LAND AT 12-20 PAUL STREET AND 83-105 CLIFTON STREET, HACKNEY EC2A 4JH

AN ARCHAEOLOGICAL EVALUATION

LOCAL PLANNING AUTHORITY:
LONDON BOROUGH OF HACKNEY

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PRE-CONSTRUCT ARCHAEOLOGY

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Land at 12-20 Paul Street and 83-105 Clifton Street, Hackney EC2A 4JH

An Archaeological Evaluation

Local Planning Authority:	**London Borough of Hackney**
Central National Grid Reference:	**TQ33058217**
Site Code:	**CLF12**
Written and researched by:	**Neil Hawkins** **Pre-Construct Archaeology Ltd, January 2013**
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1 ABSTRACT

1.1 This report details the working methods and results of an archaeological evaluation undertaken by Pre-Construct Archaeology Ltd on land at 12-20 Paul Street and 83-105 Clifton Street in the London Borough of Hackney EC2A 4JH (Figure1). The evaluation was conducted between 23rd November and 7th December 2012 and was commissioned by McLaren Property. The archaeological consultant was Mills Whipp Projects.

1.2 The fieldwork consisted of three trenches in accordance with an approved Project Design and Method Statement (Mills Whipp Projects 2012), although their proposed shapes and overall depths had to be slightly modified in accordance with site conditions.

1.3 The evaluation recorded a sequence in keeping with what was predicted. It comprised Hackney Gravels in all trenches at an elevation between 11.41 and 11.60m OD, sealed by alluvially-lain marshland deposits. At the surface of these in Trench 1 a pit was recorded which is interpreted as a late medieval – early post-medieval quarry pit, consistent with other archaeological features in the vicinity. The pit and the marshland was then in the post-medieval period sealed by an extensive deposit of dumped ground reclamation material, which raised the site (in the area of Trenches 2 and 3) to 15.75 to 15.70m OD. A 19th century cellar in Trench 3 shows the urban development of the site, which may relate to an ancillary structure within the “Stone Yard” which is shown in this location of the site in maps of the later 19th century. Finally the sequence within Trenches 2 and 3 was formed of the current ground level and associated make-up. The area of Trench 1 had previously been subjected to vertical truncation of varying scales, considered to pre-date the current 1960s edifice which occupies 12-20 Paul Street.

2 INTRODUCTION

2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Ltd in advance of the redevelopment of land at 12-20 Paul Street and 83-105 Clifton Street, EC2 4JH in the London Borough of Hackney (Figure 1) between 23rd November and 7th December 2012.

2.2 The site is bounded to the east by Clifton Street, to the west by Paul Street, and to the north and south by properties fronting both of those roads. The site is centred at National Grid Reference TQ33058217, and covers an area of approximately 4,180 square metres. The evaluation consisted of three trenches, termed Trenches 1 to 3. The locations of these interventions are illustrated on Figure 2.

2.3 The work was commissioned by McLaren Property. The archaeological consultant was Mills Whipp Projects, and the evaluation was supervised by Neil Hawkins and project managed by Chris Mayo, both of Pre-Construct Archaeology Ltd. The work was monitored by Adam Single of the Greater London Archaeological Advisory Service (GLAAS), English Heritage, the Archaeology Advisor to the London Borough of Hackney.

2.4 Following approval of the project by the Local Planning Authority, the completed archive comprising written, drawn and photographic records will be deposited with the London Archaeology Archive and Research Centre (LAARC).

2.5 Site records were compiled using the unique site code CLF12.

3 PLANNING BACKGROUND AND RESEARCH AIMS

3.1 National Guidance: National Planning Policy Framework

3.1.1 The National Planning Policy Framework (NPPF) was adopted on March 27 2012, and now supersedes the Planning Policy Statements (PPSs). The NPPF constitutes guidance for local planning authorities and decision-takers both in drawing up plans and as a material consideration in determining applications.

3.1.2 In considering any planning application for development the local planning authority will be guided by the policy framework set by the NPPF, by current Local Plan policy and by other material considerations.

3.2 Regional Policy: The London Plan

3.2.1 The relevant Strategic Development Plan framework is provided by "The London Plan, Spatial Development Strategy for Greater London Consolidated with Alterations since 2004" (Feb 2008). It includes the following policy relating to archaeology within central London:

Policy 4b.15 Archaeology
The Mayor, in partnership with English Heritage, the Museum of London and Boroughs, will support the identification, protection, interpretation and presentation of London's archaeological resources. Boroughs in consultation with English Heritage and other relevant statutory organisations should include appropriate policies in their DPDs for protecting Scheduled Ancient Monuments and archaeological assets within their area.

3.3 Local Policy: Archaeology in the London Borough of Hackney

3.3.1 The relevant local policy is provided by the London Borough of Hackney's Core Strategy, which was adopted in 2010. It contains the following policy statement with regards to the Historic Environment:

Core Strategy Policy 25: Historic Environment
All development should make a positive contribution to the character of Hackney's historic and built environment. This includes identifying, conserving and enhancing the historic significance of the borough's designated heritage assets, their setting and where appropriate the wider historic environment.

3.4 Research Aims

3.4.1 The following questions were posed for consideration in the approved 'Project Design' (Mills Whipp Projects, 2012) will be addressed by the evaluation:

- What has been the effect upon the site of past construction activity?
- What has been the nature of post-medieval activity at the site?
- Do the marshland deposits relating to Moorfields survive at the site as expected? What archaeological evidence do they contain, if any?
- Do the marshland deposits offer any potential for palaeoenvironmental information

beyond what is already known from previous work?

- Can the site be shown to have been unoccupied during the Saxon and medieval periods?
- Do earlier archaeological remains survive beneath the marshland?
- Is there any evidence for Roman activity on this hinterland area?

4 GEOLOGY AND TOPOGRAPHY

4.1 Geology

4.1.1 The solid geology of the site is shown by the Institute of Geological Sciences (IGS 1979) as Eocene London Clay forming the London Basin.

4.1.2 The British Geological Survey Sheet 256 (North London: 1994) suggests that the site is underlain by deposits of Hackney Gravels (defined as 'Post-diversionary Thames River Deposits') of Pleistocene date.

4.1.3 Archaeological fieldwork in the immediate vicinity has shown that the gravel was overlain by Langley Silt (often termed brickearth) and that both deposits have been heavily exploited by quarrying (Mills Whip Projects 2012).

4.1.4 The site was situated in the upper reaches of the River Walbrook in antiquity, the source of which is unconfirmed but is postulated to be either in Shoreditch or further away at Angel. Barton (1992) believes the river to have followed the line of Curtain Road before running through Moorfields, beneath the Bank of England and eventually entering the Thames close to Cannon Street Station. The stream probably changed its course over time and therefore there will be numerous buried channels. Associated alluvial deposits have been found at many sites in the vicinity including Phipp Street and Worship Street (ibid).

4.1.5 A ground investigation report undertaken on the site describes a sequence of London Clay overlain by Hackney Gravel. It also highlights alluvial deposits sealing the Hackney Gravel in various locations across the site (Applied Geology 2011).

4.2 Topography

4.2.1 The sites' topography is varied. The land plot containing 12-20 Paul Street comprises a post-war office block at the centre of an access roadway to the north and south, which decline from street level (at Paul Street, c 16.5m OD to a rear (eastern) car park area, which itself contains two level platforms north and south (at approximately 13.56m OD), declining into a central low platform at approximately 13.02m OD. This topography has clearly been caused by substantial groundworks during previous development in this part of the site, development which may (judging from the visible roof scars on the surrounding retaining walls) actually pre-date the current office block. The land plot containing 83-105 Clifton Street is generally flat, at an elevation of approximately 16.5m OD.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The archaeological and historical background of this site has been researched in an Archaeological Desk Based Assessment (Mills Whipp Projects 2012); the following text forms a summary of that document.

5.1 Prehistoric

5.1.1 Little evidence for activity for the prehistoric period has been found in the immediate vicinity of the site. The line of Old Street is thought to have its origins as a prehistoric trackway, but no archaeological evidence for this has ever been recorded. A pointed Palaeolithic handaxe was found close to the junction of City Road and Old Street in 1896. Recovered from the same general vicinity was a Bronze Age chisel.

5.1.2 The largest concentration of prehistoric material was recovered from investigations at the Honourable Artillery Ground, c. 330m west of the site. Forty-four sherds of Late Bronze Age/Early Iron Age pottery were found along with struck and burnt flints, potentially recovered from a stream thought to be leading to the Walbrook. Iron Age pottery sherds have also been found to the south of Finsbury Square.

5.2 Roman

5.2.1 The Roman settlement of *Londinium* had begun to grow as a mercantile centre by AD 50. It was centred on the bridgeheads that had been built across the Thames after the Roman invasion in AD 43 and was situated approximately 700m to the south of the site. A large extra mural cemetery was located in the area of Finsbury Circus to the south. The construction of the City wall at the end of the AD 2nd century was probably one of the causes of the area becoming marshy, as the wall circuit interfered with the drainage regime of the River Walbrook.

5.2.2 A handful of Roman finds have been recorded in the vicinity of the site: a Roman cremation was found in 'Moorfields' and Roman pottery was found during a 1976 excavation on Bonhill Street, along with four bronze armlets found in 1912 on Old Street. The head of a Roman terracotta figurine was found somewhere on Paul Street, and on Scrutton Street a Roman bone needle was found. These types of finds and their small number are thought to be typical of the periphery of a major Roman settlement.

5.3 Saxon

5.3.1 The place-names "Hoxton", "Haggerston" and "Shoreditch" have Saxon origins and it is likely that the latter began to develop as a settlement in the 11th century. It was probably focussed on the church of St Leonard at the junction of what was Ermine Street and Old Street.

5.3.2 The walled City was largely abandoned by the Saxons until the 9th century in favour of a new trading settlement fronting the Strand at Covent Garden. With the exception of a supposed Saxon spur from 'Moorfields' there is no evidence for Saxon activity in the area of

the site.

5.3.3 The Domesday Book of 1086 records that the Canons of St Paul's held 9 acres of land outside Bishopsgate in 1066. The area of the site itself is also thought to have belonged to St Paul's Cathedral, as in the medieval period, and was probably a bog.

5.4 Medieval

5.4.1 In the medieval period the area of Moorfields was part of the prebendal manor of Finsbury owned by St Paul's. A charter of William I mentioned the moor as a landmark. About 1180 the chronicler Fitzstephen wrote a description of London which included a description of Londoners skating in wintertime on 'that great marsh which washes the walls of the City on the north side'. An inspection of Moorfields in 1301 by the Lord Mayor's Court had to be undertaken by boat. The damp conditions have permitted the survival of many medieval artefacts including large quantities of leather, predominantly from shoes and waste material from industry, which would have been situated in the general vicinity of the site.

5.4.2 The medieval manor house Finsbury Court was located at the junction of Chiswell Street with Finsbury Pavement, on a natural prominence within Moorfields marsh. The manor house is depicted on the mid 16th century Copperplate map and was recorded during an archaeological excavation.

5.4.3 The area was transformed in 1415 when the Lord Mayor, Thomas Falconer, breached the City wall to make a new gateway, Moor Gate. This gate was probably only a postern as it was rebuilt in 1472 by the Mayor William Hampton. The causey or causeway became known as Finsbury Pavement.

5.4.4 In 1477 Ralph Joceline, Mayor, repaired the City wall between Aldgate and Aldersgate. He also caused 'Moorfields to be searched for clay, and brick thereof to made and burnt; he likewise caused chalk … to be burnt into lime in the same Moorfields'.

5.4.5 In 1511 the Mayor 'caused dikes and bridges to be made, and the ground to be levelled, and made more commodious for passage, since which time the same hath been heightened' but 'yet it stood full of noisome water'. Stow considered that the 'moorish' nature of the ground would defy any long term drainage scheme. In 1527 Mayor Thomas Seymour improved the sluices and ditches and drained the marsh.

5.4.6 Archaeological investigations corroborate the picture presented by the historical sources. The area of Moorfields was crossed by streams such as those found at 101-117 Finsbury Pavement, 119-125 Finsbury Pavement, 7-21 Wilson Street and 19-23 Worship Street. Extensive medieval quarrying for brickearth and gravel has also been identified at numerous sites in the vicinity. These include 25-32 Chiswell Street, 10-13 Dominion Street, Finsbury Island Site, Finsbury Pavement, Finsbury Square, Goswell Road and Worship Street, along with interventions in advance of the construction of the London Overground east London Line at Shoreditch, where series of roadside medieval quarry pits were recorded (Bull *et al*. 2011, 28-33). These quarries acted as sumps for the surrounding ground and so acquired a marsh vegetation. The resulting deposits can be waterlogged and anaerobic which results in good organic preservation. Furthermore, as the disused quarries were ideal for garbage

disposal vast amounts of waste leather, horn, wood and timber have survived in some instances.

5.5 Post-Medieval

5.5.1 As land reclamation proceeded large amounts of soil and debris were imported to raise the ground level. At Bonhill Street levelling was reportedly 10m deep but such a depth undoubtedly encompasses a backfilled quarry. Dumping to raise the ground level has also been recorded at City Road, Worship Street and Appold Street, between 1m to 5.5m thick.

5.5.2 In the early 17th century the paths crossing the fields were formalised as gravel walks and avenues of planted trees, being described in 1607 as 'the garden of this city and a pleasurable place of sweet airs for citizens to walk in'.

5.5.3 The copperplate map of the mid 16th century graphically illustrates the environs of the site. On Moorfields archers are shown practicing their skills while animals graze in the open fields. West of the site the main road follows the line of modern Moorgate before heading east along the line of Hog Lane (present day Worship Street) towards Bishopsgate.

5.5.4 By the time of Faithorne and Newcourt's map of 1658 there have been significant changes in the vicinity of the site. To the south and west a number of walled tenter-grounds had been established (for drying new cloth). London was expanding at this time beyond the tight confines of the City walls; the site however remained open ground.

5.5.5 During the Great Plague of 1665 additional graveyards were opened at Moorfields in Finsbury Fields. Samuel Pepys wrote on 30th August 1665 'I went forth to Moorfields to see (God forgive my presumption!) whether I could see any dead corpse going to the graves; but as God would have it did not'.

5.5.6 Moorfields became a refugee camp for the homeless following the Great fire in 1666. Debris from the fire was spread over open ground around the City, including Moorfields, and has been found at 2-14 Bunhill Row.

5.5.7 By 1682 the south-western part of the site was occupied by a tenter ground and the remainder was open land. The urban sprawl of London was expanding up and around Bishopsgate to the east. By 1746 the site lay on the edge of London. The tenter-ground still existed and the eastern side of the site had buildings associated with 'Mr Witanooms Vinegar Yard'. Horwood in 1799 depicted the site as largely open ground, Paul Street having been now laid out. Buildings occupied the western and eastern sides of the site. By 1813 a new development, Paul Square, had been erected and more buildings laid out.

5.5.8 Further development had occurred by 1835 when Clifton Street had been defined. Details in 1875 showed the site as being stone yards with terraced houses to the east. A similar picture was presented in 1896 and 1913. The site suffered some bomb damage in the Second World War and by that time the eastern terrace had been demolished. The site was largely cleared ground in 1953 with ruins on the western side. By 1964 a garage had been established and the Paul Street frontage had been developed. The site is presently occupied by an NCP car park and empty offices.

6 METHODOLOGY

6.1 The archaeological evaluation consisted of three trenches (termed Trenches 1 to 3, Fig.2), which were arranged in accordance with the Project Design (Mills Whipp Projects, 2012). The design was to excavate three 20m long, rectangular trenches that were to be 1.8m wide at base (*ibid*). Due to the anticipated depths of archaeological stratigraphy in Trenches 2 and 3, i.e. at least 4m below ground level, and the lack of space for trench enlargement, these trenches would not be entered by archaeologists and were to be examined and recorded only from ground level. Working within these parameters, Trenches 2 and 3 were each machined in c. 5m sections along the length of the trench, whereupon the excavated section was immediately backfilled after archaeological recording was completed. Trench 1 was divided into two separate lengths to avoid a service run which projected through the trench.

6.2 The dimensions of the achieved archaeological interventions were as follows:

Trench	Trench alignment	Max length	Max width	Max depth	Height of current ground surface
1 (north)	N-S	13.51m	3.91m	1.89m	13.02m OD
1 (south)	N-S	6.43m	3.99m	2.42m	13.56m OD
2	N-S	17.95m	2.66m	5.50m	16.51m OD
3	E-W	20.41m	2.60m	5.13m	16.55m OD

6.3 A 360 HYMAC type machine was used to break out each trench, followed by machine excavation using a flat bladed ditching bucket. Machine excavation continued under archaeological supervision until natural geology or archaeologically significant horizons were encountered.

6.4 All deposits were recorded on *proforma* context sheets. Trench plans were drawn at a scale of 1:20; sections in Trench 1 were drawn at a scale of 1:10 whilst sections in Trenches 2 and 3 were drawn at 1:20. The locations of the trenches were surveyed using GPS and TST survey equipment.

6.5 A full photographic record was made, including digital, black and white prints and 35mm colour transparencies. Finds, brick samples and environmental samples were collected according to standard retrieval methods as outlined in the Project Design (Mills Whip 2012).

6.6 A surveyed Temporary Bench Mark (TBM) was established near to Trench 1 using GPS equipment, which had a value of 15.70m OD and a second was located on the pavement of Clifton Street and traversed into the area of Trenches 2 and 3, which had a value of 15.95m OD. Levels on archaeologically relevant features and strata were taken from these TBMs using a dumpy level.

6.7 A site investigation which had previously been completed (Applied Geology 2011) showed in its contamination assessment that the ground contained significant levels of ground gas, metals, volatile organic compounds and total petrol hydro-carbons. The levels of ground contaminants were such that the archaeologists working within or in close proximity to the trenches wore appropriate contaminating specific PPE, and utilised a gas monitor in poorly ventilated areas.

7 ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1: Natural Pleistocene River Terrace Deposits (Figures 3-5)

7.1.1 The earliest deposit encountered during the evaluation was a layer of yellow brown slightly silty gravelly sand, contexts [14] and [6] in Trench 1, [18] in Trench 2 and [23] in Trench 3. This deposit was interpreted as the top of the Hackney Gravel. In Trench 1 it was recorded consistently at c. 11.60m OD; in Trench 2 it was only recorded in the northern third of the trench, at c. 11.41m OD. In Trench 3 the natural deposit was recorded consistently at c. 11.44m OD.

7.1.2 The Hackney Gravel recorded throughout all the evaluation trenches was consistent with the known underlying geology as described by both the British Geological Survey Sheet (256 North London) for the area and the ground investigation undertaken by Applied Geology (Applied Geology 2011).

7.2 Phase 2: Alluvial Deposits (Figure 4-5)

7.2.1 Sealing the Hackney Gravel in Trench 1 was a sequence of alluvial deposits [4], [3], [2], [1], [13] and [12]. This sequence was recorded at c. 12.59m OD and was c. 1m thick. It consisted of homogenous and sterile gravelly clay and silty clay deposits with infrequent organic lenses. These deposits represent deposition in a slow moving or stagnant (i.e. low energy) wetland environment. The alluvial sequence recorded in Trench 1 had been horizontally truncated by groundworks resulting from previous development in this part of the site. For this reason the alluvial sequence recorded in Trench 1 is equivalent to the lower alluvial deposits, such as [22], [16] and [17], in Trenches 2 and 3, described below.

7.2.2 Sealing the Hackney Gravel in Trench 2 was an extensive sequence of alluvial deposits [17], [16] and [15]. This sequence was recorded at c. 13.21m OD in the northern end of the trench and c. 13.48m OD in the southern end. At the northern end the sequence was 1.80m thick but deepened at the southern end to 2.50m and continued deeper past the limit of excavation. The sequence consisted of homogenous and sterile gravelly clay and silty clay deposits, [17] and [16], with infrequent organic lenses. These deposit types represent deposition in a slow moving or stagnant (i.e. low energy) wetland environment. The uppermost alluvial deposit [15], however, was a silty clay with more frequent organic inclusions with frequent charcoal, which contained a moderate amount of humic material indicative of a stagnant, marshy wetland environment and therefore most likely relates directly to the marshlands known to have been in the area during the medieval period. The layer was 0.70m thick.

7.2.3 Sealing the Hackney Gravel in Trench 3 was another extensive sequence of alluvial deposits [24], [22], [21], [20] and [19]. The sequence was recorded throughout the trench at c. 13.54m OD and was consistently 2.10m thick. It consisted of a series of homogenous and sterile gravelly clay and silty clay deposits [24], [22], [21] and [19], with infrequent organic lenses. These deposits represent deposition in a slow moving or stagnant (i.e. low energy) wetland environment. The equivalent of organic deposit [15], recorded in Trench 2, was

again encountered within Trench 3, layer [20]. Again it was 0.70m thick and contained a moderate amount of humic material indicative of a stagnant, marshy wetland environment. Some variation in the alluvial sequence was recorded along the length of Trench 3 with some deposits not being traced across the entire length of the trench. This is unsurprising however given the deposition conditions of a wetland environment where localised variations can occur.

7.3 Phase 3: Late Medieval / Early Post-Medieval (Figures 3-4; Plate 2)

7.3.1 Cutting through the alluvial deposits and into the underlying natural geology in Trench 1 was a pit [10]. It was sub-circular in shape, measuring 2.70m north-south by 1.60m east-west and was recorded at c. 12.35m OD. These dimensions did not represent the true original size of the feature as it extended to the east, west and south beyond the trench limits. It had also suffered extensive recent horizontal truncation and was probably originally cut from a land surface 1m or more above its recorded height. The pit had a surviving depth of 0.98m and contained three distinct fills. The primary and secondary fills, [8] and [27] respectively, were sterile silty clay and gravelly clay which contained no anthropogenic material and most likely represented predominantly natural infilling. The surviving tertiary fill [7], however, contained a moderate amount of organic material. Recovered from this deposit was a small ceramic assemblage predominantly of Surrey/Hampshire Coarse Border Ware (CBW) datable to the later medieval to early post-medieval period, AD 1350-1500 (Jarrett, C. Pers. comm.). In common with a number of contemporary features in the area the pit is considered to represent possible quarrying of the underlying natural drift geology, though unlike features on other sites, which have contained extensive dumped deposits in their upper fills, the recent truncation had removed the upper levels and therefore the potential for more accurate dating evidence.

7.4 Phase 4: Post-Medieval (Figures 4-5; Plates 3-4, 6-7)

7.4.1 Sealing the alluvial deposits in both Trenches 2 and 3 was an extensive sequence of later post-medieval made ground. In Trench 2 the made ground [25] was recorded at highest level of c. 15.70m OD throughout and had an overall thickness of between 2.20m and 2.50m. It consisted of a stratified sequence of various deposits which contained frequent brick and tile fragments.

7.4.2 Sealing the alluvial deposits in Trench 3 was an almost identical sequence of post-medieval made ground [26], to those recorded in Trench 2, described above. This sequence was recorded at a highest level of c. 15.75m OD and was consistently 2.20m deep throughout the trench. In common with the deposits recorded in Trench 2 the made ground in Trench 3 comprised a stratified sequence of varying deposits which contained frequent brick and tile fragments.

7.4.3 In Trench 1 the alluvial deposits in the southern end of the trench were sealed by a layer of made ground [11] which had an average thickness of 0.35m and was recorded at an upper height of 13.14m OD, although this height represents a truncated level resulting from the

previous development in this part of the site. The deposit was similar in composition to deposit [25] in Trench 2.

7.5 Phase 5: 19th Century (Figure 3; Plate 5)

7.5.1 Cutting through the later post-medieval made ground in the centre of Trench 3 was a 19th-century brick basement [28]. The basement wall, aligned north-south, was recorded at a highest level of c. 15.75m OD with the brick basement floor being located at c. 14.25m OD, showing the basement to be 1.50m deep. It was infilled with an extensive deposit which contained frequent brick rubble and tile fragments. The basement was seen to span an E-W dimension of c. 7m centrally in Trench 3.

7.6 Phase 6: Modern

7.6.1 Sealing pit [10] in Trench 1 was a sequence of modern made ground overlain by concrete. This concrete was recorded between c. 13.60m OD and 13.10m OD and represents the modern ground surface.

7.6.2 Sealing the made ground sequence in Trench 2 was a layer of modern made ground overlain by concrete. This concrete was recorded at c. 16.51m OD and represented the modern ground surface.

7.6.3 Sealing the 19th-century basement and the later post-medieval made ground in Trench 3 was a layer of modern made ground overlain by concrete. This concrete was recorded at c. 16.55m OD and represented the modern ground surface.

8 CONCLUSIONS AND RESEARCH AIMS

8.1 General Conclusions

8.1.1 The evaluation at the site recorded a sequence in keeping with what was predicted. It comprised Hackney Gravels at an elevation between 11.41 and 11.60m OD, sealed by alluvial-lain marshland deposits. At the surface of these in Trench 1 a pit was recorded which is interpreted as a late medieval – early post-medieval quarry pit, consistent with other archaeological features in the vicinity. The pit and the marshland was then in the post-medieval period sealed by an extensive deposit of dumped reclamation material, which raised the site (in the area of Trenches 2 and 3) to 15.75 to 15.70m OD. A 19th century cellar in Trench 3 shows the urban development of the site, with that feature perhaps relating to an ancillary structure within the "Stone Yard" which is shown in this location of the site in maps of the later 19th century. Finally the sequence within Trenches 2 and 3 was formed of the current ground level and associated make-up.

8.1.2 The area of Trench 1 had previously been subjected to significant groundwork episodes, which are considered to pre-date the current 1960s building which occupies 12-20 Paul Street. These actions truncated the pit and the top of the alluvial sequence; this is based upon the presence of a substantial retaining wall (perhaps of 19th or early 20th century date) which forms the northern, eastern and southern boundary to the car park area and which extends down to the current lower car park level. The wall shows signs of previous structures as scars and therefore suggest that previous construction in this position had already lowered the ground level prior to further ground-shaping to achieve the uniform and multi-level topography of the 1960s car park.

8.2 Research Aims

8.2.1 The research questions for this study (Mills Whipp Projects 2012) are addressed here.

8.2.2 What has been the effect upon the site of past construction activities?

The area of the site saw some truncation by past construction activities. Trench 1 was located in an area of the site which had been significantly truncated by the construction of a lower car park level directly associated with the existing 12-20 Paul Street structure. This level of truncation saw all the sequence of late post-medieval made ground removed entirely and also a large amount of the alluvial sequence below this. Directly below the modern deposits in this trench therefore were the lowest alluvial deposits, recorded elsewhere at the base of the sequence in Trenches 2 and 3. This ground reduction is illustrated by the height at the top of Trench 1, c. 13.60m OD in comparison with the top heights of Trenches 2 and 3, c. 16.30m OD. The area of Trench 1 had been lowered by around 3m prior to or during the installation of the car park.

Encountered within the centre of Trench 3 was a 19th-century brick basement, which truncated other potential deposits and features down to c. 2.30m below current ground level in a localised area. However, due to the extensive depth of the archaeological sequence of

made ground in this area the basement only truncated partially into this made ground and not below it. Therefore the alluvial sequence below the made ground was intact.

8.2.3 What has been the nature of post-medieval activity on the site?

The nature of post-medieval activity on site is dominated by an extensive sequence of made ground, recorded in Trenches 2 and 3. This made ground relates to reclamation of the marshland area of Moorfields in the early post-medieval period, something which is well attested to by historical sources as well as by the archaeological record in the vicinity (Mills Whipp Projects 2012). Numerous sites in the area have identified sequences of dumped deposits imported to raise the ground level. This dumping has been recorded at between 1m to 5.5m deep across the area of Moorfields (ibid). The made ground dumping sequence recorded during the evaluation was consistently between 2.20m and 2.50m deep across the area of Trenches 2 and 3 and therefore fits with the known profile of these deposits in the area.

8.2.4 Do the marshland deposits relating to Moorfields survive at the site as expected? What archaeological evidence do they contain, if any?

Sequences of alluvial deposits were recorded in all three evaluation trenches, although in Trench 1 it had been truncated and therefore only base of the sequence was observed. Trenches 2 and 3 however showed a complete alluvial sequence with some deposits clearly representing a marshland environment, layers [15] and [20]. However both the truncated marshland sequence in Trench 1 and the complete marshland sequences in Trenches 2 and 3 contained no evidence for archaeological activity. No archaeological artefacts were seen within the various deposits.

8.2.5 Do the marshland deposits offer any potential for palaeoenvironmental information beyond what is already known from previous work?

The marshland deposits in the area of Moorfields are known to contain an important palaeoenvironmental sequence due to the waterlogged and anaerobic conditions of deposition. Such marsh deposits were recorded during the evaluation in Trenches 2 and 3 along with a pit which also contained a marsh-like deposit due to being cut through the wetland environment. Palaeoenvironmental information from previous sites in the area corroborates the historical sources which illustrate Moorfields to be 'overgrown with...sedges, and rushes' (Mills Whip Projects 2012). The observed stratigraphy was in keeping with the expected marshland sequence and displayed no unusual characteristics.

8.2.6 Can the site be shown to have been unoccupied during the Saxon and medieval periods?

No evidence for Saxon activity was recorded during the evaluation as the area is likely to

have remained as marshland following the extensive flooding north of the city during the Roman period. A single feature of late medieval/early post-medieval date, however, was identified in Trench 1. In common with many similar features in the area, this pit was probably excavated following some drying out of the marsh in the later medieval period, finally becoming backfilled during the early post-medieval period, prior to extensive land reclamation and ground raising.

Similar features that have been recorded in the area during a number of archaeological interventions are generally interpreted as quarry pits exploiting the brickearth and gravel resources that lie beneath the Roman marsh deposits, located on the periphery of medieval settlement in open areas. Although some pits may date to slightly earlier in the medieval period, it has been suggested that at sites such as Finsbury Square and Oliver House, 51-53 City Road, quarrying was taking place in the late 15th century to provide materials for the repair of the city walls; a document dated 1477 indicates that one programme of repairs was instigated by the then Mayor, Ralph Jocelin. The quarry pits generally appear to have initially been left open and allowed to silt up naturally, though they were generally deliberately backfilled in the early post-medieval period with local domestic and trade rubbish and that from the city. Other pits that may have had late medieval origins but exhibited backfilling in the 15th and 16th centuries include those recorded at 25-29 Worship Street, 67-73 Worship Street and a large example at 11-23 City Road.

At other sites in the area located on the Hackney Terrace, quarry pits appear to have been cut from surface elevations of between c. 13m OD and 14m OD. The pit on the study site had clearly been heavily horizontally truncated by recent activity and it has been estimated that the upper c. 1m of the pit had been removed (based upon the visible scars of former buildings in the location of Trench 1 which could be seen on the retaining walls to the northern, eastern and southern sides of the car park). Such a loss would suggest a comparable original surface elevation with contemporary features in the area. Unfortunately the loss of the upper levels has also meant the probable loss of artefact-rich layers that have been recorded in the backfilling deposits of contemporary features on other sites; the organic-rich tertiary fill of the pit in Trench 1 produced only a small quantity of medieval/early post-medieval pottery.

At some sites in the vicinity contemporary pits have been found in relatively high concentrations. On one site at Finsbury Square (FSU99) twelve such features were recorded and a number of earlier quarries were found alongside Shoreditch High Street during the archaeological works in advance of the London Overground East London Line construction. On the study site however, only a single pit was recorded in Trench 1and no further features were apparent in Trenches 2 and 3, despite there being less horizontal truncation in these areas. It therefore appears that medieval activity was somewhat sparse compared to more heavily utilised areas closer to the city and along major thoroughfares. This view of the area as peripheral during the medieval period is well attested to in the archaeological record of sites in the vicinity (Mills Whipp Projects 2012).

8.2.7 Do earlier archaeological remains survive beneath the marshland?

No archaeological remains were recorded below the marshland deposits or below the alluvial sequence in general. In all three evaluation trenches the alluvial sequence sat directly upon the natural Hackney gravel with no archaeological features, deposits or artefacts being recorded below.

8.2.8 Is there any evidence for Roman activity on this hinterland area?

No evidence for Roman activity was encountered during the evaluation. As stated above marshland deposits and alluvium, most likely post-Roman in date were recorded directly overlying the natural Hackney Gravel and therefore no Roman features, deposits or artefacts were present.

8.3 Archive Destination

8.3.1 Upon completion of all phases of the archaeological work the archive will be deposited with the London Archaeological Archive and Research Centre under the unique site code CLF12.

8.4 Confidence

8.4.1 PCA considers that the archaeological evaluation was completed in accordance with all relevant guidelines, best-practice documents and the approved Written Scheme of Investigation.

8.4.2 The work was undertaken in reasonable weather conditions.

8.4.3 We consider that the results detailed in this report are reliable, although we allow that the evaluation methodology used to investigate Trenches 2 and 3 prevented close study of the sections. We are confident, however, that the methodology would have allowed identification of archaeological features within the trenches if they had been present.

9 ACKNOWLEGEMENTS

9.1 Pre-Construct Archaeology Ltd would like to thank Mills Whipp Projects for commissioning the work on behalf of their client, McLaren Property. Thanks are also extended to Adam Single of the Greater London Archaeology Advisory Service for monitoring the work on behalf of Hackney Council.

9.2 Sean Shinkwin of O'Connells Plant hire is also acknowledged for his efficient machining and subsequent reinstatement of the site.

9.3 The author would like to thank Chris Mayo for his project management, Rik Archer for the surveying, Jennifer Simonson for the illustrations and Chris Cooper for Site Logistics. Thanks are also extended to Chris Jarrett for his spot dating of the pottery. Thanks also to the excavation team: Joe Brooks and John Joyce.

10 BIBLIOGRAPHY

10.1 Printed Sources

Applied Geology, 2011, 'Report on Ground Investigation at 12-20 Paul Street, London', unpublished client report

Barton, N. 1992 *The Lost Rivers of London*, Phillimore & Co.

Bull, R., Davis, S., Lewis, H. and Phillpotts, C. with Birchenough, A. 2011 *Holywell Priory and the development of Shoreditch to c 1600: Archaeology from the London Overground East London line*, MOLA Monograph 53.

Mills Whipp Projects, 2012, '12-20 Paul Street & 83-105 Clifton Street, London EC2. Project Design for Archaeological Evaluation. Unpublished client report.

10.2 Online Sources

Department for Communities and Local Government, 2012. National Planning Policy Framework: Conserving and Enhancing the Historic Environment https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Greater London Authority, 2011 'The London Plan' http://www.london.gov.uk/priorities/planning/londonplan

London Borough of Hackney, 2010. Local Development Framework Core Strategy http://www.hackney.gov.uk/Assets/Documents/Adopted-LDF-Core-Strategy-final-incchaptimagescov-Dec2010-low-res.pdf

APPENDIX 1: PLATES

Plate 1, Trench 1 (north end) facing south (scale 2m)

Plate 2, Section 1 of pit [10], facing west

Plate 3, Trench 2, Section 5, facing east

Plate 4, Trench 2, Section 6, facing east

Plate 5, Brick basement floor [28] in Trench 3, facing south

Plate 6, Trench 3, Section 4, facing south

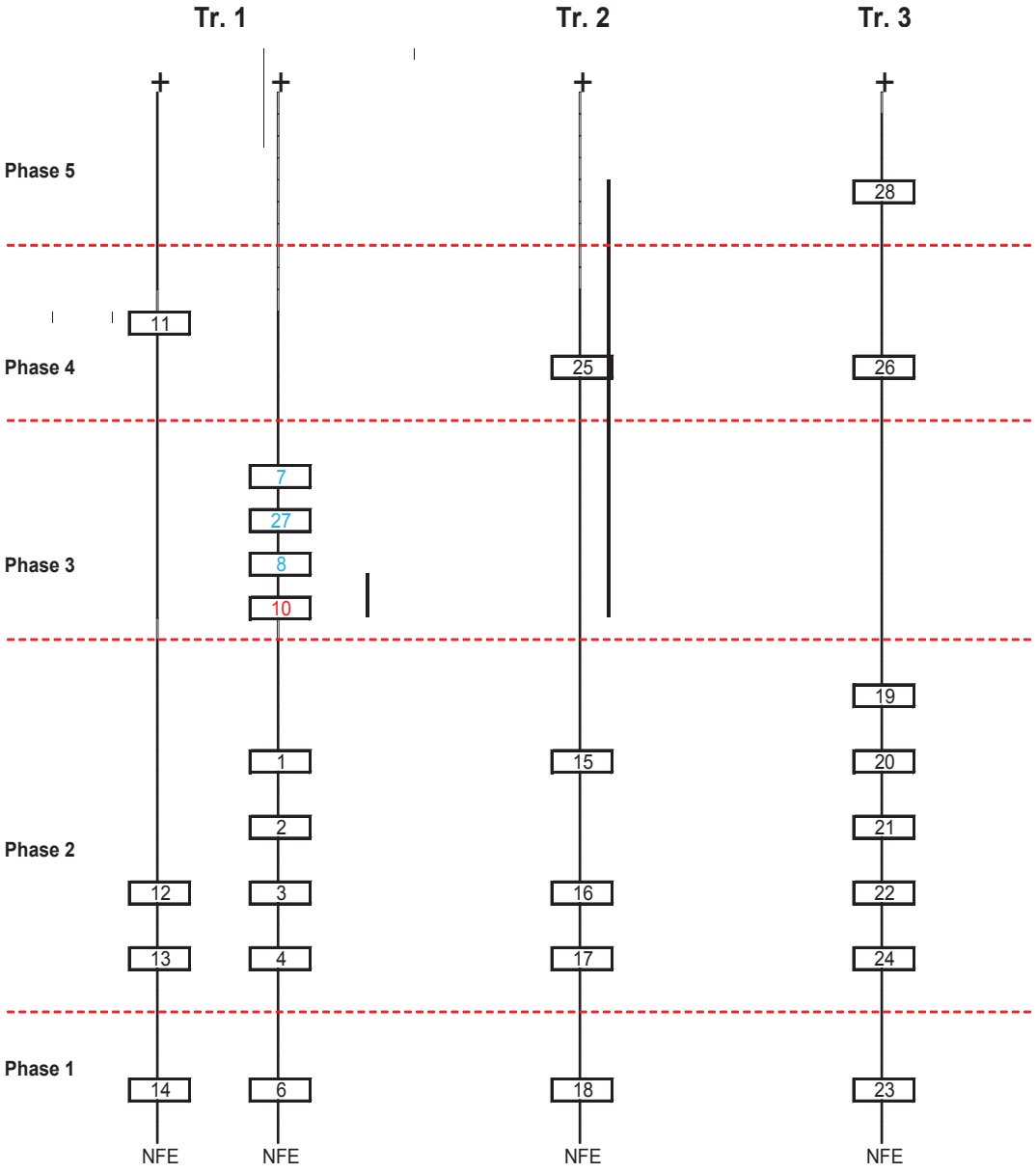
Plate 7, Trench 3, Section 3, facing south

APPENDIX 2: CONTEXT INDEX

Context	Trench	Section	Type	Description	Highest Level mOD	Lowest Level mOD	Phase
1	Trench 1	1	Layer	Alluvial layer	12.47	N/A	2
2	Trench 1	1	Layer	Alluvial layer	12.16	N/A	2
3	Trench 1	1	Layer	Alluvial layer	11.77	N/A	2
4	Trench 1	1	Layer	Alluvial layer	11.88	N/A	2
5	VOID	VOID	VOID	VOID			
6	Trench 1	1	Layer	Natural terrace gravel	11.61	N/A	1
7	Trench 1	1	Fill	Humic tertiary fill of quarry pit [10]	12.34	N/A	3
8	Trench 1	1	Fill	Primary fill of quarry pit [10]	12.02	N/A	3
9	VOID	VOID	VOID	VOID			
10	Trench 1	1	Cut	Late medieval/early post-med quarry pit	12.34	11.28	3
11	Trench 1	2	Layer	Post-med made ground	13.04	N/A	4
12	Trench 1	2	Layer	Alluvial deposit	12.59	N/A	2
13	Trench 1	2	Layer	Alluvial deposit	11.98	N/A	2
14	Trench 1	2	Layer	Natural terrace gravel	11.59	N/A	1
15	Trench 2	5, 6	Layer	Alluvial deposit	13.21	N/A	2
16	Trench 2	5, 6	Layer	Alluvial deposit	12.51	N/A	2
17	Trench 2	5, 6	Layer	Alluvial deposit	11.91	N/A	2
18	Trench 2	5	Layer	Natural terrace gravel	11.41	N/A	1
19	Trench 3	3	Layer	Alluvial deposit	13.55	N/A	2

Context	Trench	Section	Type	Description	Highest Level mOD	Lowest Level mOD	Phase
20	Trench 3	3, 4	Layer	Alluvial deposit	13.55	N/A	2
21	Trench 3	3	Layer	Alluvial deposit	12.55	N/A	2
22	Trench 3	3, 4	Layer	Alluvial deposit	12.95	N/A	2
23	Trench 3	3, 4	Layer	Natural terrace gravel	11.45	N/A	1
24	Trench 3	4	Layer	Alluvial deposit	11.94	N/A	2
25	Trench 2	5, 6	Layer	Post-med made ground	15.71	N/A	4
26	Trench 3	3, 4	Layer	Post-med made ground	15.75	N/A	4
27	Trench 1	1	Fill	Secondary fill of quarry pit [10]	12.34	N/A	3
28	Trench 3	N/A	Masonry	19th century brick basement, wall and floor	15.75	14.25	5

APPENDIX 3: SITE MATRIX



APPENDIX 4: OASIS DATA COLLECTION FORM

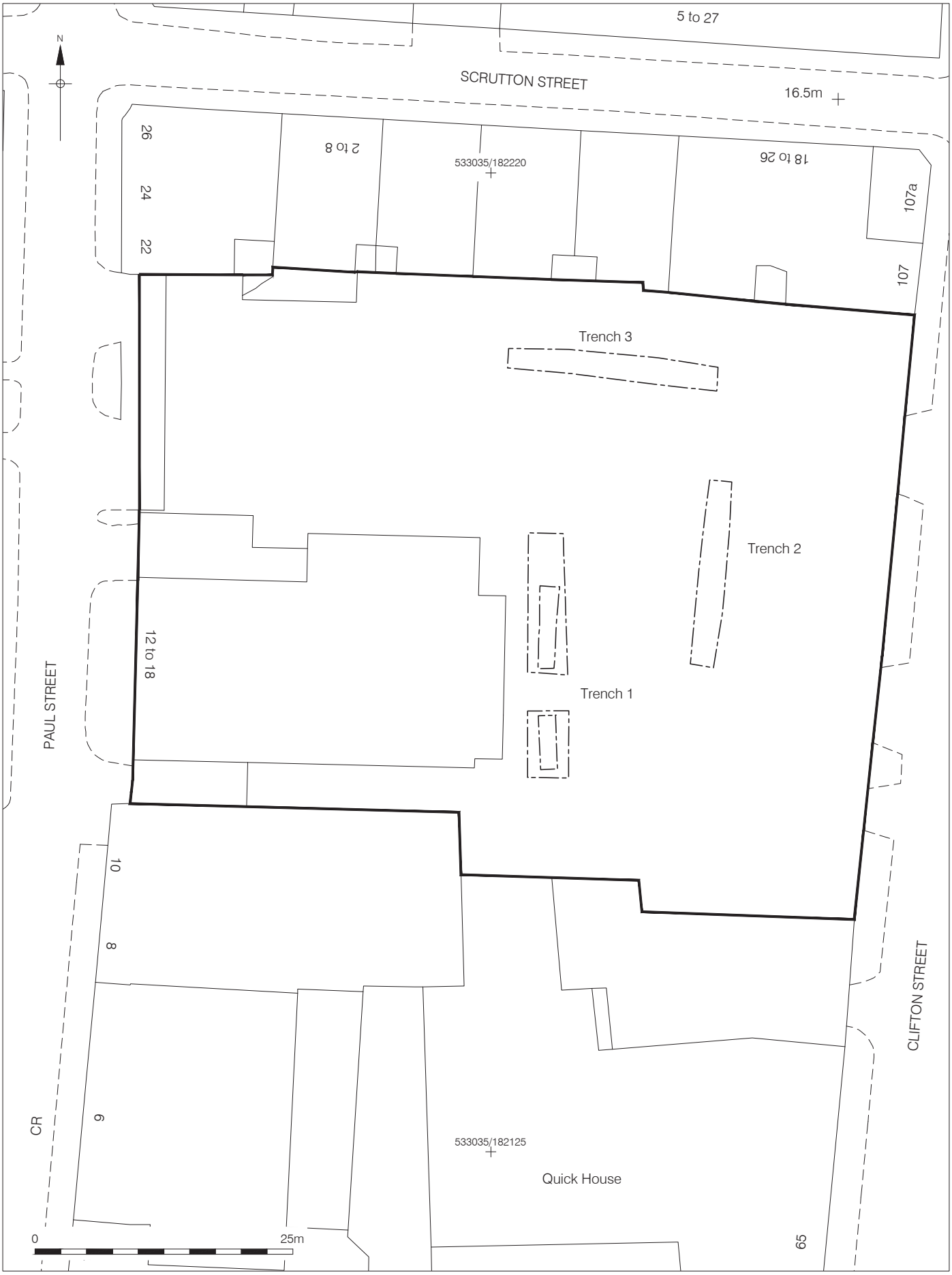
OASIS ID: preconst1-139462

Project details	
Project name	An Archaeological Evaluation at 12-20 Paul Street and 83-105 Clifton Street, London EC2
Short description of the project	An Archaeological Evaluation at 12-20 Paul Street and 83-105 Clifton Street, London EC2. Three evaluation trenches were excavated which encountered natural terrace gravels overlain by a seuqence of alluvium. Cutting through this alluvium was a late medieval/early post-medieval quarry pit. Sealing the alluvium was an extensive sequence of early post-medieval made ground associated with the reclamation of Moorfields in the 16th century. These were selaed by modern concrete
Project dates	Start: 23-11-2012 End: 07-12-2012
Previous/future work	No / Not known
Any associated project reference codes	CLF12 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Industry and Commerce 2 - Offices
Current Land use	Other 2 - In use as a building
Monument type	QUARRY PIT Medieval
Significant Finds	POTTERY Medieval
Methods & techniques	"Sample Trenches"
Development type	Urban commercial (e.g. offices, shops, banks, etc.)
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	After full determination (eg. As a condition)
Project location	
Country	England
Site location	GREATER LONDON HACKNEY HACKNEY 12-20 Paul Street and 83-105 Clifton Street
Postcode	EC2A 4ED
Study area	4077.00 Square metres
Site coordinates	TQ 3305 8217 51 0 51 31 20 N 000 04 55 W Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 11.41m Max: 11.60m
Project creators	
Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Mills Whipp Projects
Project director/manager	Chris Mayo
Project supervisor	Neil Hawkins
Type of sponsor/funding body	Developer

Name of sponsor/funding body	McLaren Property
Project archives	
Physical Archive recipient	LAARC
Physical Contents	"Ceramics"
Digital Archive recipient	LAARC
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography","Images vector","Spreadsheets","Survey","Text"
Paper Archive recipient	LAARC
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet","Drawing","Matrices","Photograph","Plan","Report","Section","Survey","Unpublished Text"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Land at 12-20 Paul Street and 83-105 Clifton Street, Hackney EC2A 4JH: An Archaeological Evaluation
Author(s)/Editor(s)	Hawkins, N.
Other bibliographic details	R11353
Date	2013
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	London
Description	A4 client document, bound with blue covers
Entered by	Chris Mayo (cmayo@pre-construct.com)
Entered on	4 January 2013

04/01/13 JS

Figure 1
Site Location
1:20,000 at A4



04/01/13 JS

Figure 2
Trench Location
1:500 at A4

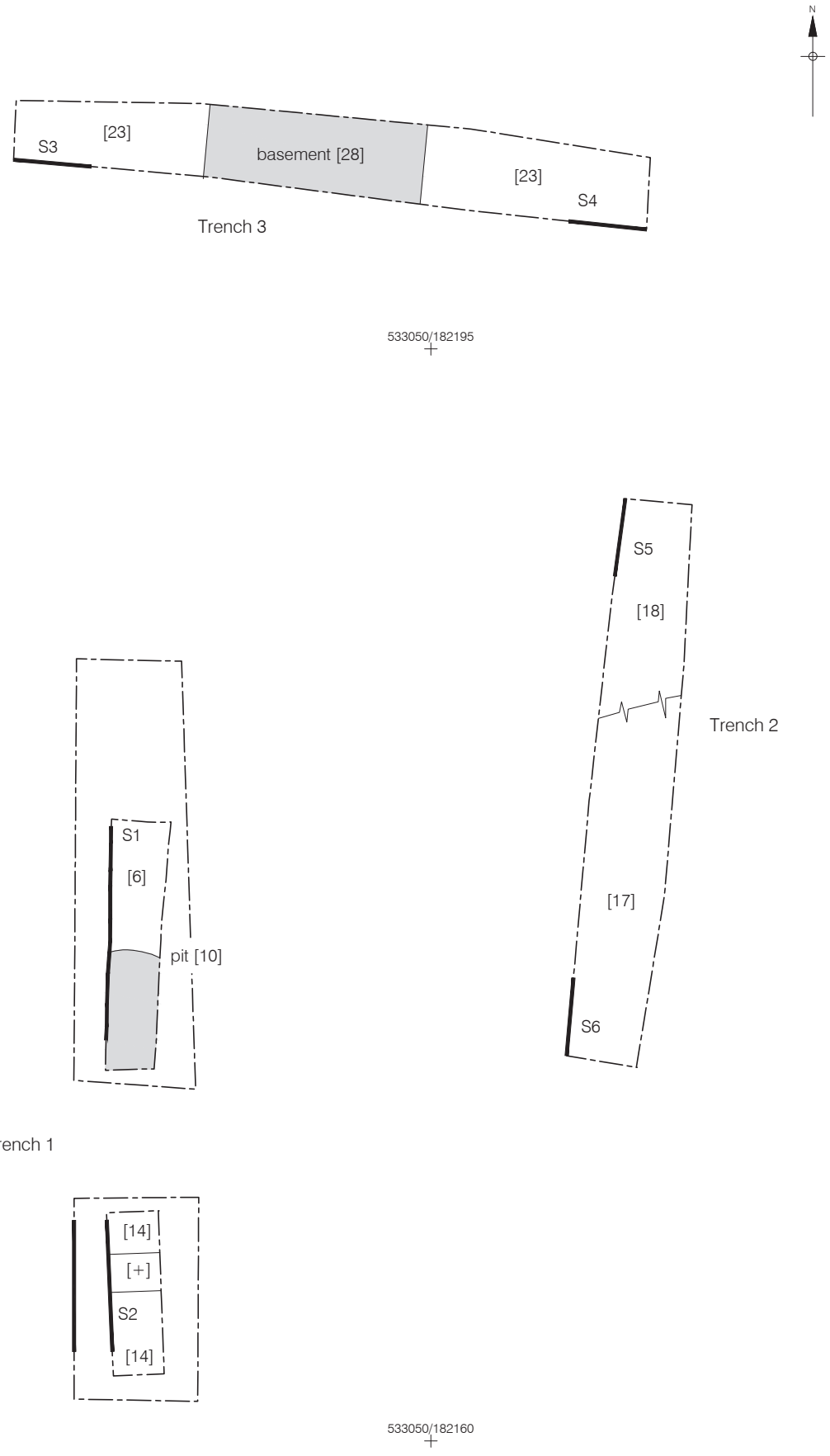


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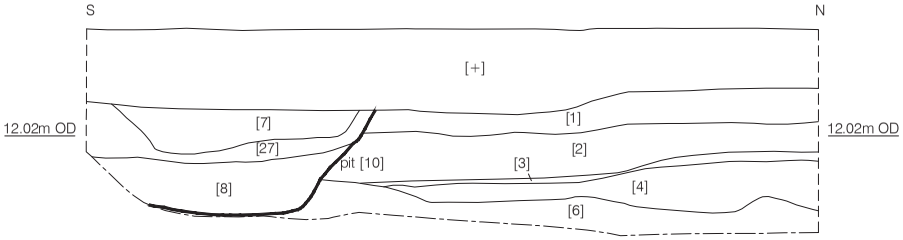
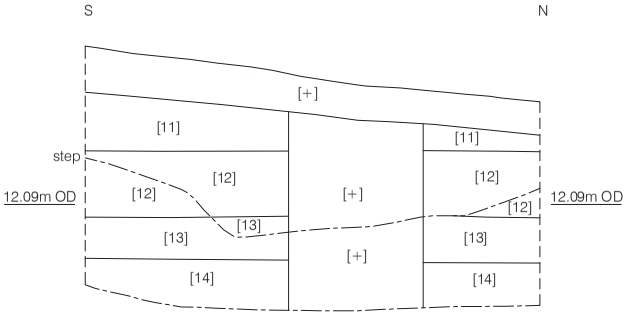
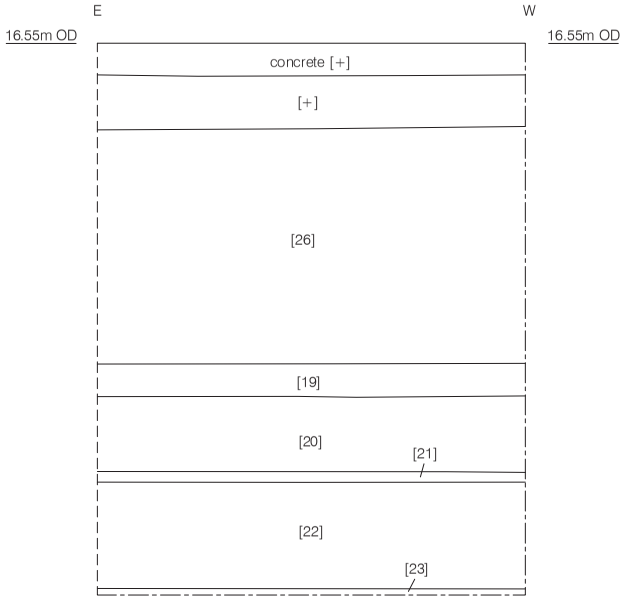
Figure 3
Trench Plans
1:200 at A4



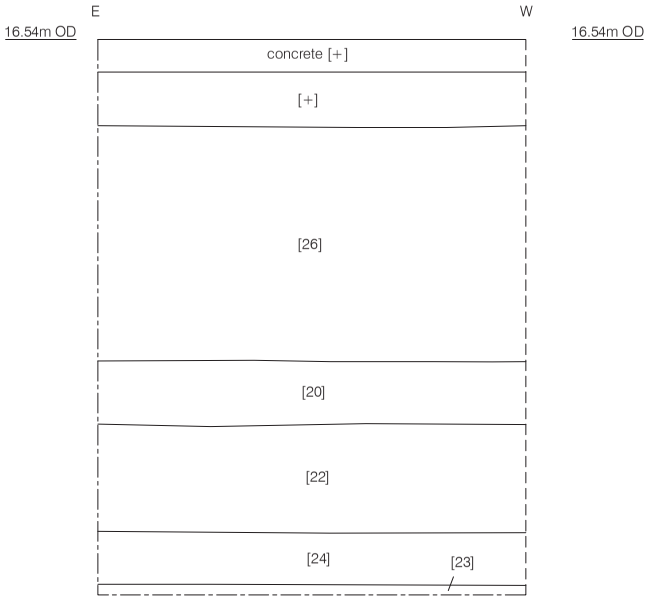
Section 1
Trench 1
East Facing



Section 2
Trench 1
East Facing



Section 3
Trench 3
North Facing

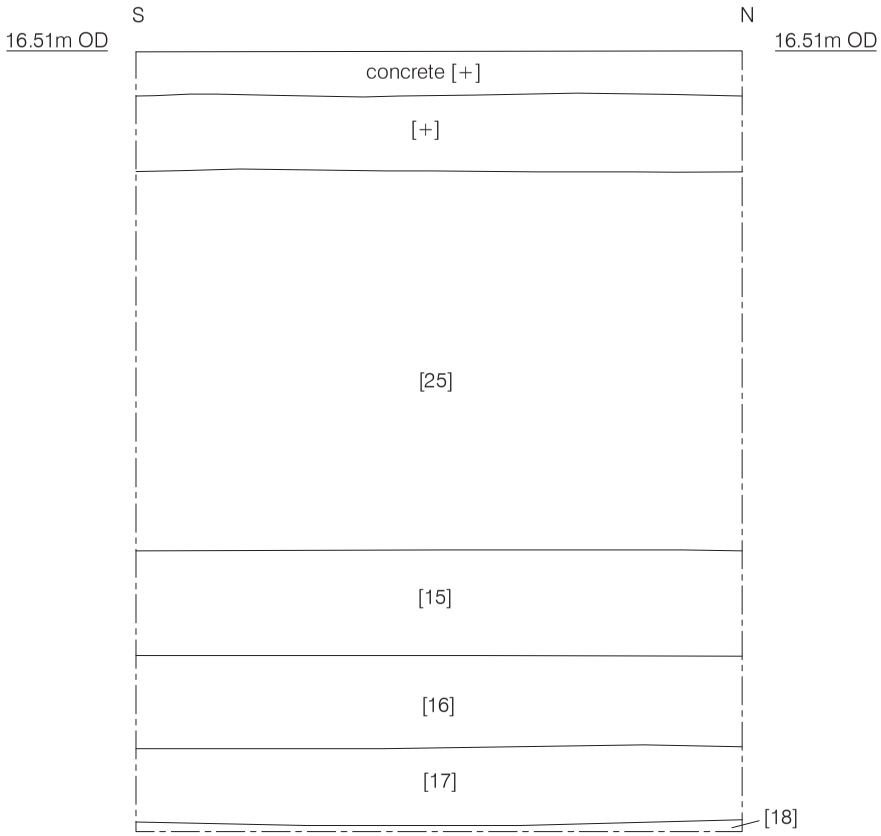


Section 4
Trench 3
North Facing

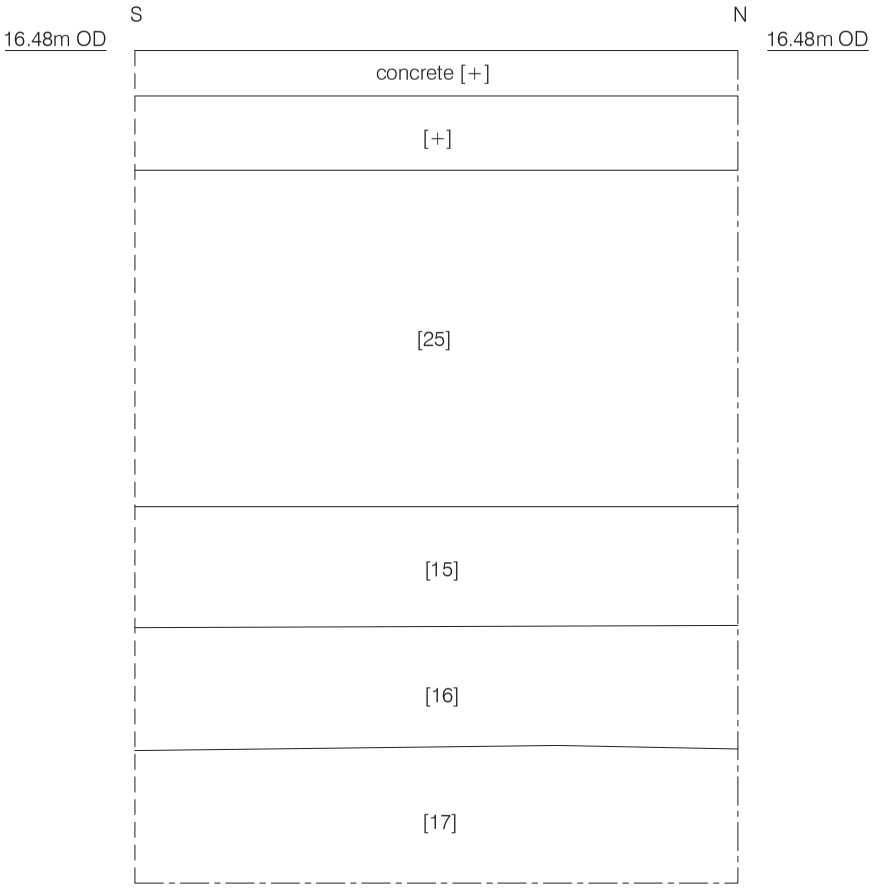
0 2m

04/01/13 JS & MR

Figure 4
Sections
1:50 at A3



Section 5
Trench 2
East Facing



Section 6
Trench 2
East Facing

0 2m

04/01/13 JS & MR

Figure 5
Sections
1:50 at A4

P C A

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