

MARDYKE ESTATE PH 1 BLOCK B

RAINHAM

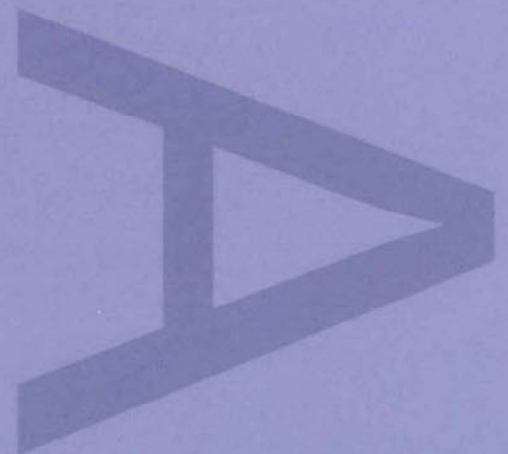
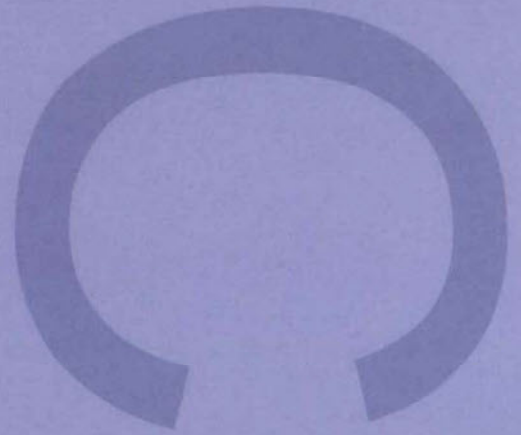
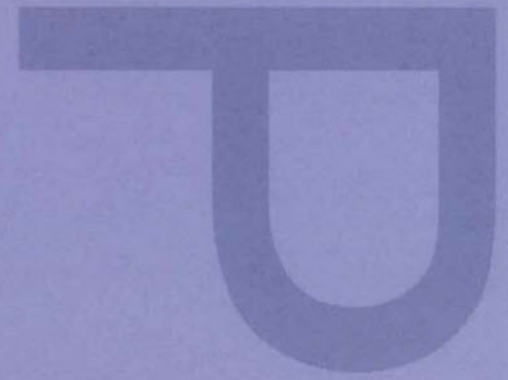
LONDON BOROUGH OF HAVERING

ASSESSMENT OF AN

ARCHAEOLOGICAL EXCAVATION

MYE 08

JANUARY 2010



PRE-CONSTRUCT ARCHAEOLOGY

DOCUMENT VERIFICATION

MARDYKE ESTATE PHASE 1 BLOCK B
RAINHAM
LONDON BOROUGH OF HAVERING

ARCHAEOLOGICAL EXCAVATION

Quality Control

Pre-Construct Archaeology Limited			K2049
	Name & Title	Signature	Date
Text Prepared by:	Amelia Fairman		January 2010
Graphics Prepared by:	Hayley Baxter		January 2010
Graphics Checked by:	Josephine Brown		January 2010
Project Manager Sign-off:	Jon Butler		January 2010

Revision No.	Date	Checked	Approved

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

**An Assessment of an Archaeological Excavation of Phase 1 Block B,
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, January 2010

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 3925

Fax: 020 7639 9588

Email: cmatthews@pre-construct.com

Website: www.pre-construct.com

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1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological excavation on Block B, within the Mardyke Estate, Rainham, London Borough of Havering, undertaken by Pre-Construct Archaeology Ltd. on behalf of Inspace Partnerships. The project was managed by Charlotte Matthews and supervised by the author, both of Pre-Construct Archaeology Ltd., and monitored by David Divers on behalf of the London Borough of Havering.
- 1.2 Only one of the two planned trenches was opened during the excavation. Trench 7 was located within a carpark, and was sealed by 20th century made ground and tarmac. Proposed Trench 8 lay within a grass verge but was abandoned due to extensive truncation by live services running throughout the area.
- 1.3 The site is centred on National Grid Reference TQ 5057 8339 (Figure 1). The site boundaries are formed by a field and Lower Mardyke Avenue to the north, fields and the Beam River to the west, housing to the south and Newtons Infant School to the west. The site was assigned the code MYE 08.
- 1.4 The underlying drift geology of the site is thought to be absent from the central part of study area, with outcrops of flood plain gravels and alluvium to the south-east and north-west respectively. The underlying London Clay was not reached during the excavation, and the earliest deposits observed consisted of river terrace gravels and sand.
- 1.5 The investigations revealed natural sand and gravel throughout the base of Trench 7 between heights of 3.42m OD and 3.23m OD. Natural gravels exhibited a significant downwards slope to the west, indicative of modern horizontal truncation.
- 1.6 Three phases of Roman activity were identified dating between the mid 1st and mid 2nd century AD. An initial phase dating from the mid to late 1st century AD was demarcated by a curvilinear ditch which extended on a northwest-southeast by northeast-southwest alignment. This was later bisected by a linear ditch, with associated pitting and postholes dating from the late 1st century AD. A final phase of activity dating from the late 1st to mid 2nd century AD included numerous intercutting pits which truncated the linear ditch. All features encountered were indicative of settlement.
- 1.7 All features were sealed by an extensive deposit of 20th century rubble interpreted as levelling prior to the construction of the Mardyke estate.

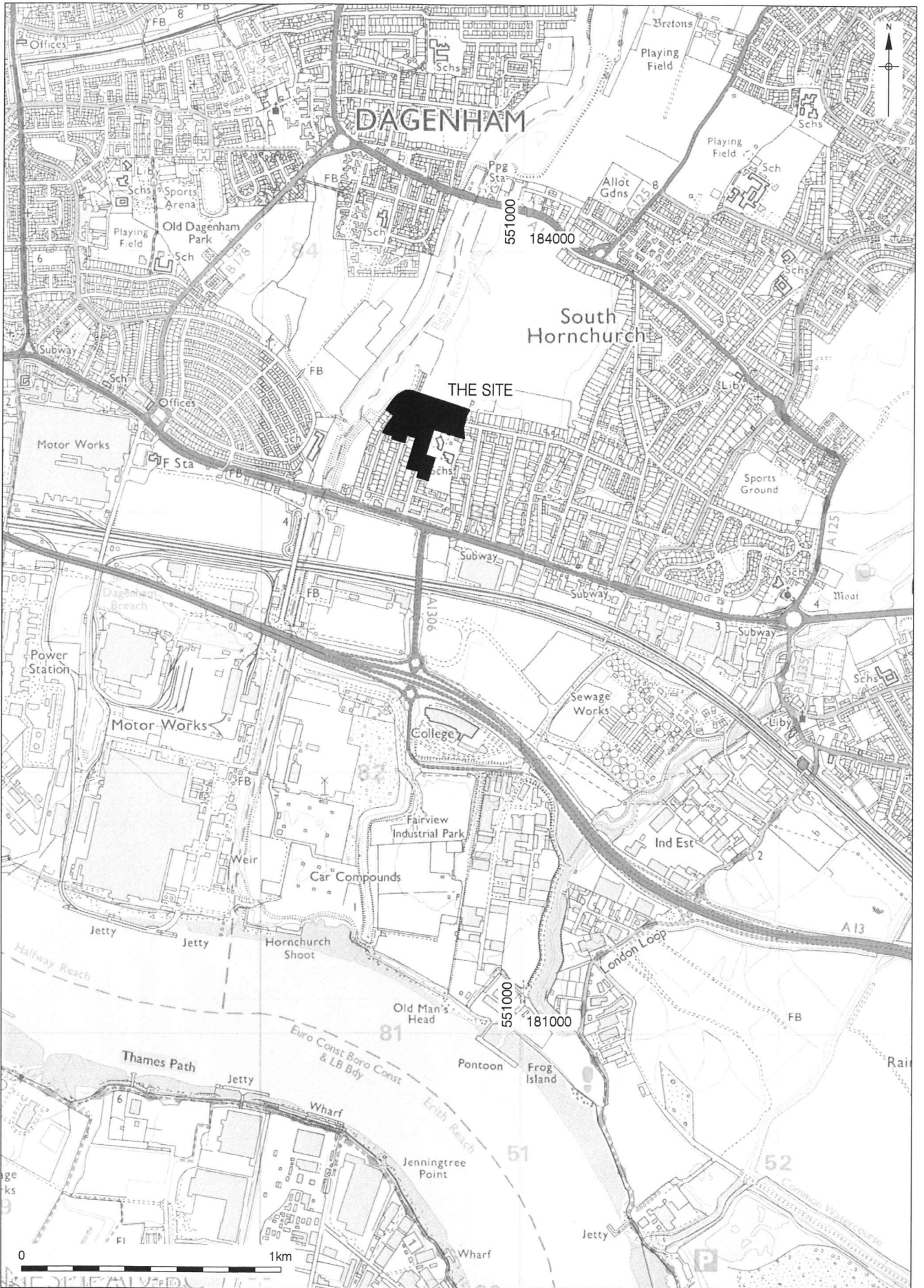
2 INTRODUCTION

- 2.1 An archaeological evaluation was carried out by Pre-Construct Archaeology Ltd on blocks B, L and P as part of the phase 1 development of the Mardyke Estate in September 2009. It revealed a number of cut features of Roman date within Trench 1. All other areas investigated revealed natural deposits and indicated extensive modern levelling and horizontal truncation. This suggested the greatest potential for archaeological deposits lay within the curtilage of Block B, within the northernmost area of the subject site¹. A method statement for an archaeological excavation to extend evaluation Trench 1 to become Trench 7 and investigate a second trench (Trench 8) was therefore drawn up by Charlotte Matthews² in November 2009. The excavation was conducted between 13th and 20th November 2009 in advance of demolition of existing structures and construction of new low-level dwellings.
- 2.2 The archaeological excavation and evaluation was commissioned by Inspace Partnerships. The project was managed by Charlotte Matthews and was supervised by Amelia Fairman both of Pre-Construct Archaeology Ltd. David Divers of English Heritage monitored all archaeological work on behalf of the London Borough of Havering.
- 2.3 The proposed redevelopment will consist of the demolition of all extant structures and the construction of new low-level dwellings and the landscaping of public areas. Whilst the proposed structures are not basemented and precise foundation types unknown, it is likely that these groundworks and those for services will severely impact upon the underlying archaeology.
- 2.4 The site is partially situated within an Archaeological Priority Zone, as defined by the Borough of Havering's Unitary Development Plan. The site itself was deemed to be of particular importance as initial analysis of the available documentary evidence, carried out as part of an archaeological desk based assessment, suggested a particularly high potential for Roman archaeology³.
- 2.5 The completed archive, comprising written, drawn and photographic records and artefacts, will be stored by Pre-Construct Archaeology Limited until their eventual deposition in the London Archaeological Archive and Research Centre (LAARC) under the site code MYE 08 .

¹ Fairman, 2009

² Matthews, 2009

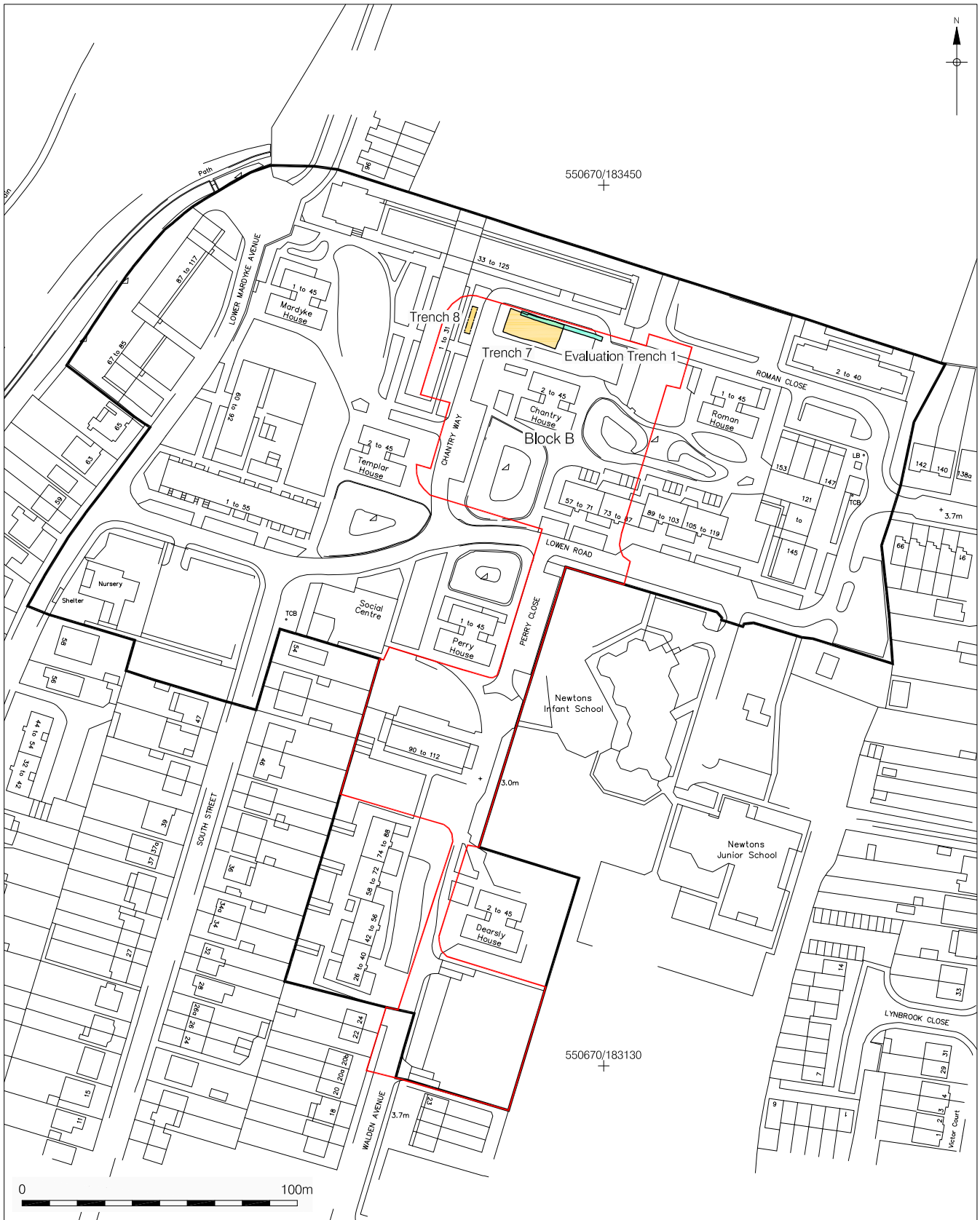
³ Payne, 2008



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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 excavation by trial trenching was designed⁴ and carried out in consultation with David Divers, the archaeological advisor for the London Borough of Newham. Two trenches were proposed within the footprint of the new development but outside the footprint of the current development. These were designed to lie within the curtilage of the proposed Phase 1 development of Block B.

⁴Matthews, 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 Beam River is present. The latter lays to the west of 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 4m and 6m OD. The site is covered in a number of raised flower beds, car parking, grassed and playground areas. The area of trenches 7 and 8, within proposed Block B, lie within a car park and grass verge respectively.
- 4.2.2 The Beam river 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 Ltd⁵.

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 Beam River 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 Beam River. 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 archaeology.

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.

5.3.6 An evaluation carried out on the subject site in September 2009⁶ recorded several postholes and pits of Roman date. Significantly, one feature contained the lids from four separate vessels dating from 120-160 AD.

5.4 SAXON & 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

⁵ Payne, 2008

⁶ Fairman, 2009

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 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 Beam River 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 northwestern limits of the site boundary. Construction of the extant Mardyke Estate began in the 1960s and remains unchanged to the present.

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 In accordance with the Written Scheme of Investigation⁷, the trenches were arranged to fully investigate the underlying drift geology and the presence or absence of significant archaeological remains across the site.
- 6.2 One of the two proposed trenches was excavated. Trench 7 extended 20m x 10m at ground level. Trench 8 was abandoned due to extensive truncation by live services, observed to continue the full footprint of the proposed location.
- 6.3 The trenches were machine excavated to a maximum depth of 1.20m 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.
- 6.5 One or more representative sample sections, each 2.5m wide, were cleaned and recorded in the trench. The base of the trench was also hand-cleaned before recording, along with any archaeological features. Discrete features were either 100% excavated, or half sectioned and linear features slotted to excavate a 20% sample in order to obtain dating evidence prior to recording.
- 6.6 The recording systems employed during the excavation 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 pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being drawn at a scale of 1:20 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 a Temporary Bench Mark established on the carpark, adjacent to Trench 7, with the value of 3.89m OD. The baseline of the trench was established using GPS and tied into the Ordnance Survey grid.

⁷ Matthews, 2009

7 ARCHAEOLOGICAL PHASE DISCUSSION

7.1 Phase 1 – Natural

7.1.1 The earliest deposit encountered within Trench 7, was natural sandy gravel [230]. This was observed throughout the base of the trench from elevations of between 3.42m OD and 3.23m OD, and consisted of loose, light reddish yellow sand and gravel. The deposit become increasingly gravel-rich towards the east, and continued beyond the limits of excavation to an unknown depth.

7.2 Phase 2 – Mid to Late 1st Century: Curvilinear Ditch

7.2.1 All cut features within Trench 7 truncated natural deposits. The earliest of these was curvilinear ditch [228]. This extended c.13m northwest-southeast before returning 7.40m northeast-southwest and ended in a rounded terminus within the footprint of evaluation Trench 1 to the north. The ditch exhibited steep sides and a flat base at 2.88m OD, with a maximum width of 0.70m and depth of 0.50m from 3.36m OD. This feature was filled in its entirety by deposits [227]=[229]=[216], a compacted fill of light greenish yellow and brown sandy silt with occasional inclusions of medium sized flint pebbles and small abraded pot fragments. An initial assessment of the pottery suggested a date range of 50-120 AD.

7.2.2 To the north of the ditch was oval shaped pit [208]. The cut extended 1.04m x 1.30m x 0.31m depth from 3.22m OD. The feature had moderately sloping sides to a concave base with no perceptible break of slope, at an elevation of 2.90m OD. A friable, mid brownish-orange, deposit of silty sand filled [208] and contained occasional small sub-angular pebbles. The relatively homogenous nature of fill [207] inferred a natural in-filling as opposed to a deliberate backfill, and contained no dating material; the function of [208] therefore remains uncertain.

7.2.3 A comparable feature was identified adjacent to ditch [228]. Oval cut [204] appeared to respect the ditch and extended 0.65m x 1.10m x 0.13m depth on a comparable northwest-southeast orientation, from an uppermost elevation of 3.40m OD. The cut exhibited concave sides and an irregularly stepped, concave base with no perceptible break of slope. The base was recorded at 3.24m OD, and the feature was entirely filled by deposit [203]. This comprised a homogenous fill of friable, light greyish yellow, sandy silt with occasional inclusions of sub-angular gravels and clay lenses. Similarly to fill [207], deposit [203] contained no dating material with which to help ascertain function, and appeared to represent a natural infill.

7.3 Phase 3 – Late 1st Century: Linear Ditch and Pitting

7.3.1 Extending the near complete length of the trench was linear feature [225]. This measured 17.10m length x 0.60m x 0.25m depth and continued beyond the eastern limit of excavation, aligned northwest-southeast. The feature truncated curvilinear ditch [228] at a near right angle and exhibited gently sloping sides and a flat base. The base sloped from elevations of 3.09m OD to 3.18m OD from west to east. Due to extensive horizontal truncation to the northwest of the subject site, it remains uncertain whether the western limits of the feature represent a genuine terminus or merely the results of this truncation. Ditch [225] was filled by a loose deposit of light, greyish-brown, sandy silt containing occasional inclusions of small to medium flint pebbles [224]=[226]. These were recorded from an uppermost elevation of 3.38m OD. Ditch [225] was therefore interpreted as a drainage ditch. The westward sloping base was expected to continue beyond the limit of excavation, towards the Beam River.

7.3.2 Several pits were observed to the south of ditch [225]. Sub-rectangular pit [206] was recorded with vertical sides and a flat base at 3.03m OD, cut from 3.36m OD. This extended 1.38m x 0.78m x 0.21m depth, aligned roughly northwest-southeast and

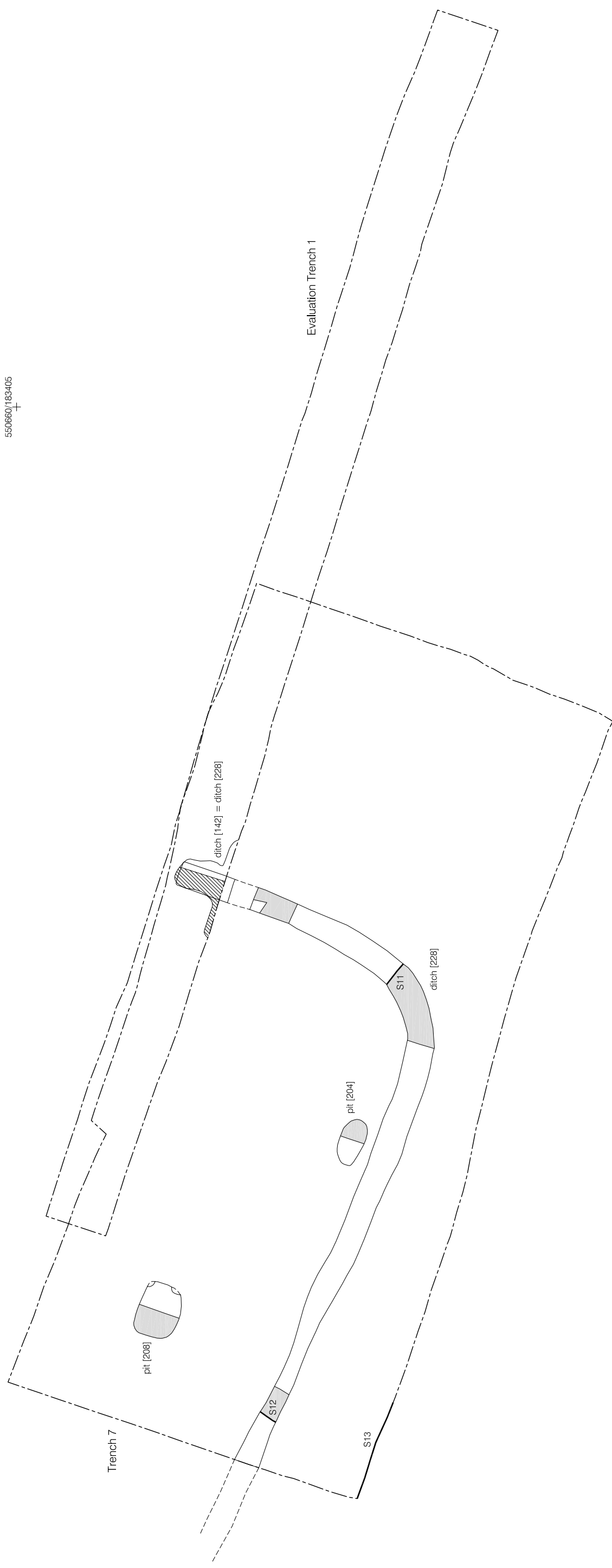
truncated earlier pit [208]. A friable deposit, of mid orange-brown, silty sand, containing moderate inclusions of sub-angular and sub-rounded pebbles, and occasional inclusions of dark soil lenses and pottery fragments filled [206] and was denoted as [205]. The pottery was dated to between 50 AD and 160 AD, and the poorly sorted nature of the backfill was indicative of deliberate backfilling. To the east of this was sub-rectangular pit [221], which measured 1.24m x 0.68m x 0.15m depth, aligned roughly north-south. This was recorded from 3.42m OD, with concave sides and slightly irregular/flattish base at 3.28m OD. The cut contained fill [220], a compact, mid yellowish grey, sandy silt, containing inclusions of small iron fragments, small heavily abraded pottery fragments and moderate flecks of daub. The iron fragments from deposit [220] were examined and represented structural fittings from a Roman 'L-clamp'.

- 7.3.3 To the north of ditch [225] a number of potential postholes were identified. These were denoted as cuts [210], [223] and [232] from west to east respectively. Feature [210] appeared oval shaped in plan, and extended 0.22m x 0.34m x 0.11m depth, aligned east-west. The sides exhibited a moderate slope with no perceptible break of slope to a concave base at 3.14m OD. This contained a single fill denoted as [209] which comprised friable, dark brown-grey silty sand with frequent inclusions of sub-angular pebbles and occasional small fragments of pottery, all of which were dated between 50 AD and 400 AD. The fill appeared relatively homogenous and was subsequently interpreted as either natural erosion or the result of in-situ formation from a rotting post.
- 7.3.4 To the southeast of [210] was heavily truncated cut [223]. The north and eastern limits of [223] were truncated by later pit [214] and southern limits truncated by [212] making the original dimensions difficult to ascertain. As seen the cut extended 0.40m x 0.24m x 0.14m depth from 3.21m OD. The feature was therefore interpreted as either the remains of a shallow pit or posthole, but the close proximity to [210] may suggest the latter interpretation. Cut [223] was filled in its entirety by [222], a deposit of friable, mid grey, silty sand with occasional inclusions of small pebbles, carbon flecks and pottery fragments. Noteworthy were the eastern edges of the cut which displayed clear evidence of in-situ burning, with c.20mm band of vitrified sand visible. The backfill however contained no evidence of burning, which suggests the cut was in-filled, possibly naturally, following the abandonment of the feature.
- 7.3.5 Feature [232] was located to the east of [223] and extended 0.39m x 0.51m x 0.40m depth. It exhibited near vertical sides with a sharp break of slope to a flat base, recorded at 2.92m OD, cut from 3.31m OD. Deposit [231] filled [232] in its entirety and comprised friable, light grey brown, silty sandy clay with very occasional inclusions of small pottery fragments, sub-angular pebbles and chalk fragments.

7.4 Phase 4 – Late 1st to Mid 2nd Century: Ditch Abandonment and Pitting

- 7.4.1 To the east of curvilinear ditch [228], rectangular pit [219] was identified as truncating the southern limits of pit fill [220]. This was recorded from 3.35m OD, 1.58m x 1.14m x 0.15m depth, with steep sides and a flat base at 3.21m OD. The pit was filled by compact, mid greyish yellow, sandy silt, with occasional to moderate inclusions of small rounded pebbles, and occasional iron and pottery fragments. This was denoted as [200] and significantly included one near complete Verlulamium Coarse white slipped ware flagon, found upright, dating to 70-160 AD. The iron fragments examined all derived from structural fittings; two pieces of a conjoining Roman 'T-clamp'.
- 7.4.2 A second rectangular pit was recorded to the west of this, north of ditch [228]. Cut [215] extended 1.64m x 1.62m x 0.25m depth, with gradually sloping sides and a flat base at 3.02m OD. Its single fill, [201], comprised compacted, light brown, sandy silt, with frequent rooting, occasional charcoal flecks and occasional sub-rounded flint nodules. Also within the fill was a near complete Highgate Wood C ware bottle dating from 70-120 AD. Similarly to the flagon found within [200] this was discovered placed upright, and may therefore indicate some kind of significance to features [219] and [215].

- 7.4.3 Adjacent to [215], oval pit [234] was identified. This was recorded from a maximum elevation of 3.42m OD, extended 1.06m x 0.60m x 0.23m depth, with concave sides and flat base at 3.19m OD. The cut was aligned northwest-southeast and filled by friable, mid yellowish-brown, silty sand deposit [233]. This deposit contained frequent inclusions of small sub-angular pebbles and occasional small fragments of pottery dating to 50-160 AD.
- 7.4.4 The northeastern limits of the trench had been subject to a much greater concentration of activity or pitting as observed elsewhere. Intercutting pits [214], [218] and [212] truncated linear ditch [225], and posthole [223]. Feature [212] appeared rectangular in plan, aligned northwest-southeast, 0.72m x 0.60m x 0.20m depth and was recorded from 3.20m OD. The cut exhibited variable sides, concave to southeast, near vertical to the northwest, with a westwards sloping base varying from 3.09m OD to 3.04m OD. This feature truncated both ditch fill [224] and fill [222] of posthole [223], and was filled by soft, dark greyish brown, sandy silt with occasional inclusions of rounded pebbles, flecks of shell, charcoal, and small pottery fragments, denoted as deposit [211].
- 7.4.5 Circular cut [218] extended 0.50m x 0.50m x 0.15m depth, with steeply sloping sides and a concave base at 3.04m OD. This feature was recorded from a maximum elevation of 3.21m OD and was filled by a deposit of soft, light greyish brown, sandy silt denoted as [202]. Fill [202] contained occasional inclusions of rounded flint nodules and fragments of pottery dating from 70 AD to 120 AD. Fills [202] and [211] were subsequently truncated by irregular cut [214]. This measured 1.16m x 0.64m x 0.16m depth from 3.20m OD, with moderately sloping, concave sides and concave base. A friable deposit of dark brownish-grey, silty sand denoted as [213] filled the feature. This contained moderate inclusions of small sub-angular pebbles and moderate inclusions of small pottery fragments dating from 70-160 AD. The irregularity of the cut suggested that this may represent two intercutting features as opposed to one, but no discernible differences were identified within fill [213] to be able to clarify this any further.



Excavated at Evaluation

Excavated

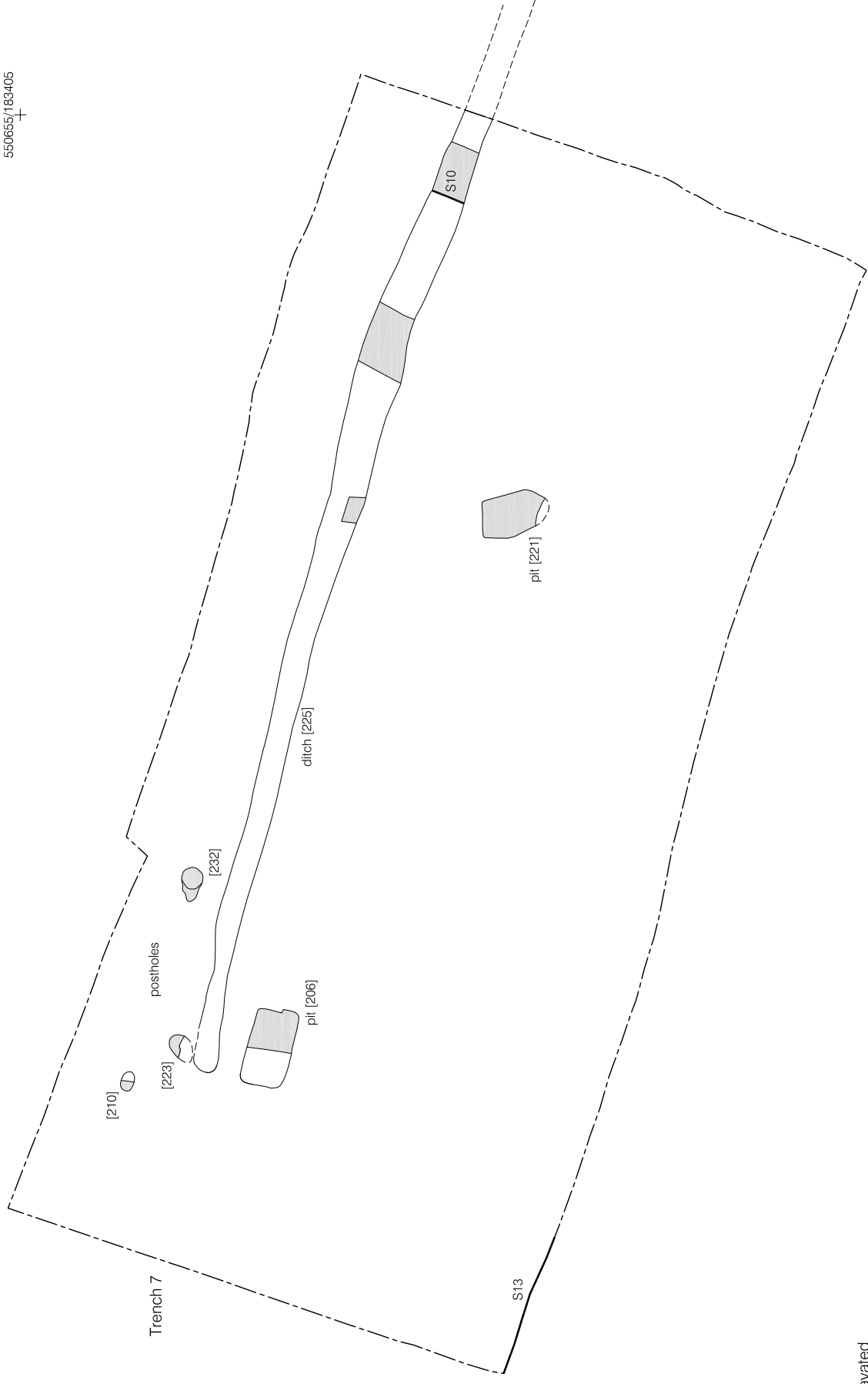


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Figure 3
Phase 2: Mid to Late 1st Century AD
1:100 at A3



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550655/183390

Trench 7

S13

Excavated

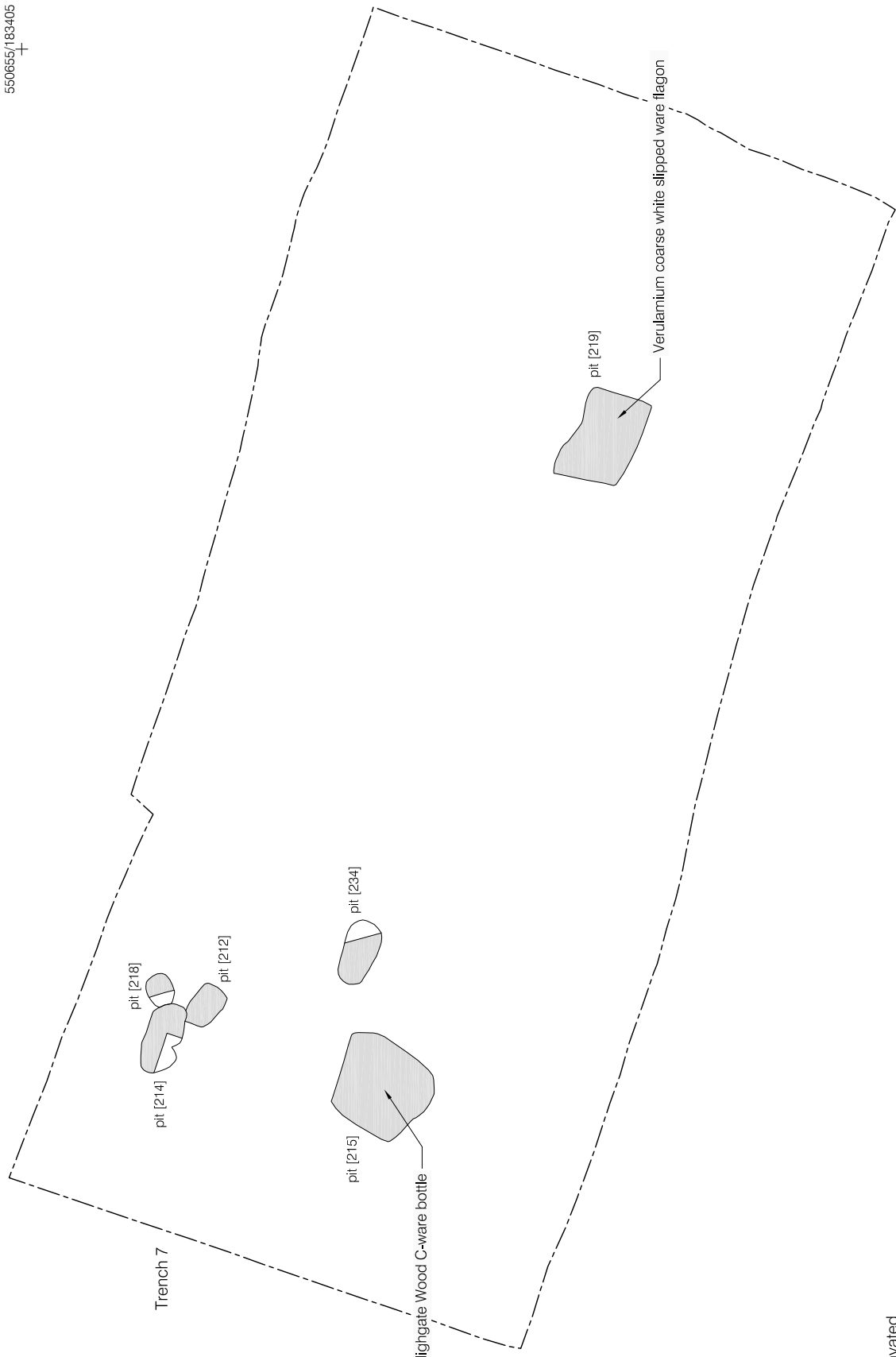


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Figure 4
Phase 3: Late 1st Century AD
1:100 at A4



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550655/183390

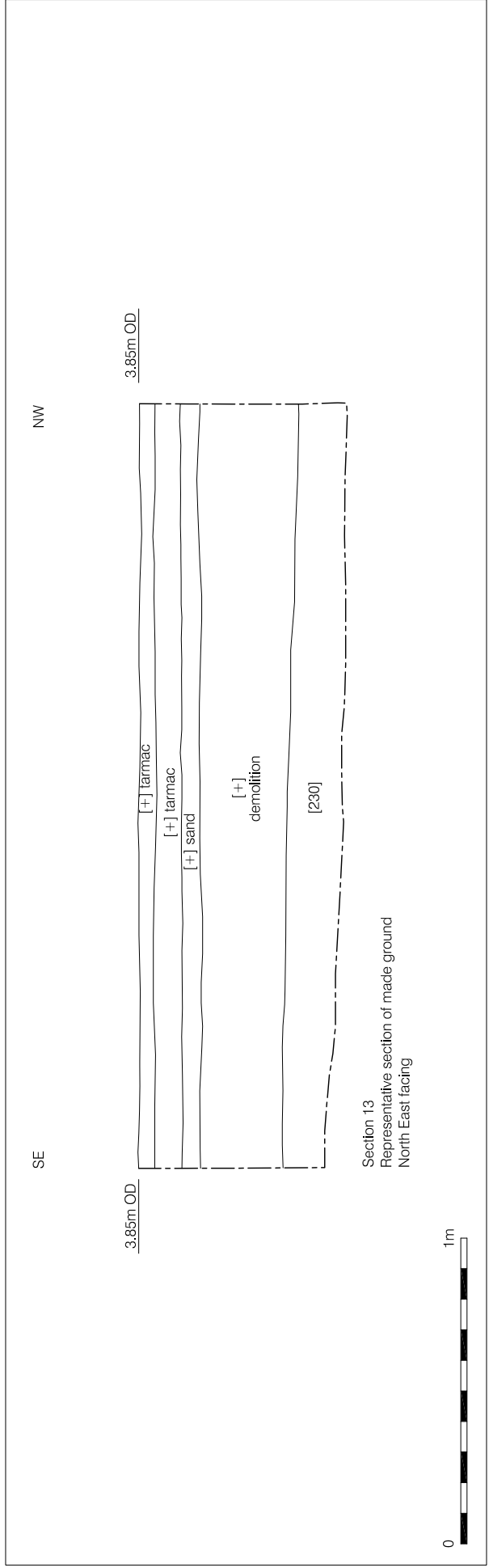
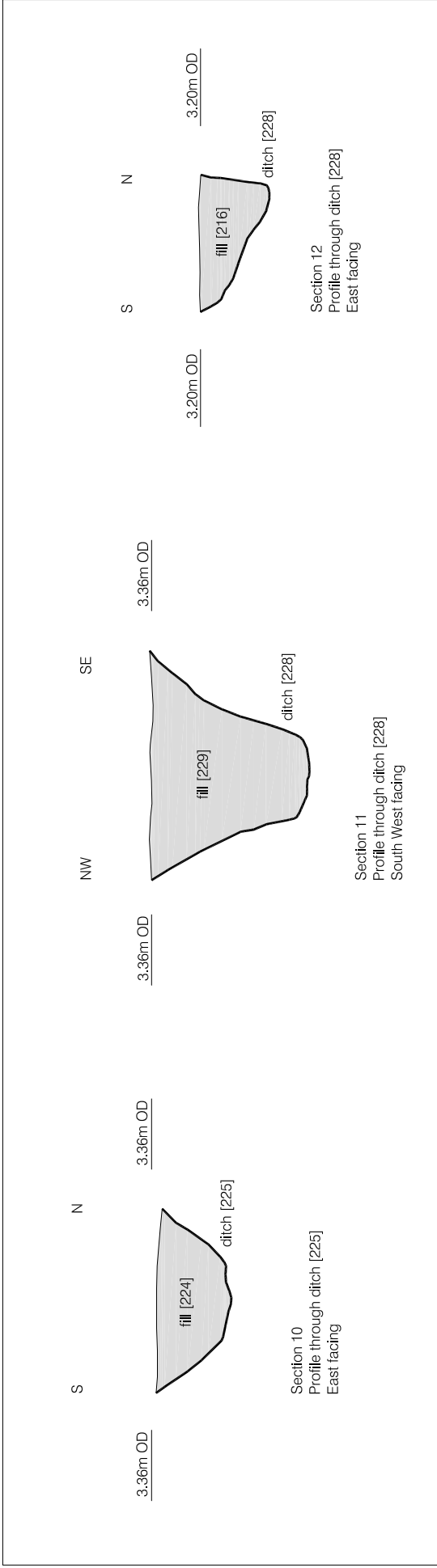
Trench 7

Excavated



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Figure 5
Phase 4: Late 1st to Mid 2nd Century AD
1:100 at A4



8 ORIGINAL AND ADDITIONAL RESEARCH QUESTIONS

8.1 ORIGINAL RESEARCH OBJECTIVES

The archaeological evidence obtained during the excavations was evaluated in light of the original research questions posed. An assessment of the archaeological evidence was made, in order to establish whether it could be used to address the research objectives. The original research objectives are listed below, along with an evaluation of the relevant evidence:

8.1.1 To determine if there is further evidence for Roman remains on the site as found during the evaluation of Trench 1

The extension to Trench 1 (Trench 7) identified numerous Roman remains, in the form of cut features. These comprised two intercutting ditches, and numerous small pits and postholes. The features identified could be broadly grouped into three phases of activity, all dating between the mid 1st and mid 2nd century AD. The excavations suggested that these remains extend to the north beyond the subject site and to the west within the area of proposed development, in support of the findings from the evaluation.

8.1.2 To determine the extent, condition, nature, character, quality and date of any archaeological remains present

No remains pre-dating the mid 1st century, or post dating the mid 2nd century AD were encountered during the investigation. These extended throughout the excavation area, with a particular concentration of activity within the northwestern vicinity of the trench.

The first phase of activity identified comprised a large curvilinear ditch aligned northwest-southeast before continuing on a northeast-southwest orientation. An irregular feature encountered within the evaluation of Trench 1 was found to represent the terminus of this cut and therefore features [142] and [228] could be equated. Ditch [228] was subsequently interpreted as a property or land boundary, with the areas to the northwest as the 'internal' space, owing to the concentration of cut features. This was bisected by linear ditch [225] at a near right angle. Although [225] clearly truncated the fill of [228], this does not preclude the features from functioning contemporaneously. The fills of both ditches appeared relatively well sorted and therefore a likely result of natural silting. Significantly, other than the later clustering of pits assigned to Phase 4, all cut features appeared to respect the limits of both ditches. Ditch [225] was subsequently interpreted as a drainage ditch, which had been re-excavated at least once, and therefore continued in use following the abandonment of [228].

A small collection of postholes was also encountered at the northwestern limits of Trench 7. Cuts [210], [223] and [232] appear to align with posthole [140] as identified during the evaluation. These may represent the southern or southeastern limits of a sub-circular structure. Further interpretations are however difficult given the extremely limited exposure. Significantly, the sand surrounding the edges of posthole [223] was vitrified, suggesting in-situ burning. A sherd of possible Middle Saxon pottery was recovered from cut [223] which may be intrusive but it is also possible that it hints at a later date for the postulated structure.

All finds retrieved from the subject site were indicative of occupation as opposed to grave goods or features associated with the Roman cemetery thought to have existed within the vicinity. Indications of ritual activity however may derive from two rectangular features which contained near complete vessels. These vessels appeared to have been placed upright within the backfill and dated between 70 AD and 160 AD.

8.2 ADDITIONAL RESEARCH OBJECTIVES

8.2.1 To compare the archaeological remains from the excavation with those identified at the Beam Washlands site to the west.

An evaluation at Beam Washlands c.200m west of the subject site, encountered cremation burials in addition to settlement activity in the form of pits, a small post structure, kilns, and wells. The date and nature of these features should be compared to those found on the Mardyke estate to establish whether the two areas were inhabited contemporaneously and whether there was any relationship between the two areas. A brief review of the results of the former excavations revealed that a large 1st century enclosure was reduced and sub-divided during the 2nd century, before some expansion during the 3rd century. No remains from the subject site were dated later than the early 2nd century, which would suggest contemporary inhabitation. Further detailed research however is necessary, including an examination of the material culture from both sites in addition to material found during the construction of the Mardyke Estate.

8.2.2 To establish how the land boundaries as identified within the subject site relate to wider patterns of Roman settlement and exploitation within the area.

The ditches encountered on the subject site, may represent only a small proportion of a much larger network of land boundaries and/or drainage ditches. Furthermore, these relate to a settlement on the opposite side of the Beam River than those encountered at the Washlands site. Linear features and any concentrations of activity should be explored to examine whether the two sites were related or entirely separate entities.

Further comparison and research would be beneficial to establish whether the remains at Mardyke represent the periphery of a much larger settlement or a separate community altogether. Other sites, spot finds and evidence from aerial photographs from the wider area should be examined to help establish any concentrations of settlement or Roman activity, and used to exemplify how this developed during the 1st and 2nd centuries.

8.2.3 To establish how the settlement areas relate to those designated for the Roman Cemetery.

During the construction of the Mardyke Estate, evidence emerged for a Roman cemetery in addition to artefacts associated with settlement activity. Further documentary research into the specific finds and provenance of these could be used to help establish how settlement areas related to those used for burial. As no evidence of cremations or graves were encountered during the excavation, it may infer that the cemetery lay further to the south. Distinctive areas were encountered during excavations at Beam Washlands for the living and the dead, and therefore a similar arrangement would have likely existed within the Mardyke area.

8.2.4 To undertake further analysis of the metal objects found within pit fills [200] and [220].

Further analysis of the iron objects interpreted as structural fittings is required. If possible they should be x-rayed in order to provide further identification and assist accurate drawing.

8.2.5 To undertake further analysis of the near complete vessels found within pit fills [200] and [201].

The near complete vessels should be further assessed and cross referenced to other similar finds within the area. Their upright placement and well preserved, unabraded nature is significant and exceptional by comparison to the remainder of the material archive. An examination of similar vessels may aid in the interpretation and understanding of the function of the pits from which they derive.

9 CONTENTS OF THE ARCHIVE

9.1 The Paper Record

Context Record Sheets	34
Sample Record Sheets	0
Plans	1 on 10 sheets
Sections	4 on 4 sheets
Photographs	72 Colour Transparencies 72 Black and White Prints 28 Digital Shots

9.2 The Finds

Pottery	1 box
CBM	2 bags
Metal	1 box
Flint	1 bag

10 IMPORTANCE OF RESULTS AND PUBLICATION OUTLINE

10.1 IMPORTANCE OF RESULTS

- 10.1.1 The investigation carried out by Pre-Construct Archaeology Ltd. at Block B, Mardyke Estate, revealed cut features and deposits that provided information about the development and exploitation of the area from the mid 1st century AD until the mid 2nd century AD. The results of the excavation will therefore compliment those of the Beam Washlands site to the west and increase understanding of Havering's past, particularly relating to the early Roman period.
- 10.1.2 The investigations established that a curvilinear land boundary was in existence from the mid to late 1st century AD. The greatest concentration of activity lay to the north and west of this feature, which was therefore interpreted as the 'internal' space.
- 10.1.3 At the end of the 1st century AD, a northwest-southeast aligned drainage ditch was constructed, and truncated the earlier boundary ditch. A rough alignment of postholes to the north of this may indicate the southeastern limits of a former structure. Significantly one posthole exhibited distinctive signs of in-situ burning. A sherd of Middle Saxon pottery may hint at a later date for the possible structure. Numerous pits were also recorded, and interpreted as refuse pits.
- 10.1.4 By the late 1st to early 2nd century AD, the linear ditch had in-filled, possibly naturally, and subsequently been abandoned. A series of intercutting pits truncated the western limits of the ditch and contained variable amounts of relatively clean, unabraded, pottery fragments. These features were similarly interpreted as refuse pits. It is noteworthy that no identifiable fragments of animal bone were recovered from the entire site.

10.2 PUBLICATION OUTLINE

- 10.2.1 As this is the first of several phases of excavation at the site it is suggested that any further analysis and the scope of any possible publication will be determined following the completion of all fieldwork on site.

11 ACKNOWLEDGEMENTS

- 11.1 Pre-Construct Archaeology Ltd would like to thank Inspace Partnerships Limited for commissioning the work and David Divers for monitoring the excavation on behalf of the London Borough of Havering.
- 11.2 The author would like to thank Charlotte Matthews for her project management, Jon Butler for his post-excavation management and editing, Hayley Baxter for the illustrations, Marit Gaimster for the analysis of the small finds, James Gerrard and Chris Jarrett for the pottery report and Alexander Pullen, Mike Bazley, John Payne, and Paul McGarrity for their on-site assistance with the fieldwork. The author would also like to thank Nathalie Barrett for the surveying and Lisa Lonsdale for technical and logistical support.

12 BIBLIOGRAPHY

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Matthews, C., 2009. *Land at Mardyke Estate, Rainham, London Borough of Havering: Written Scheme of Investigation for Archaeological Excavation Phase 1, Blocks B*. Pre-Construct Archaeology: Unpublished Report

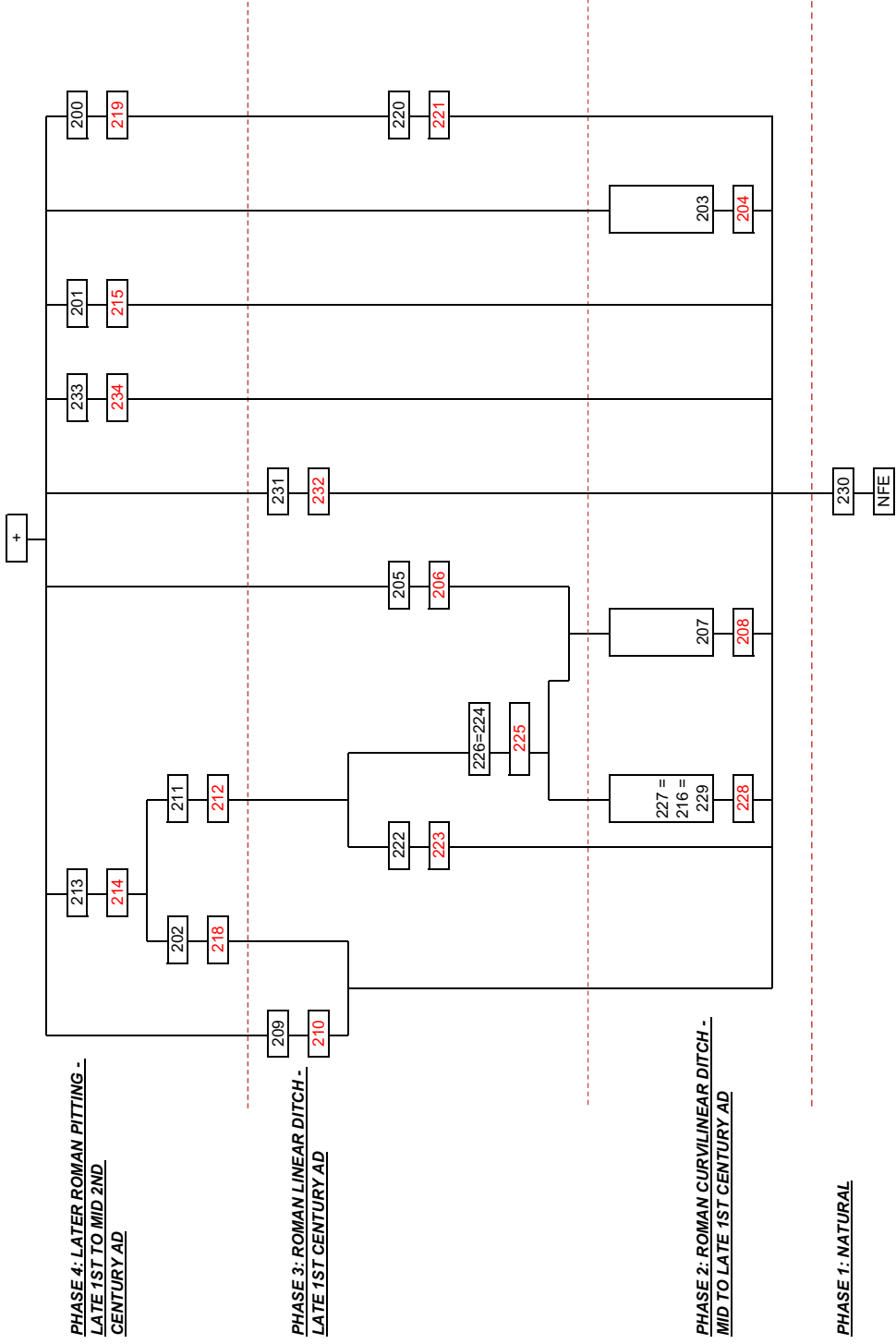
Payne, J., 2008. *An Archaeological Desk Based Assessment of Mardyke Estate, London Borough of Havering, RM13*. Pre-Construct Archaeology: Unpublished Report

APPENDIX 1- CONTEXT INDEX

Site Code	Context No.	Plan	Section / Elevation	Type	Description	Date	Phase
MYE08	200	-	-	Fill	Fill of [219]	Roman	4
MYE08	201	-	-	Fill	Fill of [215]	Roman	4
MYE08	202	Trench 7	-	Fill	Fill of [218]	Roman	4
MYE08	203	Trench 7	-	Fill	Fill of [204]	Roman	2
MYE08	204	Trench 7	-	Cut	Oval Pit	Roman	2
MYE08	205	Trench 7	-	Fill	Fill of [206]	Roman	3
MYE08	206	Trench 7	-	Cut	Rectangular Pit	Roman	3
MYE08	207	Trench 7	-	Fill	Fill of [208]	Roman	2
MYE08	208	Trench 7	-	Cut	Rectangular Pit	Roman	2
MYE08	209	Trench 7	-	Fill	Fill of [210]	Roman	3
MYE08	210	Trench 7	-	Cut	Post hole/small pit	Roman	3
MYE08	211	Trench 7	-	Fill	Fill of [212]	Roman	4
MYE08	212	Trench 7	-	Cut	Pit	Roman	4
MYE08	213	Trench 7	-	Fill	Fill of [214]	Roman	4
MYE08	214	Trench 7	-	Cut	Shallow Pit	Roman	4
MYE08	215	Trench 7	-	Cut	Rectangular Pit	Roman	4
MYE08	216	Trench 7	12	Fill	Fill of [228] same as [227] and [229]	Roman	2
MYE08	217	VOID	-	VOID	VOID	-	-
MYE08	218	Trench 7	-	Cut	Circular Pit	Roman	4
MYE08	219	Trench 7	-	Cut	Rectangular Pit	Roman	4
MYE08	220	-	-	Fill	Fill of [221]	Roman	3
MYE08	221	Trench 7	-	Cut	Rectangular Pit	Roman	3
MYE08	222	Trench 7	-	Fill	Fill of [223]	Roman	3
MYE08	223	Trench 7	-	Cut	Heavily truncated pit	Roman	3
MYE08	224	Trench 7	10	Fill	Fill of [225]	Roman	3
MYE08	225	Trench 7	10	Cut	Linear ditch	Roman	3
MYE08	226	Trench 7	-	Fill	Fill of [225] same as [224]	Roman	3

MYE08	227	Trench 7	-	Fill	Fill of [228] same as [216] and [229]	Roman	2
MYE08	228	Trench 7	11, 12	Cut	Curvilinear ditch	Roman	2
MYE08	229	Trench 7	11	Fill	Fill of [228] same as [216] and [227]	Roman	2
MYE08	230	Trench 7	13	Layer	Natural	Natural	1
MYE08	231	-	-	Fill	Fill of [232]	Roman	3
MYE08	232	Trench 7	-	Cut	Post hole	Roman	3
MYE08	233	Trench 7	-	Fill	Fill of [234]	Roman	4
MYE08	234	Trench 7	-	Cut	Oval Pit	Roman	4

APPENDIX 2: SITE MATRIX



APPENDIX 3: ASSESSMENT OF THE POTTERY

Romano-British

James Gerrard

The excavations produced a small amount of early Roman pottery (75 sherds, 1173g). The bulk of this material is formed of early Roman sandy wares with some shell tempered vessels present. Most of this probably originated in the Essex region. Two vessels are worthy of specific comment: an almost complete Verulamium Coarse White Slipped ware flagon from [200] and a Highgate Wood C ware bottle [201]. These vessels may indicate 'special' deposits.

The two semi-complete vessels should be illustrated in any publication. Other sherds need not be illustrated. A short note on the pottery should accompany any publication of the site.

Context	Sherd Count	Weight (g)	Spot Date
200	1	385	70-160
201	19	400	70-120
202	2	19	70-120
205	12	104	50-160
209	1	6	50-400
211	1	2	50-400
213	19	163	70-160
220	2	26	50-400
223	4	7	50-400
229	3	23	50-120
231	7	3	50-400
233	4	35	50-160

Saxon pottery

Chris Jarrett

A single sherd of Saxon pottery was recovered from context [222]. The fabric is chaff-tempered and dates to between the 5th and 9th centuries, but chaff-tempered wares become more common from the mid 6th century.

APPENDIX 4: THE METAL FINDS ASSESSMENT

Märit Gaimster

Three iron objects were recovered from the excavations; they are listed below. All three objects represent structural fittings, with the T-clamps the most commonly found examples. Among their functions would have been to attach cladding, such as tiles, to the walls of buildings (Manning 1985, 131–2). The clamps were all retrieved from the E part of the site, from the neighbouring pits [219] and [221].

The iron fittings from Mardyke Estate form an integral part of the material recovered during excavation and should, where relevant, be included in any further publication of the site. For this purpose, they should be x-rayed to enable further identification and assist accurate drawing.

context	description
200	iron T-clamp; incomplete; part of stem and junction with flat head; stem L 65mm+
	two conjoining pieces of iron T-clamp; incomplete; part of stem and junction with flat head; stem L 70mm+
220	iron L-clamp; incomplete; flat rectangular-section stem with expanding head; stem L 95mm+

References:

W. H. Manning, 1985. *Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum*. Dorset: The Trustees of the British Museum.

APPENDIX 5: OASIS DATA COLLECTION FORM

OASIS ID: preconst1-69504

Project details

Project name	Phase 1 Block B, Mardyke Estate, Rainham, London Borough of Havering
Short description of the project	An archaeological excavation was carried out on Block B during Phase 1 of the redevelopment of the Mardyke Estate, London Borough of Havering. Two trenches were planned to extend a previous evaluation trench and explore an adjacent area. The latter trench was abandoned due to extensive live services. The trench extension however encountered at least three phases of Roman activity dating between the mid 1st and mid 2nd centuries AD consisting of two ditches, several pits and a group of postholes. Two complete pottery vessels placed in individual pits may be evidence for ritual activity.
Project dates	Start: 13-11-2009 End: 20-11-2009
Previous/future work	Yes / Yes
Any associated project reference codes	MYE08 - Sitecode
Type of project	Recording project
Site status	Local Authority Designated Archaeological Area
Current Land use	Residential 2 - Institutional and communal accommodation
Monument type	DITCHES Roman
Monument type	POSTHOLES Roman
Monument type	PITS Roman
Significant Finds	POTTERY Roman
Significant Finds	METAL OBJECTS Roman
Significant Finds	POTTERY Early Medieval
Investigation type	'Open-area excavation'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	GREATER LONDON HAVERING RAINHAM Phae 1, Block B, Mardyke Estate, Rainham, London Borough of Havering
Postcode	RM13 8PS
Site coordinates	TQ 5057 8339 51.5288100019 0.170894554820 51 31 43 N 000

Phase 1, Block B, Mardyke Estate, Rainham, London Borough of Havering: Archaeological Excavation
Pre-Construct Archaeology Ltd. 2010

10 15 E Point

Height OD / Depth Min: 3.23m Max: 3.42m

Project creators

Name of Organisation Pre-Construct Archaeology Ltd

Project brief originator Pre-Construct Archaeology Ltd

Project design originator Charlotte Matthews

Project director/manager Charlotte Matthews

Project supervisor Amelia Fairman

Type of sponsor/funding body Developer

Name of sponsor/funding body Inspace Partnerships

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title An Assessment of an Archaeological Excavation of Phase 1, Block B, Mardyke Estate, Rainham, London Borough of Havering, RM13 8PS

Author(s)/Editor(s) Fairman, A

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P C A

PRE - CONSTRUCT ARCHAEOLOGY LIMITED

UNIT 54

BROCKLEY CROSS BUSINESS CENTRE

96 ENDWELL ROAD

BROCKLEY

LONDON SE4 2PD

TEL: 0207 732 3925 0207 639 9091

FAX: 0207 639 9588

EMAIL: info@pre-construct.com

PRE-CONSTRUCT ARCHAEOLOGY LIMITED (NORTHERN OFFICE)

UNIT 19A

TURSDALE BUSINESS PARK

DURHAM DH6 5PG

TEL: 0191 377 1111

FAX: 0191 377 0101

EMAIL: info.north@pre-construct.com

