

ARCHAEOLOGICAL EVALUATION OF BLOCKS B, L AND P, MARDYKE ESTATE, RAINHAM, LONDON BOROUGH OF HAVERING

SITE CODE: MYE 08

OCTOBER 2009

PRE-CONSTRUCT ARCHAEOLOGY

LAG 16/339

SHELF

An Archaeological Evaluation on Blocks B, L and P, Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS

Site Code: MYE 08

Central National Grid Reference: TQ 5057 8339

Written and Researched by Amelia Fairman

Pre-Construct Archaeology Limited, October 2009

Project Manager: Charlotte Matthews

Commissioning Client: Inspace Partnerships

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

Tel:020 7732 3925Fax:020 7639 9588

Email: cmatthews@pre-construct.com Website: www.pre-construct.com

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DOCUMENT VERIFICATION

Site Name

Blocks B, L and P, Mardyke Estate, Rainham, London Borough of Havering

Type of project

Archaeological Evaluation

Quality Control

0

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	Name & Title	Signature	Date
Text Prepared by:	Amelia Fairman		27.10.09
Graphics Prepared by:	Jennifer Simonson		27.10.09
Graphics Checked by:	Josephine Brown		27.10.09
Project Manager Sign-off:	Charlotte Matthews		27.10.09

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

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1 ABSTRACT

- 1.1 Pre-Construct Archaeology Ltd was commissioned by Inspace Partnerships to carry out an archaeological evaluation on Blocks B, L and P (the Phase 1 Development), Mardyke Estate, Rainham, London Borough of Havering, centred on Ordnance Survey NGR TQ 5057 8339, in connection with a proposal to demolish the existing structures and construct new low-level dwellings. The site is located within an archaeological priority area as specified in the London Borough of Havering's Unitary Development Plan, in an area where both prehistoric and Roman archaeological remains have been found. Significant remains relating to Bronze Age settlement activities have been found just south of the site while a Roman settlement has been found just to the west of the site. However, of particular significance are the Roman remains found during the construction of the Mardyke Estate in the 1960s. The evaluation was required by David Divers, English Heritage Greater London Archaeological Advisor (North East).
- 1.2 The evaluation fieldwork was undertaken from 21st to 30th September 2009. Six trenches were opened during the evaluation. Trenches 2-5 were situated in grassed areas and sealed by topsoil and subsoil. Trench 1 was located within a car park and sealed by 20th century made ground and tarmac. The trenches were positioned to investigate. Blocks B (trenches 1-3), L (trenches 4-5) and P. (trench 6) within the Mardyke Estate prior to demolition and redevelopment.
- 1.3 Natural geological deposits were observed in the bases of all trenches. These tended to comprise coarse sand, overlain and underlain by bands of gravel. A number of features cut natural geological deposits within trenches 1 and 5. No dating evidence was retrieved from these features and they were subsequently interpreted as of probable natural origin.
- 1.4 A number of cut features of Roman date were found in trench 1. These were confined to the western end of the trench and comprised two postholes and a pit. Significantly all fragments of pottery examined exhibited clean, unabraded breaks and included the lids from at least four separate vessels. The trench was subsequently sealed by a flood deposit of medieval date.
- 1.5 The trenches that were sealed by grass and topsoil appeared to have suffered extensive horizontal truncation as a result of landscaping and terracing during the construction of the Mardyke Estate. Areas of greatest archaeological potential for future works may therefore lie in areas subjected to ground raising or within areas of higher ground, as exist to the north of the subject site.

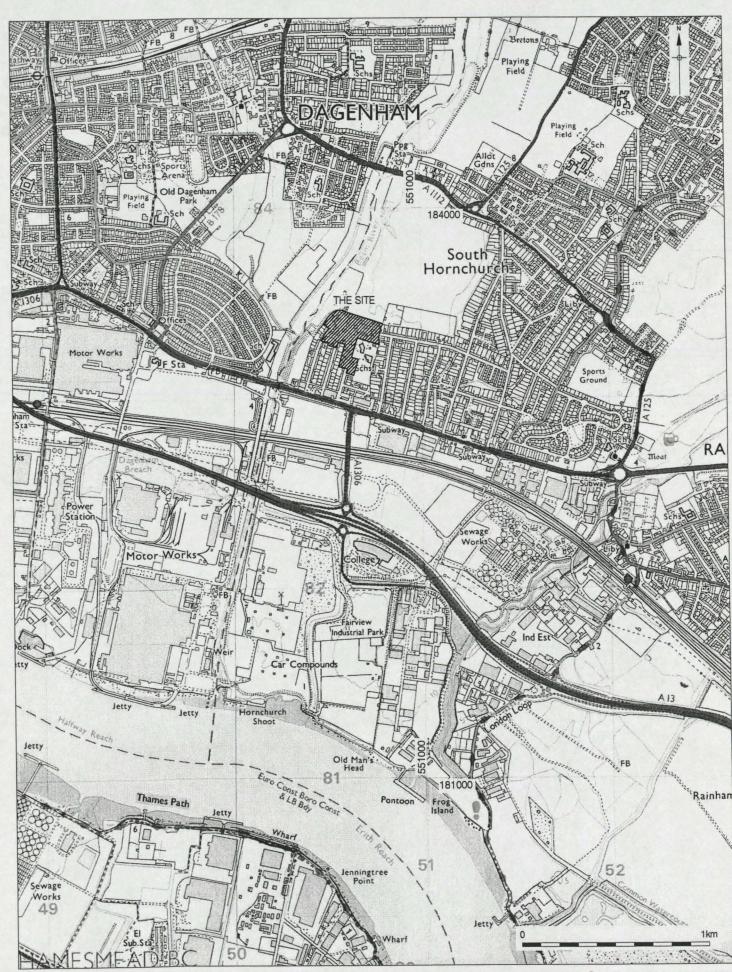
Inspace Partnerships

2 INTRODUCTION

- 2.1 Pre-Construct Archaeology Ltd was commissioned by Inspace Partnerships to carry out an archaeological evaluation of the Phase 1 development within the Mardyke Estate, Rainham, London Borough of Havering, centred on Ordnance Survey NGR TQ 5057 8339, in connection with a proposal to demolish the existing structures and construct new low-level dwellings.
- 2.2 The evaluation was conducted between 21st and 30th September 2009, in accordance with the Institute of Field Archaeologists' *Standard and guidance for archaeological field evaluation* (1994, revised 2001) and a Written Scheme of Investigation¹, which was agreed in advance of the fieldwork by David Divers, English Heritage Greater London Archaeological Advisor (North East).
- 2.3 The Phase 1 development site lies entirely within the Mardyke Estate, which is bounded by a field and Lower Mardyke Avenue to the north, fields and the River Beam to the west, housing to the south and Newtons Infant School to the east (**Figures 1** and **2**).
- 2.4 The site was assigned the code MYE 08.

¹Hawkins H., 2009.

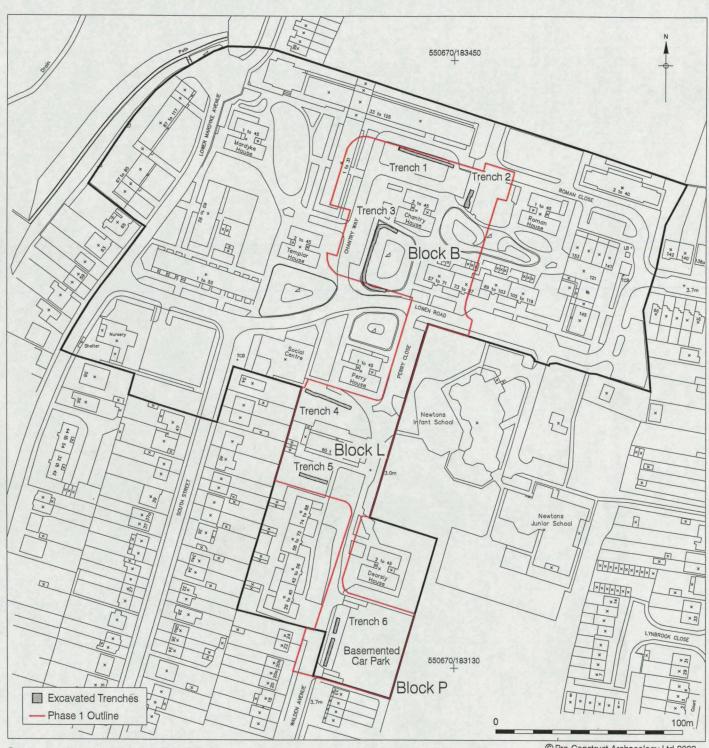
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Figure 1 Site Location 1:20,000 at A4



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Figure 2 **Trench Location** 1:2,000 at A4

3 PLANNING BACKGROUND

- 3.1 In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) "Archaeology and Planning", providing guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains.
- 3.2 In short, government policies provide a framework which:
 - Protect Scheduled Ancient Monuments
 - Protect the settings of these sites
 - Protect nationally important un-scheduled ancient monuments
 - Has a presumption in favour of *in situ* preservation
 - In appropriate circumstances, requires adequate information (from field evaluation) to enable informed decisions
 - Provides for the excavation and investigation of sites not important enough to merit *in situ* preservation
- 3.3 In considering any proposal for development, the local planning authority will be mindful of the policy framework set by government guidance, in this instance PPG16, of existing development plan policy and of other material considerations.
- 3.4 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 policies relating to archaeology and cultural heritage 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.

3.5 Havering's Local Development Framework (LDF) was adopted in October 2008. Relevant policies for Archaeological and Cultural Heritage include:

DC70 – ARCHAEOLOGY AND ANCIENT MONUMENTS

The Council will ensure that the archaeological significance of sites is taken into account when making planning decisions and will take appropriate measures to safeguard that interest. Planning permission will only be granted where satisfactory provision is made in appropriate cases for preservation and recording of archaeological remains in situ or through excavation. Where nationally important archaeological remains exist there will be a presumption in favour of their physical preservation. Particular care will need to be taken when dealing with applications in archaeological 'hotspots' where there is a greater likelihood of finding remains.

Planning permission will not be granted for development which adversely affects the three Ancient Monuments in the Borough of their settings.

DC71 – OTHER HISTORIC LANDSCAPES

The character of historic parks and Common Land will be protected or enhanced giving particular attention to the protection of views to and from common land and other historic landscapes.

3.6 The site lies partially within an Archaeological Priority Area. No Scheduled Ancient Monuments lie within the boundary of the subject site.

3.7 In accordance with the conditions laid down in Havering's LDF, a programme of evaluation by trial trenching was designed² and carried out in consultation with David Divers, the English Heritage archaeological advisor for the London Borough of Newham. Six trenches were proposed within the footprint of the new development but outside the footprints of the current buildings. These were designed to lie within the curtilage of the proposed Phase 1 development (Blocks B, L and P).

²Hawkins H., 2009.

4 GEOLOGY AND TOPOGRAPHY

4.1 Geology

- 4.1.1 The British Geological Survey 1:50,000 series (Map Sheet 257) indicates that part of the site lies within worked or made ground; wholly or partly backfilled pits. The underlying geology is London Clay which overlies Woolwich and Reading beds. These outcrop approximately 400m to the south.
- 4.1.2 Within the central part of the site, drift geology is absent. In the southeastern areas Flood Plain gravels are present, and in the northwest alluvium associated with the River Beam is present. The latter lies to the west of Lower Mardyke Avenue.

4.2 Topography

- 4.2.1 The area of the subject site is fairly level with a slight downwards slope from east to west, varying between 4 and 6m aOD (above Ordnance Datum). The site is covered in a number of raised flower beds, car parking areas, grassed areas and playground areas. The area of proposed Block P is mostly occupied by a basemented car park.
- 4.2.2 The River Beam is located directly to the west of the site and the River Thames is located c. 2km to the south of the subject site.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Unless referenced otherwise, the archaeological and historical background information cited below was obtained from the Archaeological Desk Based Assessment previously carried out by Pre-Construct Archaeology Ltd³.

5.2 Prehistoric

- 5.2.1 Excavations by Compass Archaeology, approximately 500m to the south of the subject site yielded a blade of early Mesolithic to late Neolithic date. A further Mesolithic blade was discovered during the development of the existing estate in 1963.
- 5.2.2 Recent excavations on the opposite side of the River Beam at the Washlands site, *c*.100m to the west of the subject site on the opposite side of the river discovered flint artefacts of Mesolithic date. These were encountered within alluvial deposits which filled the Wantz stream; a tributary of the River Beam. An Iron Age ditch and kiln were also revealed during the excavations.
- 5.2.3 A prehistoric pit and three postholes were identified during excavations undertaken at 15-17 New Road, approximately 500m to the south of the proposed development. Other artefacts described as being of prehistoric date were encountered during the construction of dams in the early 18th century within the vicinity of the site.

5.3 Roman

- 5.3.1 Extensive evidence for Roman activity has been found within the area of the subject site.
- 5.3.2 During the construction of the existing Mardyke Estate in 1963, evidence emerged for a Roman cemetery plus artefacts associated with settlement activity which included quernstone fragments and quantities of pottery.
- 5.3.3 Details of the 1963 discoveries are vague, but also refer to cut features filled with dark earth interpreted by the excavator as latrine pits. The naming of the easternmost of the tower blocks as Roman House and the associated road as Roman Road may indicate the approximate location of the previously excavated archaeological deposits.
- 5.3.4 The evaluation at Beam Washlands unearthed evidence of a Roman ditch and cremation cemetery which were located approximately 200 metres to the west of the site boundary. This contained 20 cremation burials. Settlement activity in the form of kilns, wells, pits and a small post structure were encountered to the west of the cemetery.
- 5.3.5 In 1929, at the junction of Manser Road and Frederick Road, a stone coffin of Roman date was discovered. A textual reference places this approximately 250 metres to the east of the subject site's eastern boundary.

5.4 Saxon and Medieval

- 5.4.1 There is no evidence for the Saxon period within the vicinity of the site.
- 5.4.2 Documentary sources state that the Manor of Mardyke originated in ½ Virgate of land which belonged to Gillian, daughter of Ellis who married William of Mardyke, prior to 1240. However, by 1300 the manor had passed to Richard of Barking. By 1662 the Estate comprised 140 acres and a Mill.
- 5.4.3 The medieval Manor of Mardyke is documented as lying on the edge of the (Hornchurch) marshes, about ½ a mile south of Dagenham Bridge. The Manor has not been located, but the presence of two ponds visible on the John Carey map of 1786 is intriguing as they clearly pre-date the construction of Mardyke Farm. It is possible that they were associated with the original Manor of Mardyke. No evidence

³ Payne, 2008

of the Manor was noted during the destruction of Mardyke Farm in the 1960s so a possibility remains that it may lie within the development area.

5.5 Post-Medieval

- 5.5.1 The character of Havering appears on the earliest maps as marsh and agricultural land, occupied by small scattered farms.
- 5.5.2 By 1702 the Manor of Mardyke was owned by the Fanshaws who sold it to the Tyler family in 1734. The estate remained in their possession until 1849 when it was finally sold. At this time the estate comprised 177 acres.
- 5.5.3 By 1918 Mardyke Farm, located directly to the north of the site, comprised 122 acres and Little Mardyke Farm comprised 72 acres.
- 5.5.4 Documentary sources state that a Dam was built across the River Beam by a Captain Perry after the Great Breach of the River Thames of 1707. This was followed by the construction of a series of earth banks, to prevent further flooding.
- 5.5.5 A review of cartographic sources suggests that parts of the Hornchurch Marsh, which spread throughout the south-western limits of the subject site, were drained during the late 18th or mid 19th centuries. Gravel extraction along the line of New Road also occurred at this time.
- 5.5.6 The area of the subject site remained in use as farmland from 1867 until 1939, with the farmhouse located at the north-western limits of the site boundary. Construction of the extant Mardyke Estate began in the 1960s and remains unchanged to the present.

6 METHODS

- 6.1 In accordance with the Written Scheme of Investigation⁴, the trenches were arranged to fully investigate the presence or absence of archaeological remains across the site.
- 6.2 A total of 6 archaeological trial trenches were excavated, the dimensions of which, at ground level, were:

Trench 1	30m x 2m
Trench 2	10m x 2m
Trench 3	50m x 2m
Trench 4	25m x 2m
Trench 5	15m x 2m
Trench 6	20m x 2m (split into two lengths to bridge an extant water
	tank)

- 6.3 The trenches were machine excavated to a maximum depth of 1.2m below the current ground surface, or to the top of archaeological or natural horizons. Potential features were then hand cleaned and partially excavated.
- 6.4 Trenches were excavated using a 360° machine with a flat bladed ditching bucket, under the supervision of the attendant archaeologist. Once recorded, the trenches were backfilled with the material removed from them.
- 6.5 One or more representative sample sections, each 2.5m wide, were cleaned and recorded in each trench. The base of each trench was also hand-cleaned before recording, along with any archaeological features. The latter were half sectioned or slotted in order to obtain dating evidence prior to recording.
- 6.6 The recording systems employed during the evaluation were fully compatible with those most widely used elsewhere in London, that is those developed out of the Department of Urban Archaeology Site Manual, now published by the Museum of London Archaeology Service (MoLAS 1994). Individual descriptions of all archaeological strata and features excavated and exposed were entered onto proforma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being drawn at a scale of 1:50 or 1:20 as appropriate and the sections at 1:10. The OD heights of all principal strata were calculated and indicated on the appropriate plans and sections. A full photographic record of the investigation was prepared, including both black and white prints and colour transparencies on 35mm film.
- 6.7 Levels were taken from Temporary Bench Marks established across the site within each block. The benchmarks within Block B were established on pavements adjacent to trenches 1 and 2, and 3 with values of 4.19m aOD and 3.57m aOD respectively. Within Block L an area of hardstanding with the value of 2.93m aOD was utilised for trenches 4 and 5, and concrete within block P was established as a bench mark with the value of 2.49m aOD. The baselines of each trench were established using GPS and tied into the Ordnance Survey grid.

⁴ Hawkins, 2009

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7 ARCHAEOLOGICAL PHASE DISCUSSION

7.1 Phase 1 – Natural Geological Deposits

- 7.1.1 Natural deposits were encountered in all trenches, and comprised varying bands of sand and gravel or silty clay.
- 7.1.2 The earliest deposit encountered within trench 1 comprised a band of friable, greyish yellow sandy gravel. This was encountered from 3.82m aOD as deposit [130] and confined to the south-eastern end of the trench, sealed by natural sand [129] (Figures 3 and 7). Sand layer [129]=[135] was observed across the trench, extending beyond the limit of excavation to an unknown depth. The deposit comprised friable, dark brown/orange yellow coarse sand, containing occasional lenses of small subrounded and sub-angular gravels and occasional lenses of silty sand. This layer exhibited a marked eastern incline, rising from 3.55m aOD to 3.89m aOD from west to east respectively. Natural sands were overlain by a 9.6m wide (east-west) band of coarse sandy gravel, comprising small angular and medium sized rounded gravels. Denoted as deposit [133]=[134], this was encountered from 3.83m aOD and appeared to extend in a roughly north-west south-east orientation. This deposit was subsequently interpreted as a natural feature, possibly the in-filling of a palaeochannel due to the interleaving of sands at its eastern and western sides.
- 7.1.3 A similar sequence was apparent within trench 4, to the south. Compacted gravel layer [107], identified at 2.19m aOD extended in a 0.8m wide east-west band through the middle of the trench (Figure 5). This was sealed by loose, mid reddish yellow mottled sand layer [109]=[110] (Figure 8). The deposit was encountered from 2.01m aOD and contained lenses of silty clay. This was overlain by firm, brown silty clay layer [106] and loose sandy gravel [108] to the east and west respectively from 2.14m aOD and 2.15m aOD. Both layers were interpreted as natural features and appeared sterile.
- 7.1.4 Comparable gravelly sand was observed within trenches 2 and 3 as deposits [124] and [138] (Figures 3, 4 and 8). The deposits comprised loose, light yellow coarse sand and were identified between levels of 3.87m aOD and 3.27m aOD. The differences in elevation indicate extensive horizontal truncation in the vicinity of trench 3.
- 7.1.5 Within trench 5, gravel layer [115] was identified as sealing natural coarse sand [116] at 2.23m aOD and 2.12m aOD (Figures 5 and 8). Natural geological deposits within trench 6 however were found to comprise fine sandy clay containing moderate inclusions of sand lenses. Layer [103]=[105] was identified from 2.06m aOD (Figures 6 and 8). The upper 100mm of this layer appeared weathered suggesting a prolonged exposure and contained residual fragments of abraded Roman pottery with a date range of c.40-500 AD. Deposit [103]=[105] was therefore interpreted as a colluvial layer.

7.2 Phase 2- Undated

- .7.2.1 A number of features were identified within trenches 1 and 5. These features all cut natural geological deposits but contained no dating material.
- 7.2.2 Feature [118] in trench 5 cut sand layer [116] from 2.08m aOD (**Figure 5**). It extended 1.34m east-west, 0.9m north-south and was 0.25m deep. It had concave sides and a rounded base at 1.83m aOD. In plan the feature was irregularly shaped with a gradual break of slope at top and base. Cut [118] was filled in its entirety by compacted, yellow/reddish brown sandy gravel [117]. The fill contained evidence of rooting, and the feature was therefore interpreted as a tree throw.
- 7.2.3 Further evidence of potentially natural features were identified within trench 1 as cuts [144] and [142] (**Figures 3** and **7**). These features were located at the west and east ends of the trench, truncating natural sand [129] and gravel [133] respectively.

Feature [144] extended 1.44m east-west, 0.26m north-south (extending beyond the limit of excavation to the north) and was 0.25m deep. The cut appeared irregular in plan with steep sides and uneven base at 3.35m aOD, and filled in its entirety by loose, greyish brown coarse sandy gravel deposit [143]. Cut [142] was similarly irregularly shaped in plan extending 2.5m east-west, 1.2m north-south and was 0.62m deep. Its sides were steep and concave and it had a flat base at 3.07m aOD. The cut was entirely filled by deposit [141] from 3.69m aOD, and comprised a firm, light grey gravelly sandy silt with very occasional inclusions of burnt flint. Both features were subsequently interpreted as tree throws of unknown date.

- 7.2.4 Feature [120] was also identified within trench 1, and cut natural sand [129]. The cut extended beyond the southern limit of excavation and was therefore only partially revealed. It continued 1.5m east-west, 0.78m north-south and was 0.15-0.2m deep. The feature had concave sides and an uneven, concave base at 3.51m aOD, cut from 3.67m aOD. Fill [119] comprised loose, yellowish-grey, silty sand, containing very occasional inclusions of small burnt flint fragments and small heavily abraded pottery fragments. The fill was relatively homogenous and well sorted, and therefore interpreted as a natural in-filling, the function or date of the cut however remains unknown.
- 7.2.5 To the east of [142], features [146] and [132] were identified. Cut [146] extended 0.38m in diameter and was 0.08m deep from 3.65m aOD. The feature had concave sides and a rounded base at 3.57m aOD, filled by firm, brownish grey gravelly sandy silt [145], which contained occasional inclusions of charcoal flecks and burnt clay. Approximately 2m to the east of this feature, and continuing beyond the southern limit of the trench was feature [132]. This extended 0.24m east-west and was 0.12m deep, cut from 3.7m aOD, with a tapered base at 3.61m aOD. Filling [132] was a deposit of firm, brownish-grey fine sandy clayey silt [131]. Features [146] and [132] both truncated natural gravel [133]. With no dating evidence recovered from these two features, they were tentatively interpreted as ephemeral post holes or naturally infilled voids resulting from bioturbation.

7.3 Phase 3 – Roman

- 7.3.1 A number of Roman features were identified within trench 1, all at the western end of this trench.
- 7.3.2 Cut [126] extended 1.22m north-south, 1.28m east-west and was 0.4m deep; it continued beyond the limit of excavation to both north and west (**Figures 3** and **8**). In plan the feature appeared sub-rectangular with steeply sloped sides and an uneven, undulating base. The feature cut natural sand from 3.46m aOD with its base at 3.06m aOD, and was filled by deposit [125], which comprised loose, mid brownish grey, silty sand with occasional inclusions of rounded pebbles, CBM (ceramic building material) and medium to large sized pottery fragments. The latter were all fresh and unabraded and interestingly included lids from four different vessels. An examination of these sherds gave a date range of c.120-160 AD. A large fragment of CBM recovered from this context appears to be from a Belgic type brick of late Iron Age to Roman date.
- 7.3.3 Smaller feature [122] cut fill [125]. This was found at 3.43m aOD and was 0.6m in diameter and 0.29m deep; it was sub-rectangular in plan and was filled by deposit [121]. The cut exhibited a sharp break of slope at its top, gradual at its base, with steep sides and a rounded base, at 3.14m aOD. Deposit [121] comprised loose, brownish-grey, clayey silty sand, containing moderate inclusions of rounded and sub-rounded gravels and occasional small fragments of pottery. Similar to the pottery sherds found within [125], all examples exhibited clean breaks and were unabraded indicating burial soon after deposition. The pottery has a date range of *c*.70-200 AD.
- 7.3.4 Approximately 3m east of [126] a third feature was identified. Cut [140] was circular in plan with stepped sides, concave at top before becoming vertical, with a sharp break of slope at its top and its base and a flat regular base at 3.22m aOD. The feature extended 0.52m east-west, 0.18m north-south (extending beyond the northern limit of

excavation) and was 0.37m deep, from 3.59m aOD. Filling [140] was deposit [139] which comprised loose, greyish-brown, silty sand containing occasional inclusions of small rounded gravels, charcoal flecks and flecks of burnt clay. No dating material was recovered from this feature. However, it was assigned to this phase on the basis of its association with features [126] and [122], the regularity of the cut, and its identification at a comparable aOD height to the other Roman features. Features [140] and [122] were subsequently interpreted as postholes and [126] as a roughly contemporary pit.

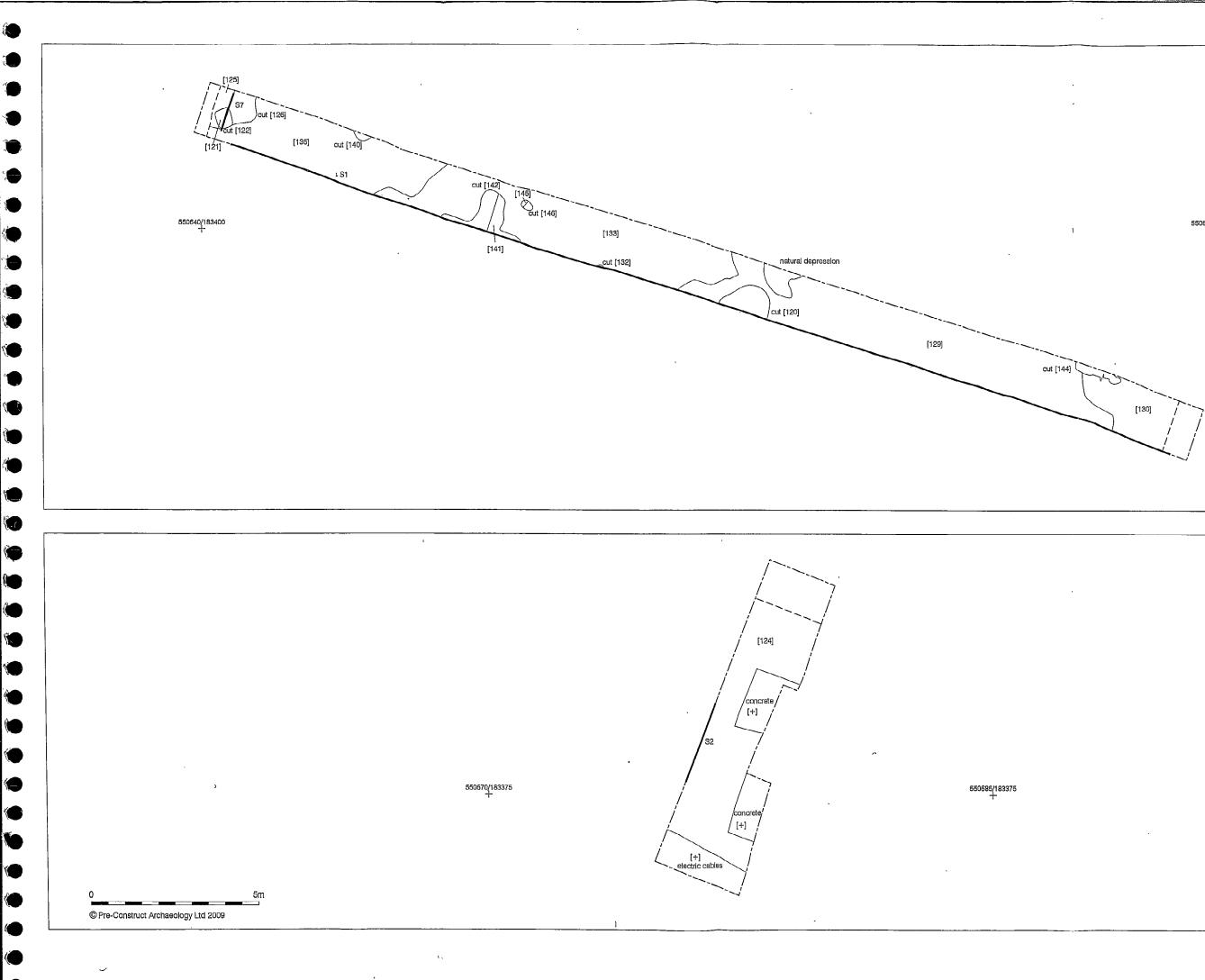
7.4 Phase 4- Medieval

7.4.1 Sealing trench 1 was a 0.1-0.25m thick deposit of firm, blue-grey sandy silt. Layer [128] was identified from 4.12m aOD in the east of the trench, sloping down to 3.78m aOD in the west (**Figure 7**). The deposit contained occasional flecks of daub and small sherds of pottery. Furthermore, within the deposit were lenses of small sub-angular gravels and sand consistent with a flood deposit. The lower boundary between [128] and natural sands and gravels appeared diffuse and undulating and may suggest a period of standing water. A review of the pottery recovered suggested a medieval date, but also included residual fragments of Roman date. Layer [128] was subsequently interpreted as a medieval flood deposit. No similar deposits were identified elsewhere within the subject site.

7.5 Phase 5 – Modern

- 7.5.1 Sealing [128] within trench 1 was a 0.15m thick deposit of dark brown-grey sandy silt. Layer [127] contained occasional small sherds of late 18th/early 19th century pottery. This deposit was identified from 4.12m aOD, interpreted as made ground, and subsequently sealed by 20th century rubble and tarmac.
- 7.5.2 Trenches 2, 4, 5 and 6 were all sealed by 0.15m-0.30m thick bands of sandy silt subsoil. These were denoted as deposits [123], [112], [114] and [100]=[104] respectively, and encountered from 4.18m aOD to the north of the subject site within trench 2, and 2.33m aOD to the south within trench 6 (**Figure 8**). A modern land drain [102] was also encountered within trench 6, cutting natural geological deposits and extending in a north-east south-west orientation (**Figure 6**).
- 7.5.3 Made ground [137], 0.3m thick, was observed within trench 3 and comprised compacted brown-grey silty sand with gravel. It extended from 3.55m aOD (**Figure 8**).
- 7.5.4 Trenches 2, 3, 4, 5 and 6 were all sealed by topsoil and grass. The turf and subsoil within these trenches were interpreted as landscaping deposits associated with the construction of the Mardyke Estate during the 1960s.

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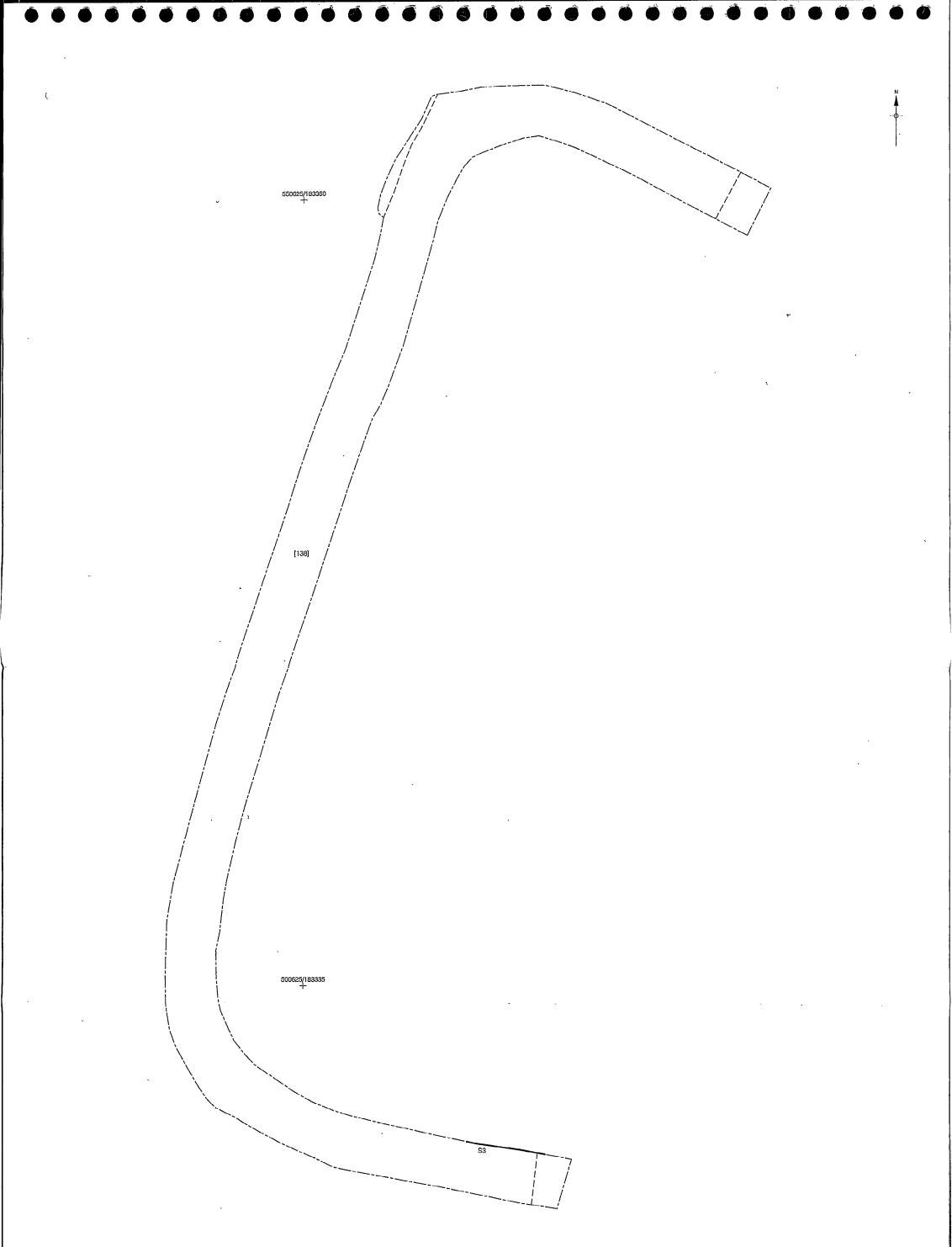


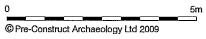
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Trench 1

Trench 2

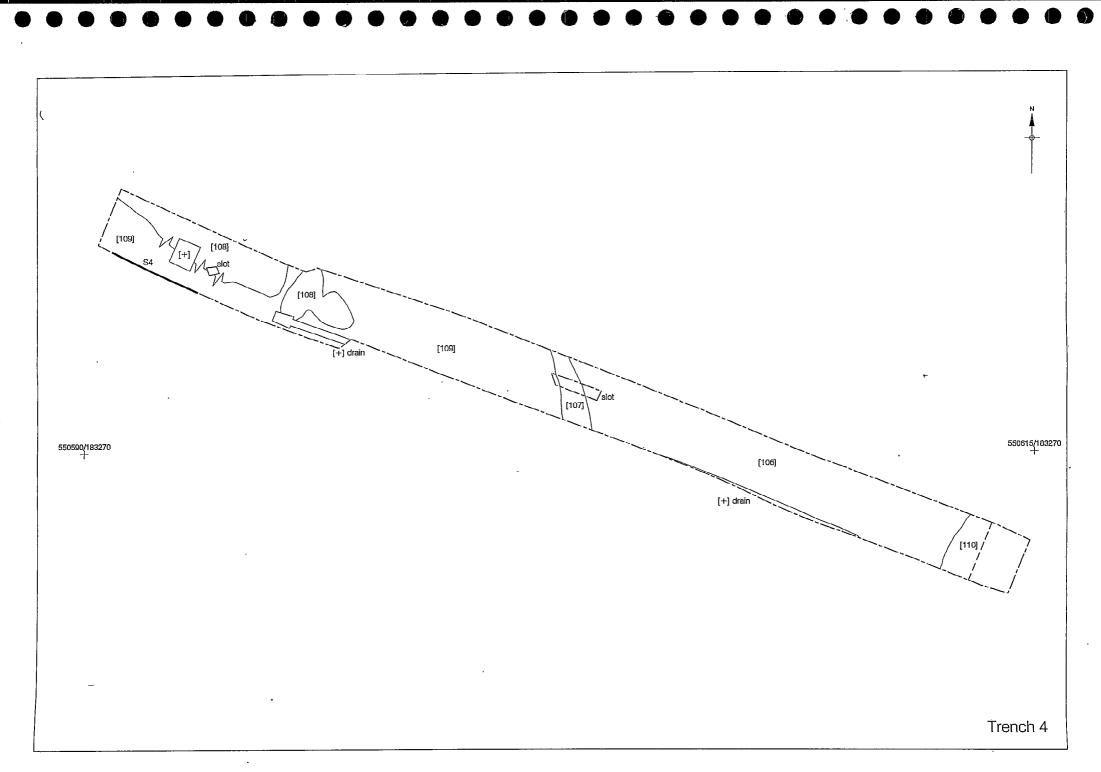
Figure 3 Trenches 1 & 2 1:100 at A3





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Figure 4 Trench 3 1:100 at A3



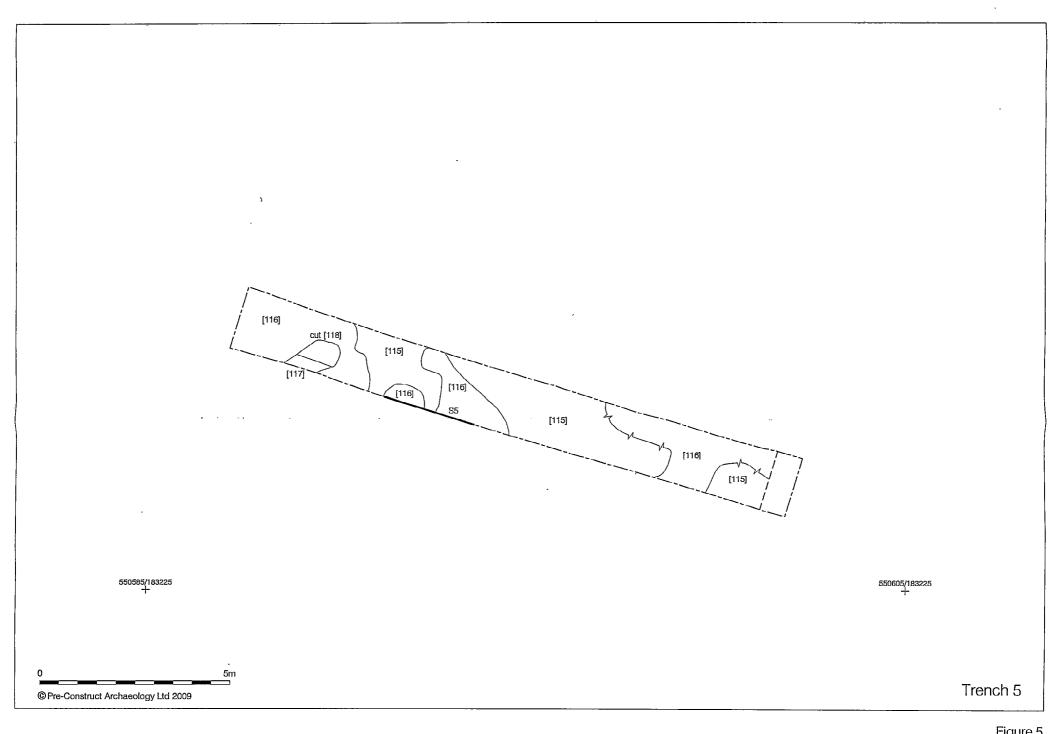
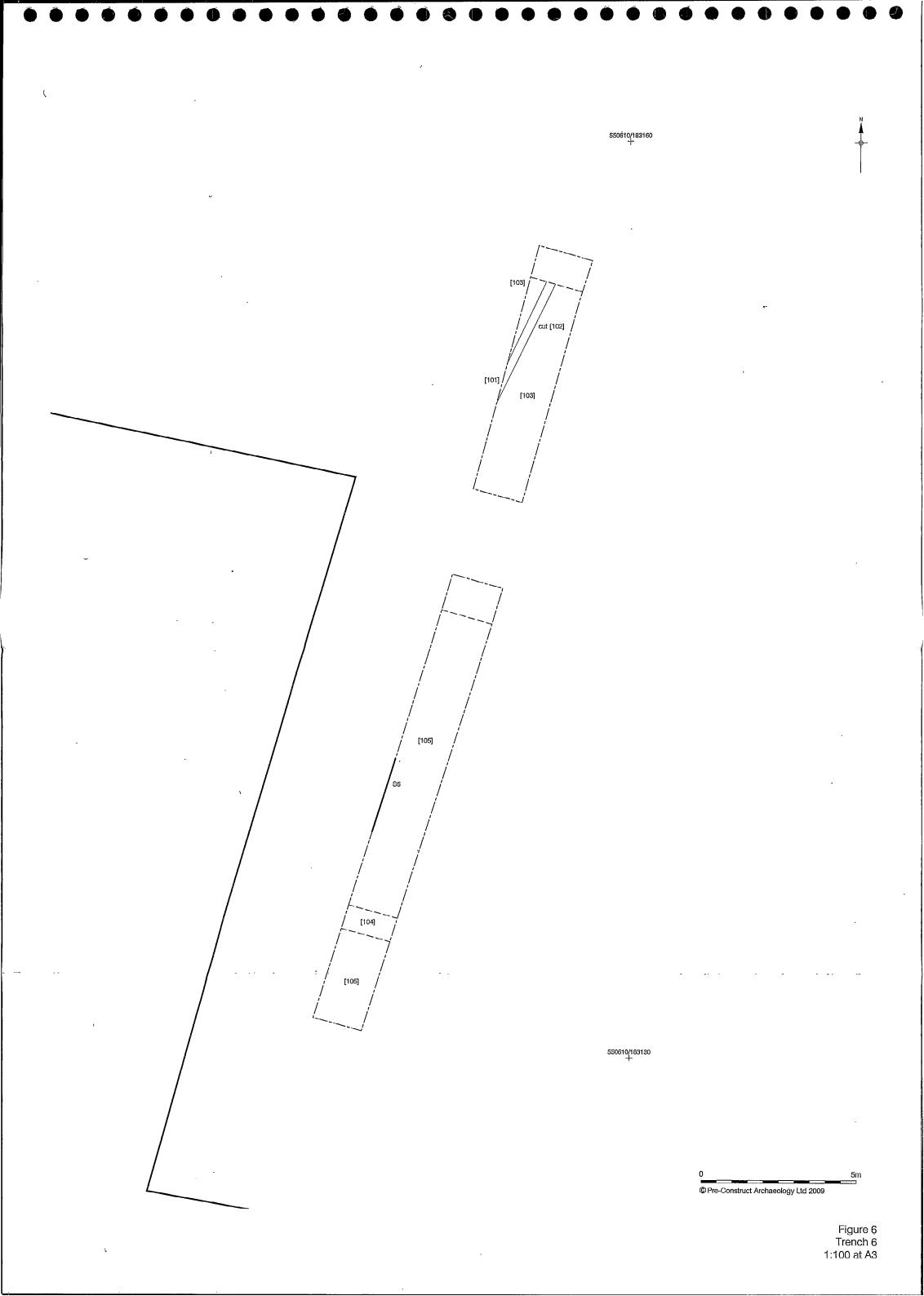
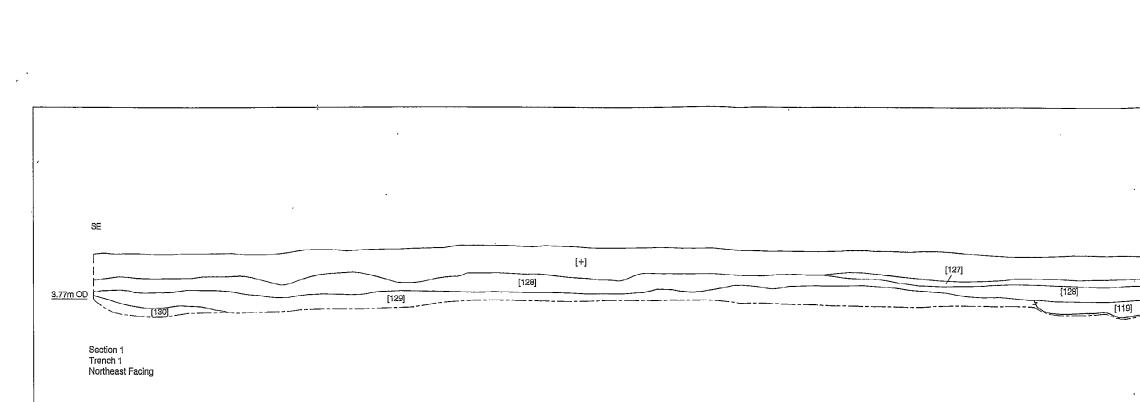


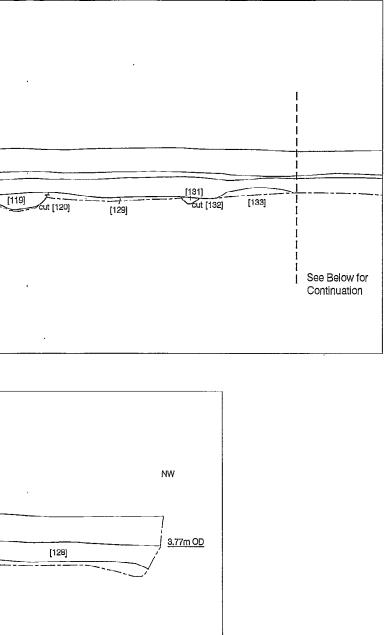
Figure 5 Trenches 4 & 5 1:100 at A3





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> Figure 7 Section 1 1:50 at A3

s Ν 4.29m OD 4.29m OD [+] Ε W [123] [+] [124] [136] <u>3.45m OD</u> 3.45m OD [137] Section 2 Trench 2 [138] East Facing Section 3 Trench 3 South Facing SE NW SE NW [113] 2.32m OD 2.32m OD [114] [115] [111] 2.18m OD [112] 2.18m OD [108] [116] [116] [109] lens of dark clayey slit Section 5 Trench 5 . Northeast Facing Section 4 Trench 4 Northeast Facing SW NE 3.44m OD 3.44m OD [125] cut [126] [121] cut [126] [125] [135] cut [122] SW NE Section 7 [+] Trench 1 2.21m OD 2.21m OD [104] Southeast Facing [105] Section 6-Trench 6 Southeast Facing 2m

Figure 8 Sections 2 - 7 1:50 at A4

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8 INTERPRETATIONS AND CONCLUSIONS

- 8.1 The principal objectives of the archaeological evaluation as set out in the Written Scheme of Investigation⁵ were as follows:
 - To determine if there is further evidence for prehistoric remains on the site as found at nearby investigations;
 - To determine if there is further evidence for Roman remains, in particular burials, on the site as found during the construction of the current estate;
 - To determine the extent, condition, nature, character, quality and date of any archaeological remains present; and
 - To inform the strategy for further mitigation.
- 8.2 These objectives were achieved and the results are summarised below.
- 8.3 No features were firmly identified as being prehistoric in date. Numerous undated cut features, generally cutting natural gravels, were identified within trenches 1 and 5. These could conceivably represent prehistoric activity or natural gullys/tree throws dating to this period.
- 8.4 Roman features were confined to the western limits of the northernmost area investigated, trench 1. These comprised two postholes and a pit with a date range of *c*.70-200 AD. These features cut natural sands and the pottery sherds all exhibited clean breaks and appeared unabraded suggesting rapid burial following deposition. Noteworthy was the identification of lids from four separate vessels within a relatively small area. Furthermore, a possible late Iron Age to Roman brick from a Roman context could indicate prehistoric activity within the vicinity. No indications of burials were identified within the investigation.
- 8.5 Trench 1 was only trench investigated that was sealed by made ground and tarmac; all other trenches lay within grassed areas. It is likely that trenches 2-5 had been previously subjected to extensive landscaping and horizontal truncation as opposed to ground raising as encountered within trench 1. This may explain the apparent lack of archaeological features or deposits within the majority of the trenches investigated.
- 8.6 The results of the investigation would suggest that further work within the northern areas of Block B, particularly any groundworks penetrating over 0.5m below current ground level, is likely to have a severe impact on any underlying archaeological deposits. The quality and nature of the Roman material recovered from a relatively small area would suggest the potential for encountering similar material within the immediate vicinity to be high and therefore worthy of further investigation.

⁵ Hawkins, 2009

9 ACKNOWLEDGEMENTS

- 9.1 Pre-Construct Archaeology Ltd would like to thank Inspace Partnerships Limited for commissioning the work and David Divers for monitoring the evaluation on behalf of the London Borough of Havering.
- 9.2 The project was managed for Pre-Construct Archaeology Ltd by Charlotte Matthews. The fieldwork was directed by Amelia Fairman and assisted by Matthew Harrison, Shane Maher and Tristan Adfield. Nathalie Barrett carried out the surveying and Lisa Lonsdale the technical and logistical support. This report was written by Amelia Fairman. The pottery sherds were identified and spot dated by James Gerrard (Roman) and Berni Seddon (medieval). The illustrations were prepared by Jennifer Simonson.

Inspace Partnerships

10 **BIBLIOGRAPHY**

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Appendix 1: Context Index

and a second s	Context	A SECONDERS AND A REAL IN CAMPAGE	Bulling & Block, barry and barry bridge					
		Plan	Elevation		Description		Phase	Photos No.
	100	**	-	Layer	Sub-soil	Modern	5	-
MYE 08	101	Trench 6	-	Fill	Fill of [102]	Modern	5	-
MYE 08	102	Trench 6	-	Cut	Land drain	Modern	5	- ·
MYE 08	103	Trench 6	P4	Layer	Natural silty clay	Natural	1	D (3); 1/2 (8-10)
MYE 08	104	Trench 6	6	Layer	Sub-soil (same as [100])	Modern	5	D (2); 1/2 (5-7)
MYE 08	105	Trench 6	6	Layer	Natural silty clay (same as [103])	Natural	1	D (2); 1/2 (5-7)
MYE 08	106	Trench 4	-	Layer	Gravelly clay - Natural	Natural	1	D (4); 1/2 (11-13)
MYE 08	107	Trench 4	-	Layer	Gravel - Natural	Natural	1	-
	108	Trench 4	4	Layer	Sandy gravel - Natural	Natural	1	D (5, 9); 1/2 (14-16, 26-28)
MYE 08	109	Trench 4	4	Layer	Silty sand - Natural	Natural	1	D (5, 9); 1/2 (14-16, 26-28)
MYE 08	110	Trench 4	-	Layer	Silty sand - Natural (same as [109])	Natural	1	D (5, 9); 1/2 (14-16, 26-28)
MYE 08	111	-	4	Layer	Topsoil ·	Modern	5	D (9); 1/2 (26-28)
	112	-	4	Layer	Made ground	Modern	5.	D (9); 1/2 (26-28)
MYE 08	113	-	5	Layer	Topsoil	Modern	5	D (8, 10); 1/2 (23-25, 29-31)
MYE 08	114	-	5	Layer	Sub-soil	Modern	5	D (8, 10); 1/2 (23-25, 29-31)
					· · · · · · · · · · · · · · · · · · ·			D (6, 8, 10); 1/2 (17-19, 23-25,
MYE 08	115	Trench 5	5	Layer	Gravel - Natural	Natural	1	29-31)
							· ·	D (6, 8, 10); 1/2 (17-19, 23-25,
MYE 08	116	Trench 5	5	Layer	Sand - Natural	Natural	1	29-31)
MYE 08	117	Trench 5	-		Fill of [118]	Undated	2	-
MYE 08	118	Trench 5		Cut	Tree throw	Undated	2	D (7); 1/2 (20-22)
	119	120	1		Fill of [120]	Undated	2	D (24); 3/4 (24-26)
		120,						
MYE 08	120	Trench 1	1	Cut	Irregular cut, possible pit	Undated	2	D (24); 3/4 (24-26)
MYE 08	121	122, 126	7	Fill	Fill of [122]	Roman	3	D (13); 3/4 (2-4)
MYE 08	122	122, 126	7	Cut	Post-hole	Roman	3	D (13); 3/4 (2-4)
MYE 08	123	-	2	Layer	Sub-soil	Modern	5	D (15); 3/4 (8)
MYE 08	124	Trench 2	2	Layer	Sandy gravel - Natural	Natural	1	D (14-15); 3/4 (5-8)
		126,	· · · · · · · · · · · · · · · · · · ·				<u> </u>	
MYE 08	125	Trench 1	7	Fill	Fill of [126]	Roman	3	D (16); 3/4 (9-11)
		126,	-				-	
MYE 08	126	Trench 1	7	Cut	Roman pit	Roman	3	D (16); 3/4 (9-11)
	127	-	1		Made ground	Modern	5	-
	128	-	1		Grey silty sand - flood deposit	Medieval	4	D (27-28); 3/4 (33-36)

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Appendix 1: Context Index

	Context		Section /					
		Plan	Elevation	Туре	Description	Date	Phase	Photos No.
MYE 08	129	Trench 1	1	Layer	Coarse sand - Natural	Natural	1	D (28); 3/4 (35-36)
MYE 08	130	Trench 1	1	Layer	Gravel - Natural	Natural	1	D (28); 3/4 (35-36)
MYE 08	131	-	1	Fill	Fill of [132]	Undated	2	-
MYE 08	132	Trench 1	1	Cut .	Poss post-hole	Undated	2	-
MYE 08	133	Trench 1	1	the second s	Gravel - Natural	Natural	1	D (11-12, 25-26); 1/2 (32-36); 3/4 (27-32)
MYE 08	134	-	1	Layer	Sandy gravel - Natural	Natural	1	-
MYE 08		Trench 1	1 and 7	Layer	Sand - Natural	Natural	1	D (11-12, 25-27); 1/2 (32-36); 3/4 (27-34)
MYE 08	136	••	3	Layer	Sub-soil	Modern	5	D (20); 3/4 (17-19)
MYE 08	137	-	3	Layer	Made ground	Modern	5	D (20), 3/4 (17-19)
MYE 08	138	Trench 3	3	Layer	Gravelly sand - Natural	Natural	1 .	D (17-20); 3/4 (12-19)
MYE 08	139	-	-	Fill	Fill of [140]	Roman	3	D (21); 3/4 (20-22)
MYE 08	140	Trench 1	-	Cut	Post-hole	Roman	3	D (21); 3/4 (20-22)
MYE 08	141	Trench 1	1	Fill	Fill of [142]	Undated	2	D (22-23); 3/4 (23)
MYE 08	142	Trench 1	1	Cut ·	Tree throw	Undated	2	D (22-23); 3/4 (23)
MYE 08	143	-	-	Fill	Fill of [144]	Undated	2	-
MYE 08	144	Trench 1	-	Cut	Natural gully/animal burrow	Undated	2	-
MYE 08	145	Trench 1	-	Fill	Fill of [146]	Undated	2	-
MYE 08	146	Trench 1	-	Cut	Post-hole	Undated	2	-

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Appendix 2:*Site Matrix

TRENCH NO: 1 2 3 5 4 6 $\begin{bmatrix} + \\ - \end{bmatrix}$ 111 112 113 114 . PHASE 5: MODERN 123 [136] 100 = 104 127 137 101 102 PHASE 4: MEDIEVAL 128 . . 139 140 PHASE 3: ROMAN 121 122 125 126 . 119 120 143 144 131 141 142 145 PHASE 2: UNDATED 117 118 . . 133 = 134 PHASE 1: NATURAL 108 gravet Nat 115 gravel 106 silty clay 103 = 105 clay 129 130 135 124 116 sand 138 109 = = 110 sand 107

Appendix 3: Oasis Form

OASIS ID: preconst1-65213

Project details	
Project name	Land at Mardyke Estate, Archaeological Evaluation Phase 1, Blocks B, L and P, Rainham, London Borough of Havering
Short description of the project	Six trenches were excavated to investigate Blocks B, L and P within Mardkye Estate, Rainham, prior to demolition and redevelopment. A number of undated, potentially naturally cut features were encountered within trenches 1 and 5. Within trench 1 several Roman features were identified, comprising two postholes and a pit. These were sealed by a medieval flood deposit and modern made ground. No other archaeologically significant features were identified.
Project dates	Start: 21-09-2009 End: 30-09-2009
Previous/future work	Yes / Yes
Any associated project reference codes	MYE 08 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Residential 1 - General Residential
Monument type	PIT Roman
Monument type	POSTHOLE Roman
Monument type	POSTHOLE Roman
Monument type	LAYER Medieval
Monument type	LAYER Modern
Monument type	PIT Uncertain '
Significant Finds	LID Roman
Methods & techniques	'Targeted Trenches'
Development type	Housing estate
Prompt	Direction from Local Planning Authority - PPG16

Appendix 3: Oasis Form

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Position in the planning process	Not known / Not recorded
Project location	
Country	England
Site location	GREATER LONDON HAVERING RAINHAM Mardyke Estate, Rainham, London Borough of Havering, Archaeological Evaluation Phase 1, Blocks B, L and P
Postcode	RM13 8PS
Study area	12722.37 Square metres
Site coordinates	TQ 5057 8339 51.5288100019 0.170894554820 51 31 43 N 000 10 15 E Point
Height OD / Depth	Min: 2.15m Max: 3.83m
Project creators	
Name of Organisation	Pre-Construct Archaeology Ltd
Project brief oríginator	Pre-Construct Archaeology Ltd
Project design originator	Helen Hawkins
Project director/manager	Charlotte Matthews
Project supervisor	Amelia Fairman
Type of sponsor/funding body	Inspace Partnerships
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Evaluation on Blocks B. L and P, Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS
Author(s)/Editor(s)	Fairman, A
Date	2009
lssuer or publisher	Pre-Construct Archaeology Ltd
Place of issue or publication	London

Appendix 3: Oasis Form

DescriptionA4 folioEntered byAmelia Fairman (afairman@pre-construct.com)Entered on6 October 2009

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PRE-CONSTRUCT ARCHABOLOGY LIMITED UNIT 54

BROCKLEY CROSS BUSINESS CENTRE

96 ENDWELL ROAD

BROCKLEY

LONDON SE4 2PD

TEL: 020 7732 3925 020 7639 9091

FAX: 020 7639 9533

EMAIL:1710@pre-construct.com

PRE-CONSTRUCT ARCHAEOLOGY LIMITED (NORTHERN OFFICE)

UNIT 19A

TURSDALE BUSINESS PARK

Durham DH6 5PC

TEL: 0191 377 1111

FAX: 01191 377 01101

EMAIL:mio.norih@pr=construct.com

