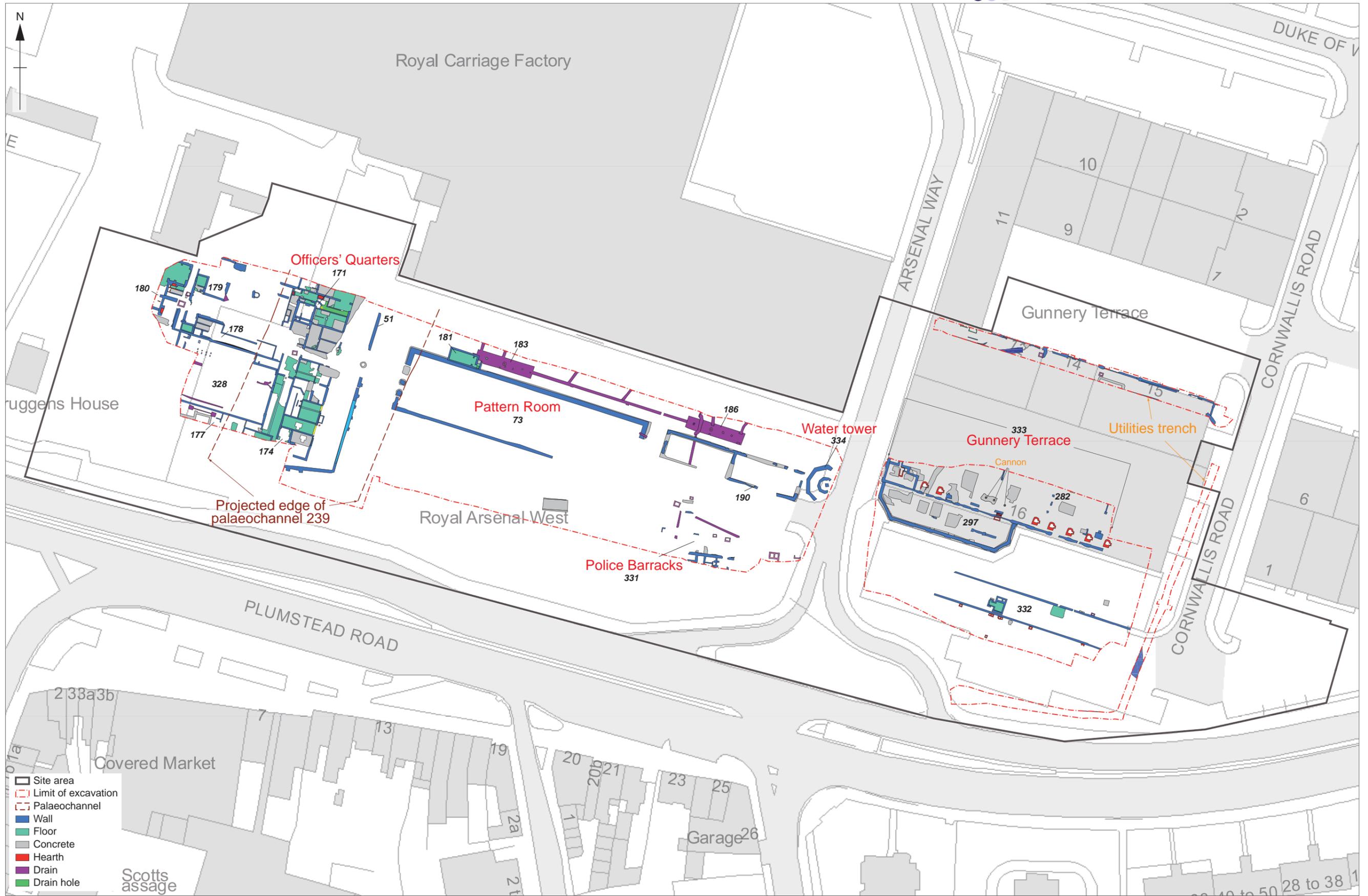


Figure 1: Site location (from SWSI, MOLA 2011)



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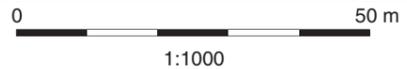


Figure 2: Site Plan



Plate 1 - The Royal Arsenal, Woolwich with Site in foreground (Copyright English Heritage)



Plate 2 - Eastern edge of palaeochannel 239



Plate 3 - Floor surfaces within Officers' Quarters (Structure 174)



Plate 4 - Officers' Quarters (Structure 171)



Plate 5 - Pattern Room and drainage tank 186



Plate 6 - Base of octagonal water tower 334



Plate 7 - Recording of furnace/hearth features within structure 282



Plate 8 - Cannon 324



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