

JOHN MOORE HERITAGE SERVICES

AN

ARCHAEOLOGICAL DESK-BASED ASSESSMENT

OF

2 TO 4 WILLOW LANE,

MITCHAM,

LONDON BOROUGH OF MERTON

TQ 2786 6772

On behalf of

Chancerygate Group Limited

NOVEMBER 2004

REPORT FOR

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1 INTRODUCTION

1.1 Origins of the Report

This archaeological desk-based assessment was commissioned by the Chancerygate Group Limited. It has been prepared in support of a planning application for the construction of new warehousing and storage units (Application Number: 03/P2800).

A draft resolution to approve this development has been received from the London Borough of Merton. Approval is subject to compliance with a series of conditions including Condition 12, which states that no development shall take place until a programme of archaeological work has been secured by the applicant. This desk-based assessment represents the first stage of this work, providing an assessment of the archaeological potential of the site. This will allow for the formulation of a more informed and appropriate mitigation strategy.

1.2 Planning Guidelines and Policies

This report has been prepared in accordance with *Planning Policy Guidance Note 16: Archaeology and Planning* (PPG 16) issued by the Department of the Environment (1990); and with the policies relevant to archaeology in the *London Plan* (February 2004) and the *London Borough of Merton Unitary Development Plan* (Adopted October 2003). In format and contents, this report conforms to the standards outlined in the Institute of Field Archaeologists' guidance paper for desk-based assessments (IFA 1999).

1.2.1 Government Planning Policy Guidance

PPG 16 (1990) provides Government guidance for the investigation, protection and preservation of archaeological remains affected by development. The document emphasises the importance of archaeology (Section A, Paragraph 6) and states that:

“Archaeological remains should be seen as a finite, and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed. They can contain irreplaceable information about our past and the potential for an increase in future knowledge. They are part of our sense of national identity and are valuable both for their own sake and for their role in education, leisure and tourism.”

PPG 16 additionally stresses the importance of addressing archaeological issues at an early stage in the planning process (Paragraph 12):

“The key to informed and reasonable planning decisions, as emphasized in paragraphs 19 and 20, is for consideration to be given early, before formal planning applications are made, to the question of whether

archaeological remains exist on a site where development is planned and the implications for the development proposal.”

The advice given recommends early consultation between developers and the planning authority to determine “whether the site is known or likely to contain archaeological remains” (Paragraph 19). As an initial stage, such consultations may lead to the developer commissioning an archaeological assessment, defined in the following manner in PPG 16 (Paragraph 20):

“Assessment normally involves desk-based evaluation of existing information: it can make effective use of records of previous discoveries, including any historic maps held by the County archive and local museums and record offices, or of geophysical survey techniques.”

If the desk-based assessment should indicate a high probability of the existence of important archaeological remains within the development area, then further stages of archaeological work are likely to be required. PPG 16 states that in such cases (Paragraph 21):

“it is reasonable for the planning authority to request the prospective developer to arrange for an archaeological field evaluation to be carried out before any decision on the planning application is taken. This sort of evaluation is quite distinct from full archaeological excavation. It is normally a rapid and inexpensive operation, involving ground survey and small-scale trial trenching, but it should be carried out by a professionally qualified archaeological organisation or archaeologist.”

Additional guidance is provided if the results of an evaluation indicate that significant archaeological deposits survive within a development area. PPG 16 stresses the importance of preservation (Paragraphs 8 and 18):

“Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation.”

“The desirability of preserving an ancient monument and its setting is a material consideration in determining planning applications whether that monument is scheduled or unscheduled.”

But acknowledges that (Paragraphs 24 and 25):

“the extent to which remains can or should be preserved will depend upon a number of factors, including the intrinsic importance of the remains. Where it is not feasible to preserve remains, an acceptable alternative may be to arrange prior excavation, during which the archaeological evidence is recorded.”

“Where planning authorities decide that the physical preservation *in situ* of archaeological remains is not justified in the circumstances of the case and that development resulting in the destruction of the archaeological remains should proceed, it would be entirely reasonable for the planning authority to satisfy itself before granting planning permission, that the developer has made appropriate and satisfactory provision for the

excavation and recording of the remains. Such agreements should also provide for the subsequent publication of the results of the excavation.”

This level of work would involve the total excavation and recording of archaeological remains within the development area by a competent archaeological contractor prior to their destruction or damage.

1.2.2 The London Plan

The Government guidance set out in PPG 16 has been integrated into County Structure Plans and Local Plans. The London Plan (February 2004), published by the Greater London Authority includes the following policy relevant to archaeological remains (Policy 4B.14):

“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 UDPs for protecting scheduled ancient monuments and archaeological assets within their area.”

1.2.3 The Merton Unitary Development Plan

The London Borough of Merton Unitary Development Plan (October 2003) was developed in accordance with the strategic recommendations of an earlier draft of the London Plan. The two policies relevant to archaeology follow the Government guidelines and principles in the Ancient Monument Acts and PPG16 (1990). The first of these is concerned with the protection and preservation of the archaeological resource (Policy BE.13) and states:

“There will be a general presumption in favour of the permanent physical preservation of all scheduled ancient monuments and other nationally important archaeological sites and their settings. Planning permission will not be granted for development that would adversely affect such monuments and sites, involve significant alteration to them or would have a harmful impact on their settings.

Locally important archaeological remains should preferably also be preserved in situ. Exceptionally, where remains cannot be preserved in situ, they will be preserved by record through an appropriate programme of archaeological work by a recognised archaeological organisation before development begins, in accordance with a project design approved by the Council. Such provision shall also include the subsequent publication of the results.”

The second policy is concerned specifically with archaeological evaluation (Policy BE.14) and states:

“Where development is proposed within an archaeological priority zone, as shown on the proposals map, the council may require a preliminary archaeological assessment before proposals are considered. This requirement may also be applied to sites outside the archaeological priority zones

especially where they are over 0.6 ha or where there is proven or known archaeological potential.”

1.3 Aims and Objectives

The primary aim of this report is to provide a professional assessment of the archaeological potential of the proposed development site. This follows the Government guidance in PPG 16 (1990) by presenting a synthetic account of the available archaeological and historic data and its significance at an early stage in the planning process. The report will provide the evidence necessary for informed and reasonable planning decisions concerning the need for further archaeological work. The information will allow for the development of an appropriate strategy to mitigate the effects of the development on the archaeology, if this is warranted.

In accordance with PPG 16, the report presents a desk-based evaluation of existing information. It additionally follows the Institute for Field Archaeologists (IFA) *Standard* definition of a desk-based assessment (IFA 1999); and the Greater London Archaeology Advisory Service guidance papers for desk-based assessments (1998a) and archaeological reports (1998b). In brief, it seeks to identify and assess the known and potential archaeological resource within a specified area ('the site'), collating existing written and graphic information and taking full account of the likely character, extent, quantity and worth of that resource in a regional and national context. It also aims to define and comment on the likely impact of the proposed development scheme on the surviving archaeological resource.

The IFA *Standard* states that the purpose of a desk-based assessment is to inform appropriate responses, which may consist of one or more of the following:

- The formulation of a strategy for further investigation, whether or not intrusive, where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised.
- The formulation of a strategy to ensure the recording, preservation or management of the resource
- The formulation of a project design for further archaeological investigation within a programme of research

In accordance with PPG 16, this desk-based assessment forms the first stage in the planning process as regards archaeology as a material consideration and, if warranted by the archaeological potential, may lead to evaluation by fieldwork within the defined development area.

1.4 Methodology

The format and contents of this report are an adaptation of the standards outlined in the Institute of Field Archaeologists' guidance paper for desk-based assessments (IFA 1999), and in the Greater London Archaeology Advisory Service guidance papers for desk-based assessments (1998a) and archaeological reports (1998b). The work has involved the consultation of the available documentary evidence, including records of

previous discoveries and historic maps, and has been supplemented with a site visit. The format of the report is adapted from an Institute of Field Archaeologists *Standard Guidance* paper (IFA, 1999).

In summary, the work has involved:

- Identifying the client's objectives
- Identifying the cartographic and documentary sources available for consultation
- Assembling, consulting and examining those sources
- Visiting the site

The principal sources consulted in assessing this site were:

- The Greater London Historic Buildings, Sites and Monuments Record
- The Merton Local Studies Library
- The Wandle Industrial Museum Website (www.wandle.org)
- The Environmental Assessment (Delta-Simons 2003)
- The Ground Investigation Report (Soil Consultants Limited 2003)

The Greater London Historic Buildings, Sites and Monuments Record holds details of all known archaeological sites, historic parks and gardens and listed buildings within the London Borough of Merton. The Merton Local Studies Library retains copies of historic maps and various documentary sources. The Wandle Industrial Museum website reproduces recent issues of its newsletter, together with text from the display boards, providing information about the history of the Wandle.

The environmental assessment (Delta-Simons 2003) and ground investigation report (Soil Consultants Limited 2003) were provided by the client, along with information about areas of recent disturbance, details of the development and the planning background. The relevant evidence from the environmental assessment includes a site description, a historical review, a Sitescope report and a review of the geotechnical investigations. Details of the results of the most recent ground investigation are presented in the reports by Soil Consultants Limited (2003) and Delta-Simons (2003).

There has been no archaeological work carried out within the proposed development area. The assessment of its potential has, therefore, relied on predictive modelling based on the known distribution of remains within a 750 metre radius of the site (from a central grid reference of TQ 2786 6772). This information is derived from excavations, evaluations, chance finds, architectural evidence and historical records. It should be stressed that the distribution represents the extent of current knowledge and is partly the product of chance, since most of the investigated sites are those which have been developed in the recent past. For the most part, the intervening land has simply not been explored archaeologically. For this reason, apparently blank areas should not be automatically regarded as being devoid of remains.

The assessment of the likely condition of any potential archaeological remains has relied upon a study of the available historic maps, information about modern ground disturbances and the geotechnical results which provide evidence for the impact of previous land-use and development on the site.

One of the aims of the report is to identify appropriate archaeological response/s. Therefore, consideration has been given to the need for further archaeological work which will ensure the adequate recording and/or protection of any archaeology encountered within the proposed development area. Such strategies might involve further assessment and evaluation by fieldwork. If appropriate, this would allow for the identification and location of potential archaeological deposits on the site and provide the evidence necessary to determine their significance and condition.

A preliminary environmental assessment of the site (John-Newton and Partners 2003) and a geotechnical and an environmental investigation report (Geo-Environmental Services 2003) have not been assigned to the client and are not available. However, the results are summarised in the appraisal by Delta-Simons (2003). Otherwise, there have been no restrictions on reporting or access to the relevant records. The copyright to the Greater London Historic Buildings, Sites and Monuments Record is held by English Heritage.

2 THE SITE

2.1 Location (Figure 1)

The site is located in the London Borough of Merton, in the parish of Mitcham. The development area is situated to the south-east of the town centre on the Willow Lane Industrial Estate, where it is centred on National Grid Reference TQ 2786 6772.

2.2 Description (Figures 1 and 2)

The site lies in the north-eastern part of the industrial estate and comprises a rectilinear block of land extending over 0.78 hectares. Its edges are marked by Willow Lane and the Willow Lane Bridge to the south-east, Wandle Way to the south-west, the fence of the tramway to the north-east and the property boundary of the adjacent industrial warehouse to the north-west. The development area is currently surrounded by a hoarding with an entrance leading onto Wandle Way.

At the time of the environmental assessment the site was being used as a vehicle parts storage and distribution facility (Delta-Simons 2003) and there were three principal buildings within the development area (Soil Consultants Limited 2003). The structures included an office and storage area, a former vehicle workshop and a former works building (Delta-Simons 2003). The L-shaped building in the south-western part of the site was made of concrete and had a piled foundation (Soil Consultants Limited 2003). The intervening land was surfaced with a reinforced concrete hard-standing and tarmac (Delta-Simons 2003; Soil Consultants Limited 2003). A couple of small brick out-buildings additionally stood on the site.

At the time of the site visit (8th November 2004), all of the buildings had been demolished and the concrete and tarmac had been removed. The north-eastern end of the development area was obscured by a large spoil heap. Beyond this the surface is now a level area composed of a mixture of brick and concrete fragments and gravel.

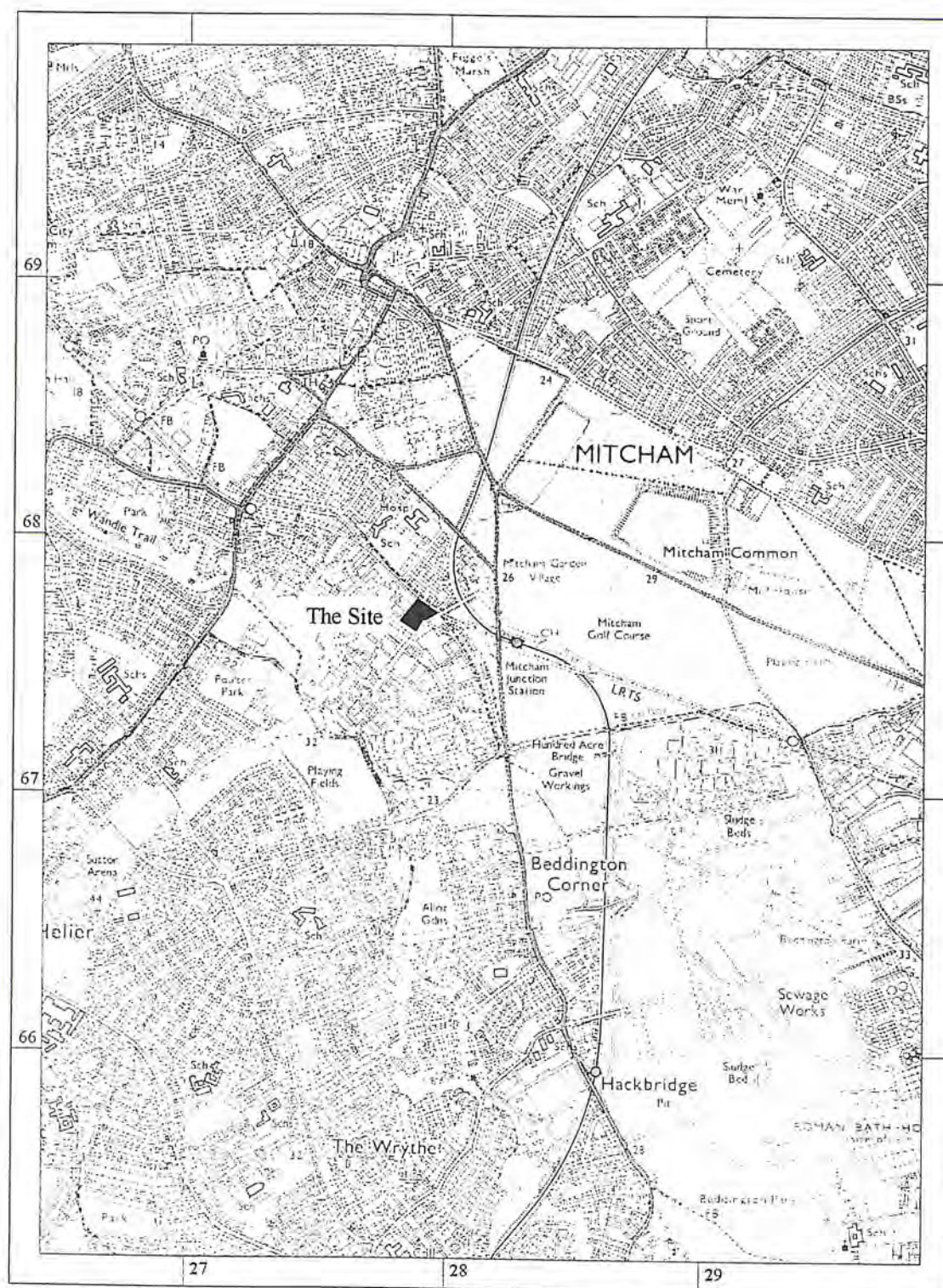


Figure 1: Site Location (1 to 25 000 scale)

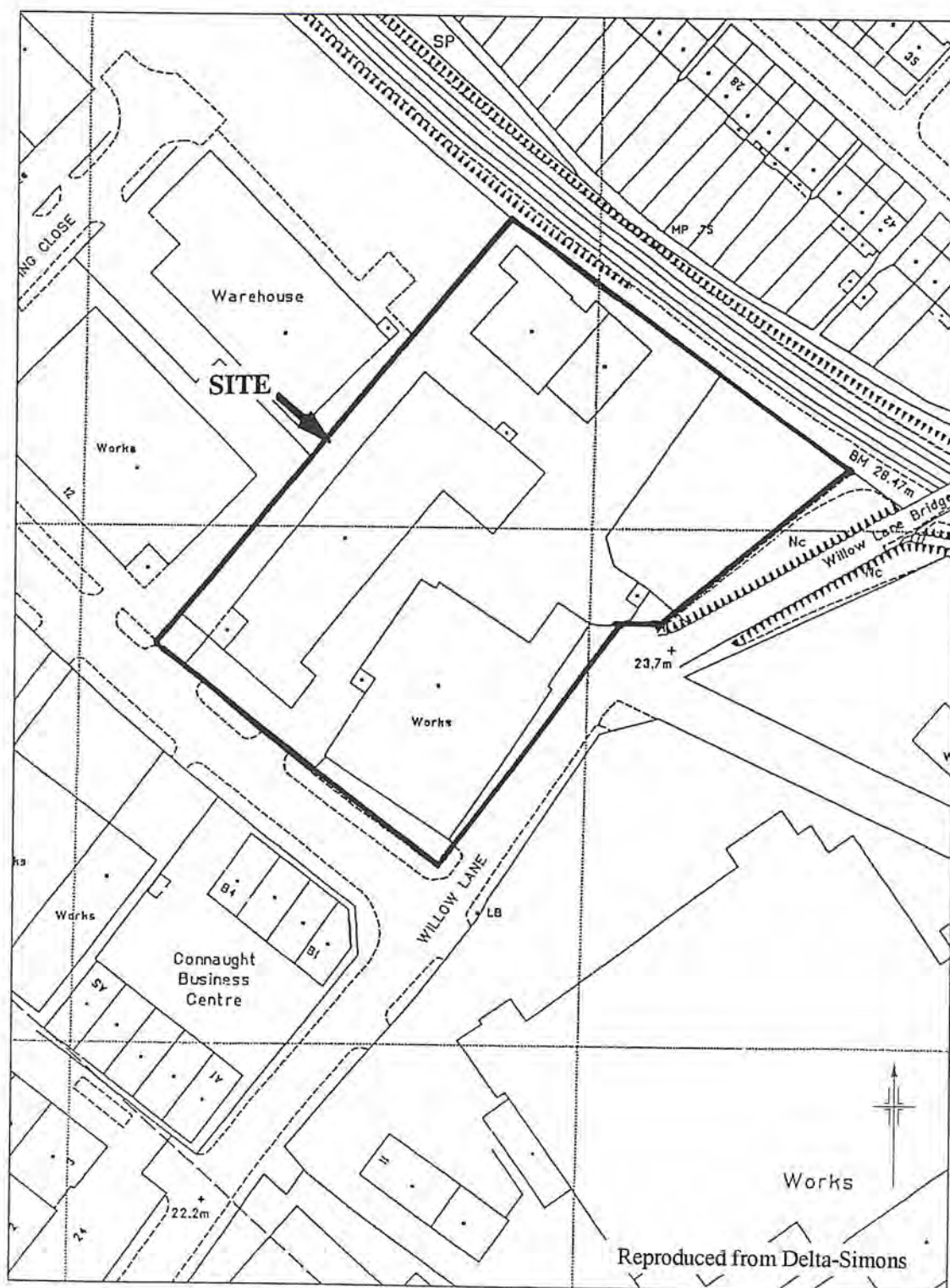


Figure 2: Recent Site Layout (not to scale)

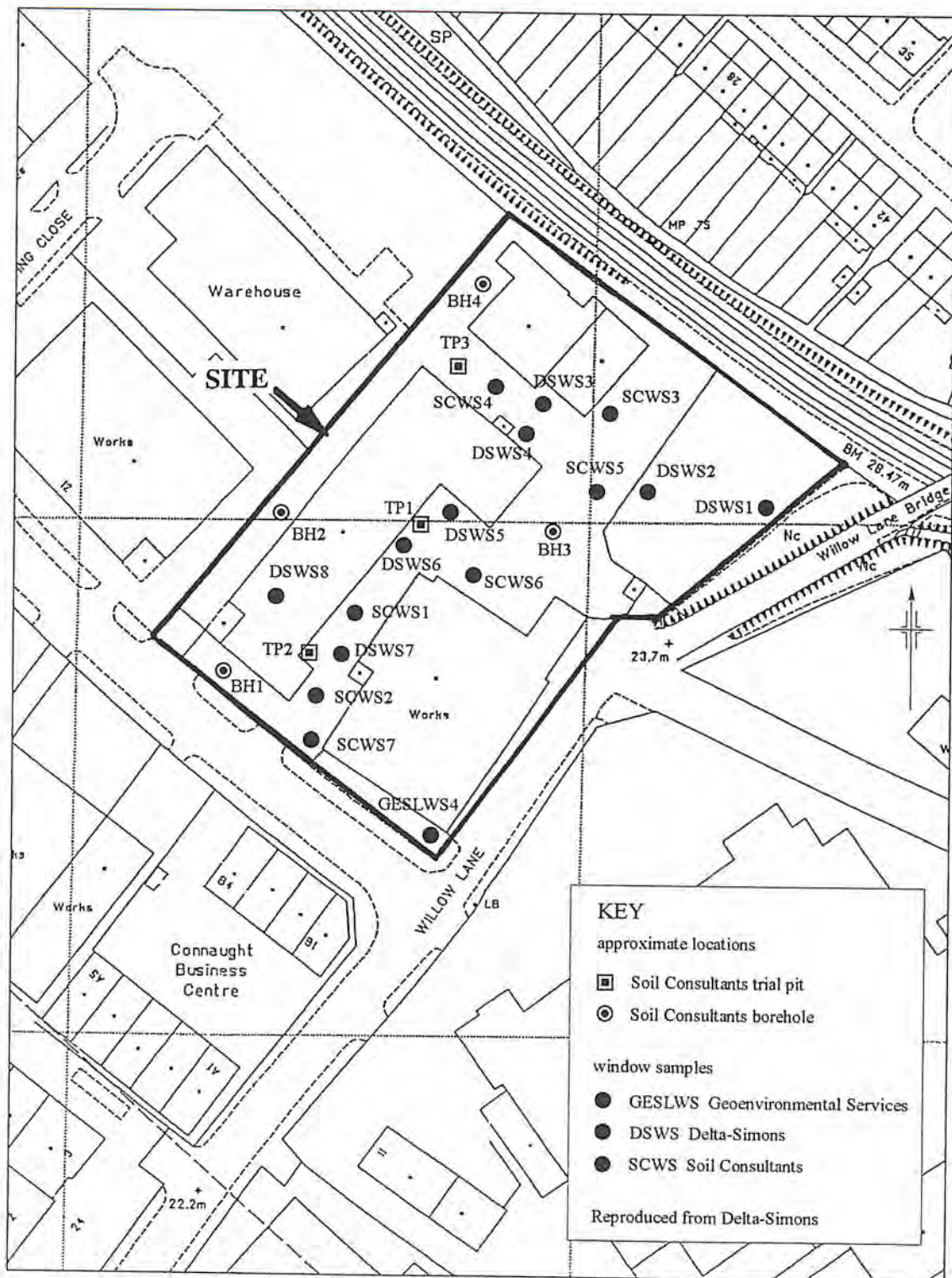


Figure 3: The Location of the Geotechnical Exploratory Holes (not to scale)

2.3 Topography

The development land lies approximately 350 metres to the north-east of the River Wandle. This rises at the foot of the North Downs in Carshalton and Waddon Park, Croydon and runs northwards for approximately 19 kilometres before draining into the Thames (Wandle Industrial Museum website; and Cluett and Phillips 1997). The river falls some 55 metres over its length (Wandle Industrial Museum website) and is consequently fast-flowing with a relatively wide floodplain in the Mitcham area.

The Wandle runs close to the south-western edge of the valley in the vicinity of the development area. Much of the low lying ground lies to the north-east of the river where the application site occupies the first gravel terrace at approximately 22.5 metres above Ordnance Datum. The valley sides slope upwards in a north-easterly direction to 35 metres above Ordnance Datum on Mitcham Common

2.4 Geology

The 1:50,000 geological map for South London (Sheet 270, Geological Survey of Great Britain (England and Wales) depicts Taplow Gravel across the development area. This is thought to have formed during the Wolstonian Glaciation which is dated broadly to the later part of the Pleistocene, between 275,000 and 160,000 years ago (Sumbler 1996).

2.5 The Geotechnical Data

2.5.1 Introduction

Two geotechnical surveys have taken place within the development area. The first by Geo-Environmental Services (2003) is summarised in the environmental assessment (Delta-Simons 2003). The most recent was carried out by Soil Consultants Limited (2003).

The detailed findings of the first survey are not available (Geo-Environmental Services 2003), although the synthesised results demonstrated the presence of made-ground across the site to a variable depth of between 1.0 and 4.0 metres (Delta-Simons 2003). This was composed of reworked sandy and clayey gravels associated with varying proportions of brick, tile, concrete and ash. Concrete was recorded in one of the boreholes at a depth of 6.0 metres below ground level. The gravel underlain by London Clay was found on the eastern half of the site, while groundwater was encountered at a depth of 2.0 metres (Delta-Simons 2003).

The second investigation both replaced and expanded on the first (Soil Consultants Limited 2003). The work included four deep boreholes of between 12 and 20 metres (Figure 3, BH1 to BH4), seven shallower boreholes (Figure 3, SCWS1 to SCWS7) and three trial pits (Figure 3, TP1 to TP3). Delta-Simons excavated a further eight probe-holes for their contamination appraisal (Figure 3, DSW1 to DSW7). On 21st October 2003 standing water levels were measured at a depth of 3.5 metres below ground level (Soil Consultants Limited 2003).

The second geotechnical survey concentrated on the south-western, north-western and north-eastern parts of the site. The fringes of the south-eastern quadrant were also investigated, but the survey did not include the area occupied by the building which was still in use.

The investigations identified deep deposits in the south-western corner of the site which have been interpreted as a backfilled gravel pit (Soil Consultants Limited 2003; Delta-Simons 2003). Made ground (consisting of clay and sandy clay with some gravel, flint, stone, rubber, concrete and brick fragments) extends across the site and is thought to represent site levelling during previous phases of redevelopment (Delta-Simons 2003). This is 1.5 to 2.0 metres thick across the south-eastern part of the site and 0.6 to 1.8 metres deep in the northern half of the development area. Potentially natural deposits were additionally recorded directly below the reinforced concrete in the northern third of the site at depths of between 0.36 and 0.75 metres.

A detailed synthesis of the relevant results (Soil Consultants Limited 2003; Delta-Simons 2003), is presented below.

2.5.2 South-West Quadrant

Five boreholes, two trial pits and three probe-holes were dug in this part of the site (Figure 3). These indicate the presence of made ground to a depth of between 5.3 and 6.2 metres in the south-western part of the site (Figure 3, BH1 and BH2). This becomes slightly thinner towards the centre of the development area, where it is between 3.4 and 4.3 metres thick (Figure 3, TP1, TP2, SCWS1 and SCWS2). Two of the intervening probe-holes did not penetrate below this layer (Figure 3, DSWS6 and DSWS7), while a third recorded potentially natural deposits at a depth of 1.5 metres (Figure 3, DSWS8). The borehole in the south-eastern corner of this quadrant revealed Terrace Gravel below the made ground at a depth of 2.0 metres (Figure 3, SCWS7).

Borehole BH1

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.25	Reinforced concrete slab
0.25 to 6.2	Made ground – brick and stone fragments present
6.2 to 20.0	London Clay

Borehole BH2

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.25	Concrete slab
0.25 to 5.3	Made ground – brick and stone fragments present
5.3 to 12.5	London Clay

Trial Pit TP1

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.5	Reinforced concrete
0.5 to 3.4	Made ground – brick fragments present
3.4 to 4.	London Clay

Trial Pit TP2

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.3	Reinforced concrete
0.3 to 0.45	Made ground – concrete rubble
0.45 to 0.55	Concrete slab
0.55 to 2.0	Made ground – brick fragments present
2.0 to 3.6	Made ground – blue grey silty sand
3.6 to 3.8	Pale grey silty sand with gravel

Borehole SCWS1

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.3	Reinforced concrete slab
0.3 to 0.5	Made ground – concrete hardcore
0.5 to 1.1	Made ground – brick fragments, sand and cinders
1.1 to 2.2	Made ground – brown clay, cinders and stone fragments
2.2 to 4.3	Made ground – soft black silty clay-bound sand
4.3 to 4.6	Terrace Gravel
4.6 to 6.0	London Clay

Borehole SCWS2

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.4	Reinforced concrete slab
0.4 to 0.65	Made ground – concrete hardcore
0.65 to 1.6	Made ground – brick fragments and sand
1.6 to 3.9	Made ground – soft black silty clay-bound sand
3.9 to 4.2	Black silty sand

Borehole SCWS7

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.15	Concrete slab
0.15 to 0.6	Made ground – brick fragments present
0.6 to 2.0	Possible made ground – black discoloured silty sandy clay and dark grey silty sand with gravel
2.0 to 3.0	Terrace Gravel

Probe-hole DSWS6

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.6	Reinforced concrete

Probe-hole DSWS7

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.38	Reinforced concrete
0.38 to 0.84	Made ground – concrete and rubber fragments present
0.84 to 3.0	Made ground dark clayey discoloured sand

Probe-hole DSWS8

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.46	Reinforced concrete
0.46 to 1.5	Made ground – clinker present
1.5 to 2.8	Gravelly sand with some rounded gravel
2.8 to 3.0	Firm clay

2.5.3 South-East Quadrant

A single borehole dug in the north-western corner of this quadrant revealed Terrace Gravel at a depth of 1.75 metres (Figure 3, SCWS6).

Borehole SCWS6

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.25	Tarmac over concrete
0.25 to 0.45	Made ground – concrete rubble
0.45 to 1.75	Made ground – clay-bound sand and silt with shale
1.75 to 3.0	Terrace Gravel

2.5.4 North-West Quadrant

Two boreholes, one trial pit and three probe-holes were excavated in this part of the site (Figure 3). Terrace Gravel was encountered at depths of between 1.1 and 1.8 metres below ground level in the north-west corner of the area (Figure 3, BH4 and TP3). The probe-hole in the south-east corner was 3.0 metres deep and did not penetrate below made ground (Figure 3, DSWS5), while an intervening borehole and probe-hole stopped in the reinforced concrete (Figure 3, SCWS4 and DSWS4). A layer of sand with some flint was recorded in the centre of the quadrant just below the concrete at a depth of 0.36 metres (Figure 3, DSWS3). This is thought to represent a natural deposit (Delta-Simons 2003).

Borehole BH4

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.25	Reinforced concrete slab
0.25 to 1.8	Made ground – brick fragments present
1.8 to 3.25	Terrace Gravel
3.25 to 12.5	London Clay

Trial Pit TP3

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.4	Reinforced concrete
0.4 to 1.1/1.4	Made ground – stone and brick fragments present
1.1/1.4 to 2.1	Terrace Gravel

Borehole SCWS4

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.2	Concrete slab
0.2 to 0.7	Made ground – concrete rubble and sand
0.7	Concrete

Probe-hole DSWS3

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.3	Tarmac
0.3 to 0.36	Reinforced concrete
0.36 to 1.54	Sand with some flint

Probe-hole DSWS4

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.55	Reinforced concrete

Probe-hole DSWS5

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.69	Reinforced concrete
0.69 to 3.0	Made ground

2.5.5 North-East Quadrant

Three boreholes and two probe-holes were drilled in this part of the site (Figure 3), where the made ground is thinner than elsewhere. Along the north-western edge of the quadrant it varies in thickness between 0.6 and 1.2 metres (Figure 3, BH3, SCWS3 and SCWS5), with Terrace Gravel at depths of between 0.8 and 1.0 metres below ground level (Figure 3, SCWS3 and SCWS5). Clayey sand interpreted as a natural deposit (Delta-Simons 2003) was recorded directly below the reinforced concrete in the centre of the quadrant at a depth of 0.75 metres (Figure 3, DSWS2). The probe-hole in the north-eastern corner of the site was dug to a depth of 1.6 metres and did not penetrate below made ground (Figure 3, DSWS1).

Borehole BH3

<i>Depth (metres)</i>	<i>Description</i>
0 to 0.20	Reinforced concrete slab
0.2 to 1.2	Made ground – brick fragments present
1.2 to 3.1	Discoloured dark grey to black sandy gravel
3.1 to 20.5	London Clay

Borehole SCWS3

Depth (metres)	Description
0 to 0.1	Tarmac
0.1 to 0.25	Concrete slab
0.25 to 1.0	Made ground – brick fragments present
1.0 to 1.25	Terrace Gravel

Borehole SCWS5

Depth (metres)	Description
0 to 0.35	Tarmac
0.35 to 0.6	Made ground – brick and stone fragments present
0.6 to 0.8	Dark brown silty sandy clay with occasional gravel
0.8 to 1.25	Terrace Gravel

Probe-hole DSWS1

Depth (metres)	Description
0 to 0.3	Reinforced Concrete
0.3 to 1.6	Made ground - clayey sand

Probe-hole DSWS2

Depth (metres)	Description
0 to 0.75	Reinforced Concrete
0.75 to 1.5	Clayey sand with some flint
1.5 to 2.2	Clayey sand with some flint and gravel

3 PROPOSED SCHEME OF DEVELOPMENT (Figure 4)

The proposed scheme is for two light industrial warehouses, sub-divided into units, with associated car parking and landscaping. These will be located on either side of a central access road leading from Wandle Way.

The proposed shallow spread foundations are to consist of a series of reinforced pads set at a depth of 0.6 metres. The smallest are to be 0.75 metres square and the largest are to be 1.75 by 3.5 metres in area. These are to be overlain by a reinforced concrete slab.

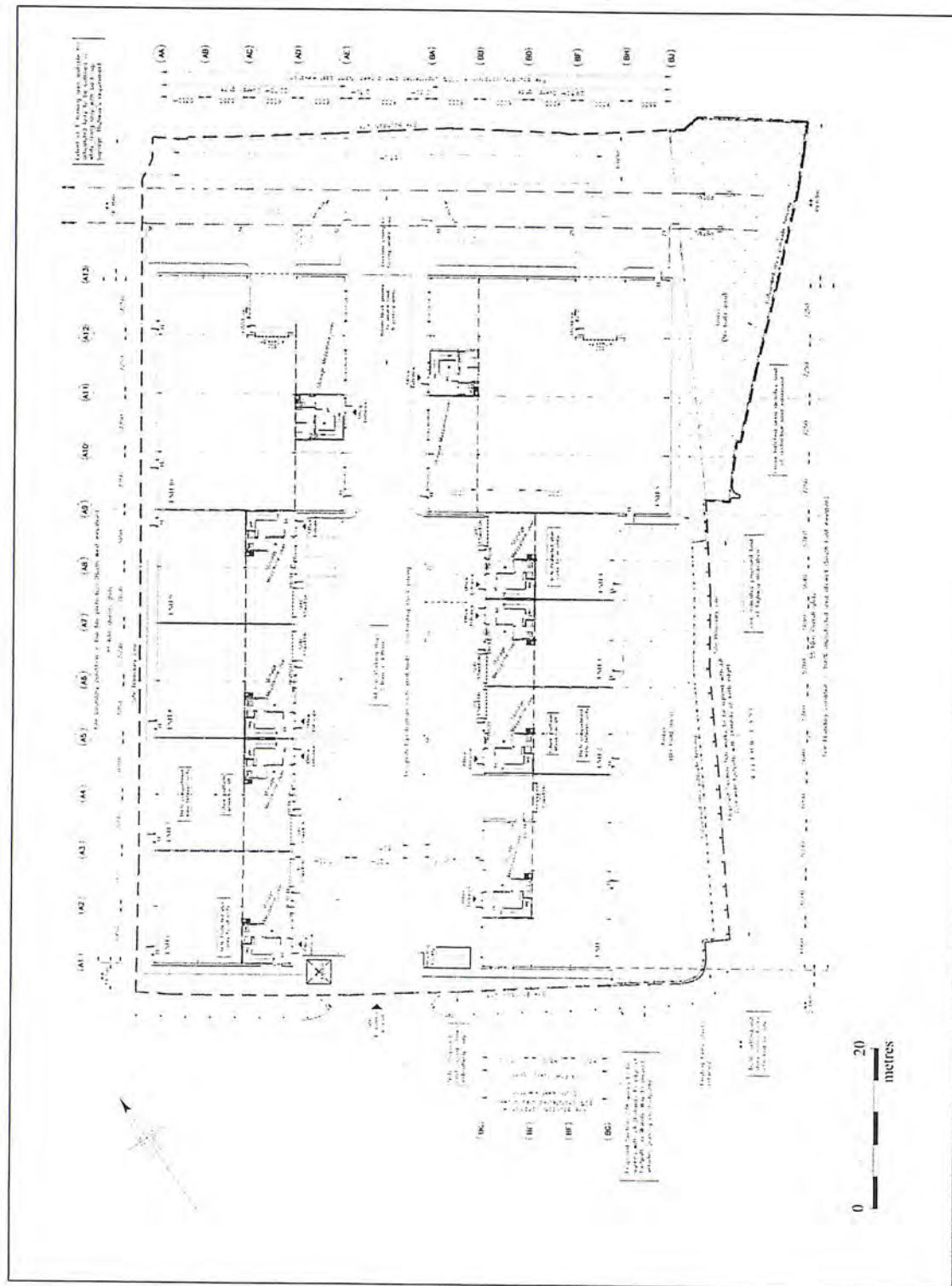


Figure 4: The Proposed Development Scheme

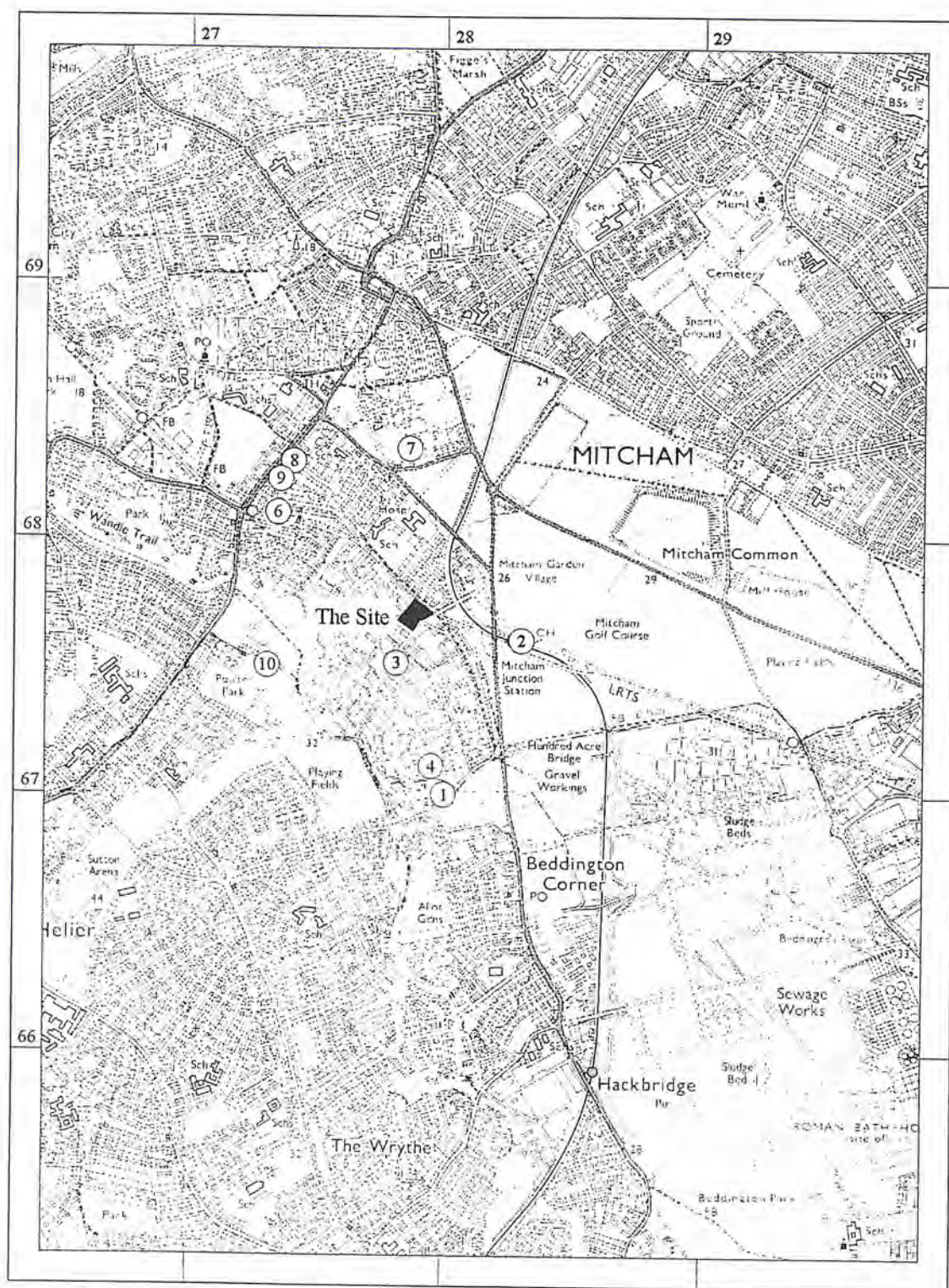
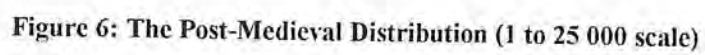


Figure 5: The Distribution of Prehistoric to Medieval Remains (1 to 25 000 scale)



4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 Known Archaeological Sites (Figures 5 and 6)

There are no Scheduled Ancient Monuments, Listed Buildings or previously recorded archaeological remains within the development area. The site is not in a Conservation Area, nor does it encroach on any Historic Parks or Gardens on the English Heritage register. It is, however, located within an Archaeological Priority Zone shown on the proposals map in the London Borough of Merton Unitary Development Plan (October 2003).

The absence of known remains does not mean that the site is necessarily devoid of archaeological deposits or features, since there has been no archaeological fieldwork carried out within the proposed development area. The majority of previous investigations in the vicinity have focussed on development sites so that the character of the archaeological resource on the intervening land is unknown.

The assessment of the archaeological potential of the site is based on the available evidence within a 750 metre radius of a central grid reference at TQ 2786 6772, described in the report as the study area. There have been 16 trenched evaluations carried out in this zone. These include seven located some 600 to 750 metres to the north and north-west of the development site; five positioned 500 to 700 metres away to the south and west; and four within a 100 to 400 metre radius of the site. The results of these evaluations are outlined in the relevant sections.

The detailed information from the study area is considered in the context of more general evidence from the Mitcham area and the Wandle valley. This allows for a more informed appraisal of the significance and potential of the local finds.

The distribution of archaeological remains in the study area is shown in Figures 5 and 6 and a summary of this evidence is presented below in chronological order. Local sites mentioned in the report are identified by unique numbers, corresponding with the numbers shown in Figures 5 and 6 and listed in the gazetteer (Section 7.2). This provides a brief description for each entry, an Ordnance Survey National Grid reference, and the Greater London Historic Buildings, Sites and Monuments Record number. The sources of all data are duly referenced in the text or gazetteer, while all reports consulted are listed in the bibliography (Section 7.1).

4.1.1 The Palaeolithic Period (500,000 to 10,000 BC)

The earliest remains found in the study area date to the Palaeolithic period (500,000 to 10,000 BC) and comprise a large collection of animal bones from the Mitcham Gravel Pits. These come from a location some 650 metres to the south of the development site, close to the Wandle (Figure 5, 1). Although the excavator claimed that the skeletal remains were associated with tools, this was discounted when later examination of the flint-work proved it to be of natural origin (Montague 1992). The bones include the remains of bison, auroch, red deer, roe deer, reindeer, mammoth, horse and rhinoceros (ibid.). They are very fragmentary and the animals represented are typical of contrasting climatic and environmental conditions. This suggests that

they are likely to have been eroded and transported from their original positions by the ancestral River Wandle during the Pleistocene.

A similarly natural mechanism is likely to account for the presence of a small number of scattered and abraded Palaeolithic flint artefacts found in the Taplow gravels in Mitcham (Montague 1992). All are from locations outside the study area and are older than the Taplow Terrace (*ibid.*). The only concentration of Palaeolithic material near to the Wandle is located much further to the north where the river joins the Thames at Wandsworth (Wymer 1987).

4.1.2 The Neolithic Period (4000 to 2200 BC)

The evidence for a Neolithic presence in the vicinity of the development site is of an ephemeral and uncertain character. The only find is a single broken polished flint axe which may have come from same general area as the Palaeolithic animal bones, approximately 650 metres to the south (Figure 5, 1). This has an uncertain provenance and there is some doubt over the precise find spot.

A few broadly contemporary artefacts have been discovered in Mitcham, including two other axes, a late Neolithic bowl and a few fragments of similar pottery (Montague 1992). All come from different locations outside the study area and indicate a general presence in this part of the Wandle Valley during the Neolithic. However, there are no concentrations of material and the general level of activity seems to have been low.

4.1.3 The Middle to Late Bronze Age (1000 to 600 BC)

The only Bronze Age find from the study area is a single hoard of bronze palstaves. This was discovered some 400 metres to the east of the development site on the edge of Mitcham Common (Figure 5, 2). The hoard dates to the middle Bronze Age (Needham 1987) and was found in the nineteenth century (Montague 1992).

Subsequent occupation just outside the study area may be indicated by traces of late Bronze Age cultivation and a few contemporary artefacts from an old river channel (Bird, Crocker, Maloney and Saich 1996). These were found during an evaluation carried out about 900 metres to the south-east of the development area (*ibid.*). There is only one other known focus of Bronze Age settlement in Mitcham at the Kings College Sports Ground approximately two kilometres to the north-west of the development site (Bird, Crocker and McCracken 1990). An evaluation in this location revealed a series of pits and ditches cutting the gravel terrace, associated with middle and late Bronze Age pottery (Bazely 1989).

4.1.4 The Roman Period (AD 43 to 410)

There is rather more substantial evidence for the Roman occupation of Mitcham. The evidence from the study area includes a late third century grave uncovered during gravel extraction in 1928 (Bidder 1942), just 130 metres to the south of the

development site (Figure 5, 3). The grave contained an inhumation buried in a coffin accompanied by two pottery vessels (Bidder 1942). Three other pots were found nearby, two of which came from a back-filled ditch which also contained animal bone and pieces of tile (ibid.).

Three of the evaluations within the study area have also produced occasional fragments of Roman pottery and tile. These include one sherd associated with post-Medieval artefacts in an alluvial silt, approximately 500 metres to the south of the development site (Figure 5, 4); and a few fragments found 550 metres to the south-west (Figure 5, 5). Scattered sherds of Roman pottery and tile were additionally recovered from later features some 650 metres to the north-west of the application site (Figure 5, 6).

The development and character of Roman settlement in the Mitcham area is likely to have been influenced by its position close to a major communication route. Stane Street marks the line of the Roman road leading from London to the Sussex coast at Chichester and Fishbourne. This crosses the Wandle in Merton and passes close to the site of a Roman settlement encompassing Merton Priory almost three kilometres to the north-west of the development area. A series of features likely to denote a second focus of Roman occupation have also been identified near to Mitcham church, just 1.2 kilometres to the north-west (Bird, Crocker and McCracken 1990), while a Roman cemetery has been discovered 1.9 kilometres away in the same direction (Jackson, Maloney and Saich 1997).

4.1.5 The Early to Middle Saxon Period (AD 410 to 800)

A single early to middle Saxon pit was found during an evaluation approximately 650 metres to the north-west of the application site (Figure 5, 6). This feature had been backfilled with domestic refuse including animal bone, pottery and fired clay.

This is a very unusual find in the Wandle valley, where most of the contemporary sites are cemeteries. The largest is located in Mitcham only just outside the Study Area, approximately 800 metres to the north-west of the development site. This includes 230 graves which are mostly of sixth century date (Poulton 1987). Other cemeteries are recorded further to the south-east at Beddington and Croydon (ibid.).

4.1.6 The Medieval Period (AD 1066 to 1485)

There are two possible Medieval farmsteads surrounded by moats within the study area. The first was owned by Southwark Priory and is thought to have been located below The Canons, approximately 600 metres to the north of the development area (Figure 5, 7). The second moated site is said to coincide with Mitcham Hall some 700 metres to the north-west (Figure 5, 8), but there is little evidence to support this claim. An evaluation close to this site revealed a late Medieval or early post-Medieval floor interpreted as a garden feature (Figure 5, 9). A possible Medieval midden deposit was found nearby, but this only contained 19 sherds of pottery.

An evaluation 550 metres to the south-west of the development site (Figure 5, 10) revealed two Medieval ditches associated with a single sherd of thirteenth to fourteenth century pottery. The area was low-lying and waterlogged and it is quite possible that these were drainage channels.

The historical record provides additional information about the setting of some of these archaeological sites. There are five major Medieval land-holdings recorded in the parish of Mitcham, although the precise location of these is uncertain (Malden 1912). These include The Canons, which is thought to coincide with the Medieval Manor of Mitcham Canons (Malden 1912), focused on a location about 600 metres to the north of the development area (Figure 5, 7). The Medieval manor of Biggin and Tamworth in the northern part of the parish belonged to Merton Priory and extended northwards to Tooting Graveney and Streatham (ibid.). The manor of Ravensbury incorporated the Ravensbury Park area to the north-west of the development land. Two of the Medieval land holdings were located in Lower Mitcham just to the north of Mitcham Common (Malden 1912). These include a property at Witford or Wickford, which is recorded by the Domesday survey of AD 1086, and the Manor of Lodge.

4.1.7 The Post-Medieval Period (AD 1485 to 1900)

The earliest excavated evidence related to post-Medieval occupation in the study area is focused on the site some 750 metres to the north of the development (Figure 6, 11) which also revealed Medieval remains (Figure 5, 9). The features included a series of chalk floors dating between AD 1550 to 1800, which is thought to have been part of a barn. This was originally a timber structure, which was extended in brick during the later seventeenth or eighteenth century. The remains of several nineteenth century buildings likely to have been associated with Mitcham Hall were also revealed, while nearby gravel surfaces dated between the eighteenth and twentieth centuries.

Eighteenth century wall foundations were also uncovered by evaluations on two other sites in this same general area. On the first of these, some 750 metres to the north-west of the development (Figure 6, 12), the footings were associated with a brick-built culvert and were thought to have been part of Wessex House. The second set of foundations were close to a small pit containing fragments of eighteenth and nineteenth century brick and tile and were found 700 metres to the north of the development site (Figure 6, 13).

Evidence of cultivation in this general area was identified during an evaluation 650 metres to the north-west of the development site (Figure 6, 14). This consisted of a series of plough soils containing pottery dating from the seventeenth century.

Much of the remaining information about the study area is related to a variety of Mitcham industries. These include a brewery at 425 London Road, 700 metres to the north-west of the development (Figure 6, 15). All of the other industrial sites lie to the south-west and west of 2 to 4 Willow Lane.

The closest is the Willow Works, which was situated just 200 metres to the south-west of the development (Figure 6, 16). This was established in the early eighteenth

century by Thomas Selby of West Ham who was a bleacher of linens and calicos (Montague 1996). The bleaching and printing of calico was an expanding eighteenth century industry, but declined during the early nineteenth century in the Wandle valley (*ibid.*). This was exacerbated at the Willows by disputes over water rights and by AD 1851 the works were closed and the surrounding meadows were once again used as farmland (*ibid.*). The chimney and wheel were retained until the gravel quarrying between the wars (*ibid.*).

The Mitcham Flour Mill occupied a position at the end of Willow Lane, some 400 metres to the south-west of the development site (Figure 6, 17). This was also known as Searle's Mill and had originally been built around AD 1740 as a copper mill (Montague 1996). In the mid-eighteenth century it may have been used for dressing lambs skins (*ibid.*). By AD 1780 it had been converted to a flour mill and by AD 1884 it had become the J. S. Deed and Sons Eagle Leatherworks (*ibid.*). The mill and wheel were removed in the early 1960's during flood relief works (*ibid.*). In 1992 an evaluation recorded a timber barrel and with a brick wall on chalk foundations (Figure 6, 17). It was thought that these remains might relate to the tanning industry on the site (*ibid.*). However, the structural features were attributed to the seventeenth or early eighteenth century, and if this is correct they must relate to an earlier phase of activity pre-dating the mill.

The nearby Logwood Mills, concerned with the extraction of natural pigments for dyes, were situated off Willow Lane to the east of the Mitcham Flour Mill (Figure 7, 18; Montague 1996). The historic maps indicate the presence of a logwood mill on the site by AD 1685. The industry prospered until the late nineteenth century when chemical dyes were introduced and by 1880 the buildings on the site had been amalgamated with those of the Mitcham Flour Mill (*ibid.*).

Two other mills, Grove Mill and Crown Mill, were situated around 525 metres to the west of the development site (Figure 6, 19). These are thought to have been near to one of the Medieval mills recorded during the Domesday survey of AD 1086 (Montague 1996), but there is no physical evidence to support this claim. Grove Mill was first recorded during the mid-seventeenth century and was used for grinding corn (*ibid.*). In 1902 it was taken over by a company manufacturing a fibre used for upholstery and was rebuilt twice after fires in 1788 and 1907 (*ibid.*). A watching brief carried out during the recent redevelopment of the mill recorded late eighteenth century buildings, together with earlier chalk footings and the remains of a timber structure (Figure 6, 19). One of the buildings associated with the two mills is reputed to have been used as a workshop for the Surrey Iron Railway, while three cast iron wheels from the wagons were found nearby (Figure 6, 19).

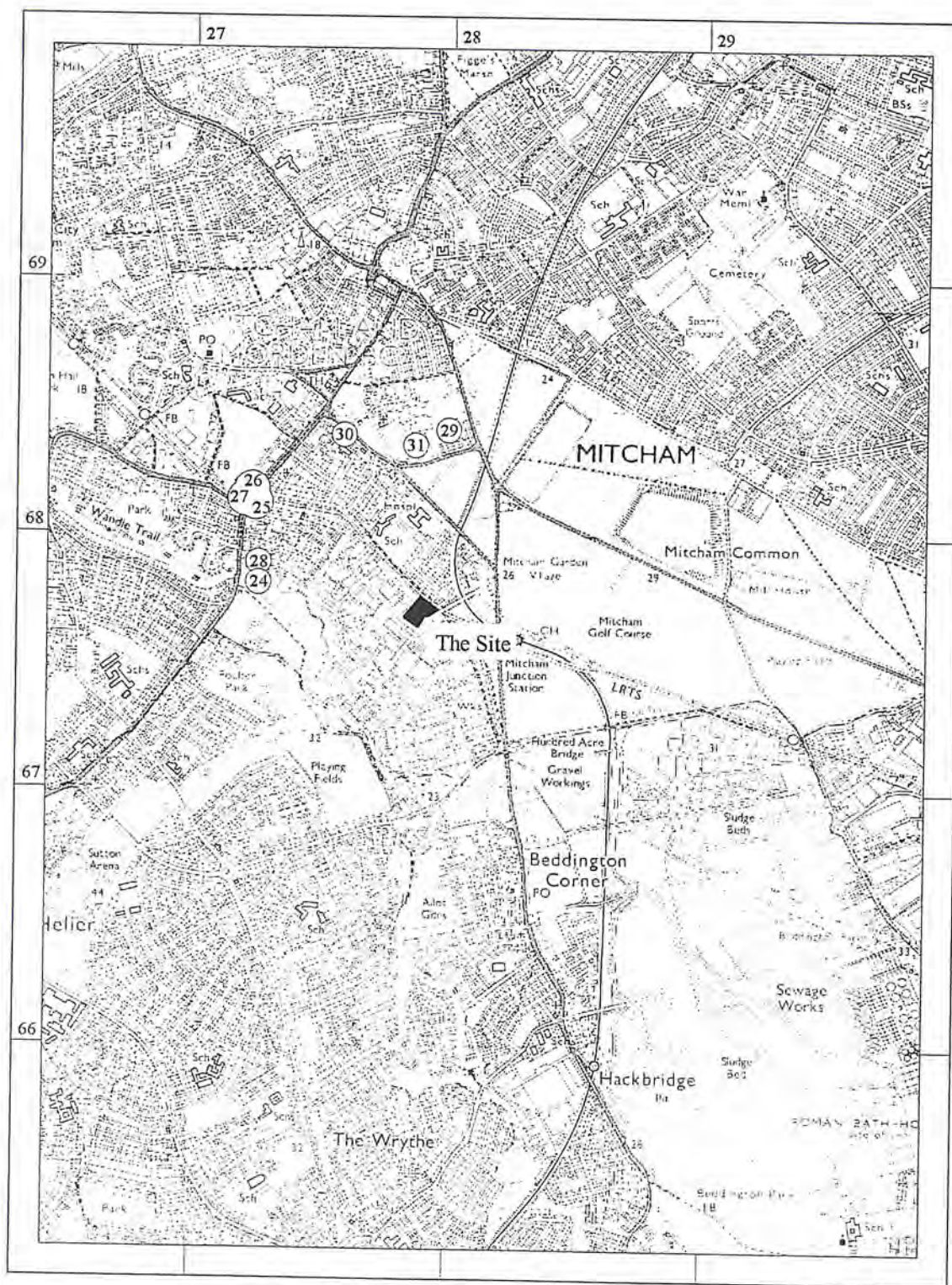


Figure 7: The Distribution of Listed Buildings (1 to 25 000 scale)

The route of the early railway coincides roughly with the tramway running along the northern edge of the development site (Figure 6, 20). It was originally conceived as part of a larger scheme linking London with Portsmouth (Wandle Industrial Museum website). Although a canal was considered, it was opposed by the numerous mill owners along the Wandle who were concerned that their industries would be affected

if the flow of the river was reduced (ibid.). The railway, designed to carry goods, was approved and was opened on the 26th July 1803. The tracks were set on stone blocks and consisted of cast iron angle-plates to guide the wheels of horse drawn wagons (ibid.). The line was officially closed on 31st August 1846, although short stretches may have continued in use beyond this date (Hardman 1984).

Mitcham railway station is reputed to have originally been built as part of the Surrey Iron Railway. This is located 750 metres to the north-west of the development site (Figure 6, 21).

The site of the one remaining mill within the study area lies 600 metres to the west of the development (Figure 6, 22). This was Glover's Snuff Mill which lay just over the Mitcham parish boundary in Morden. This is one of a number of snuff mills along the Wandle (Wandle Industrial Museum website) and is first mentioned in documents dating to AD 1809 (Montague 1996). The mill had been abandoned by 1834 and the buildings survived into the 1920's (ibid.).

The development site occupied an area used for farming and horticulture. Mitcham was well known for its 'physic gardens' where roses, camomile, white poppies, liquorice, angelica, lavender and peppermint were cultivated (Malden 1912). Peppermint was first grown before AD 1750, and was reputed to produce the best oil in the world (Wandle Industrial Museum Website). The watercress industry prospered along the Wandle from about AD 1850 (ibid.) and there are numerous beds shown on the historic maps. The cultivation of watercress declined sharply after AD 1937 when it was wrongly blamed for an outbreak of typhoid in Croydon (Cluett and Phillips 1997).

None of the watercress beds coincide with the development site nor is there any evidence that it was used for market gardening. The only archaeological traces of cultivation in the study area were recorded 500 metres to the south of the development area (Figure 6, 23). The remains consist of a series of 18th and 19th century drainage gullies found during an evaluation.

4.2 Listed Buildings (Figure 7)

All of the listed buildings are located between 550 and 750 metres to the north-west and north of the development area (Figure 7, 24 to 31). This identifies the main centre of post-Medieval settlement in Mitcham (see Section 4.3.1).

The majority of the buildings are houses listed as Grade II (Figure 7, 24 to 29) which are defined by English Heritage as being "of special interest, warranting every effort to preserve them". The Grade II structures additionally include the almshouse on Cricket Green, 700 metres to the north-west of the development site (Figure 7, 30).

The only Grade II* house belonging to a class of "particularly important buildings of more than special interest" is The Canons, located approximately 600 metres to the north of the development area (Figure 7, 31). This dates to the seventeenth century and has a Grade II listed dovecote in the garden.

4.3 The Cartographic Evidence (Figures 8 to 18)

4.3.1 The Area of the Development in the Eighteenth Century (Figure 8)

The study of the historic maps has been confined to those which provide information about the changing character of the land occupied by the development site. The earliest of these is John Rocque's map of Surrey dated to AD 1768 (Figure 8). Willow Lane is depicted running between Bridge Mill, on the site of the Logwood Mills (Figure 7, 18), and Mitcham Common. The centre of Mitcham is shown to the north-west, with Lower Mitcham to the north.

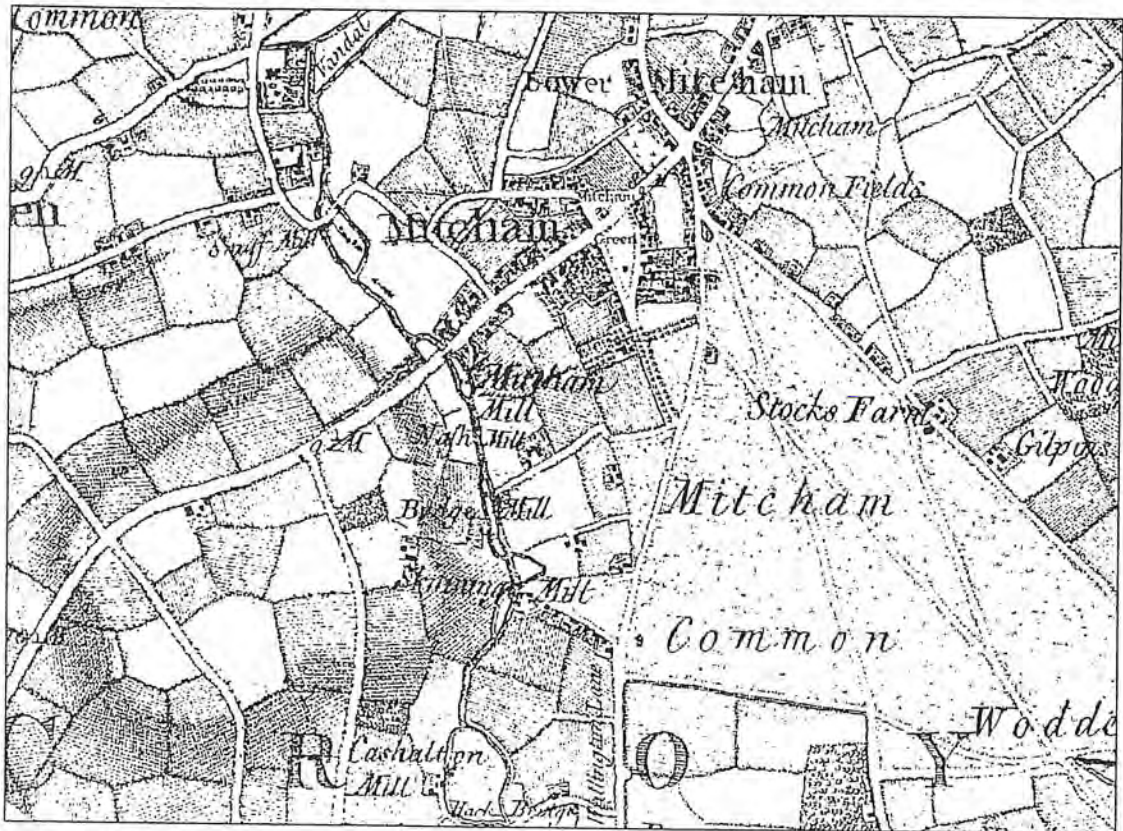


Figure 8: Extract from John Rocque's Map of Surrey – AD 1768 (not to scale)

At the time Willow Lane followed a slightly different course and would have crossed the north-eastern corner of the area occupied by the development site. This becomes clearer on the larger scale nineteenth century maps (Section 4.3.2, Figures 9 to 11). There is only one set of buildings shown by Rocque to the north of the Willow Lane. The position of these broadly coincides with the location of the Willow Works (Figure 6, 16), approximately 200 metres to the south-west of the development site.

This particular piece of information is important because it may resolve an apparent ambiguity in one of the secondary sources (Montague 1996). This describes a large house with basements constructed in AD 1746 and named as "The Willows" (ibid.). Rocque's map (Figure 8) suggests that its location was congruent with the Willow Works (Figure 6, 16), yet Montague states that "The Willows" became "The Wandle

Paddocks Stud Farm” which would place it further to the north-east on the development site.

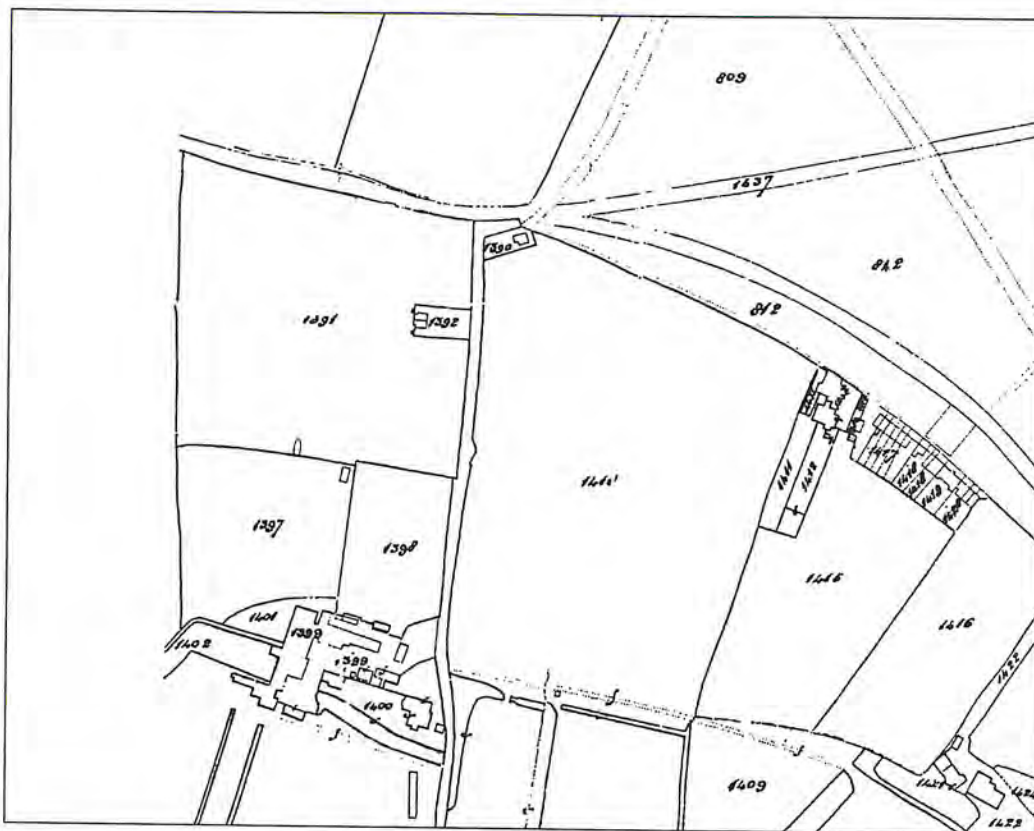


Figure 9: Extract from the Mitcham Tithe Map – AD 1847 (not to scale)

4.3.2 The Area of the Development in the Nineteenth Century (Figures 9 to 11)

There was no Parliamentary enclosure in Mitcham, nor is there any record of an informal agreement (Malden 1912). The next view of the area is provided by the Tithe map of AD 1847 (Figure 9). The course of Willow Lane remained unaltered, while the development site coincides with parts of four land units listed in the accompanying apportionments of AD 1848 (Figure 9, 1390, 1391, 1392 and 1410). These include a cottage and garden in a location corresponding with the north-eastern corner of the development (Figure 9, 1390); and two houses and gardens in positions close to its centre (Figure 9, 1391). The rest of the area was being used as meadow land (Figure 9, 1391 and 1410).

By the time the first edition Ordnance Survey map was published in AD 1867 (Figure 10) the cottage (Figure 9, 1390) had been demolished, and the garden had been incorporated in a small triangular land parcel (Figure 10, 447). The houses and gardens were still in place (Figure 9, 1391) and the surrounding land remained as open fields, while the course of Willow Lane was unchanged.

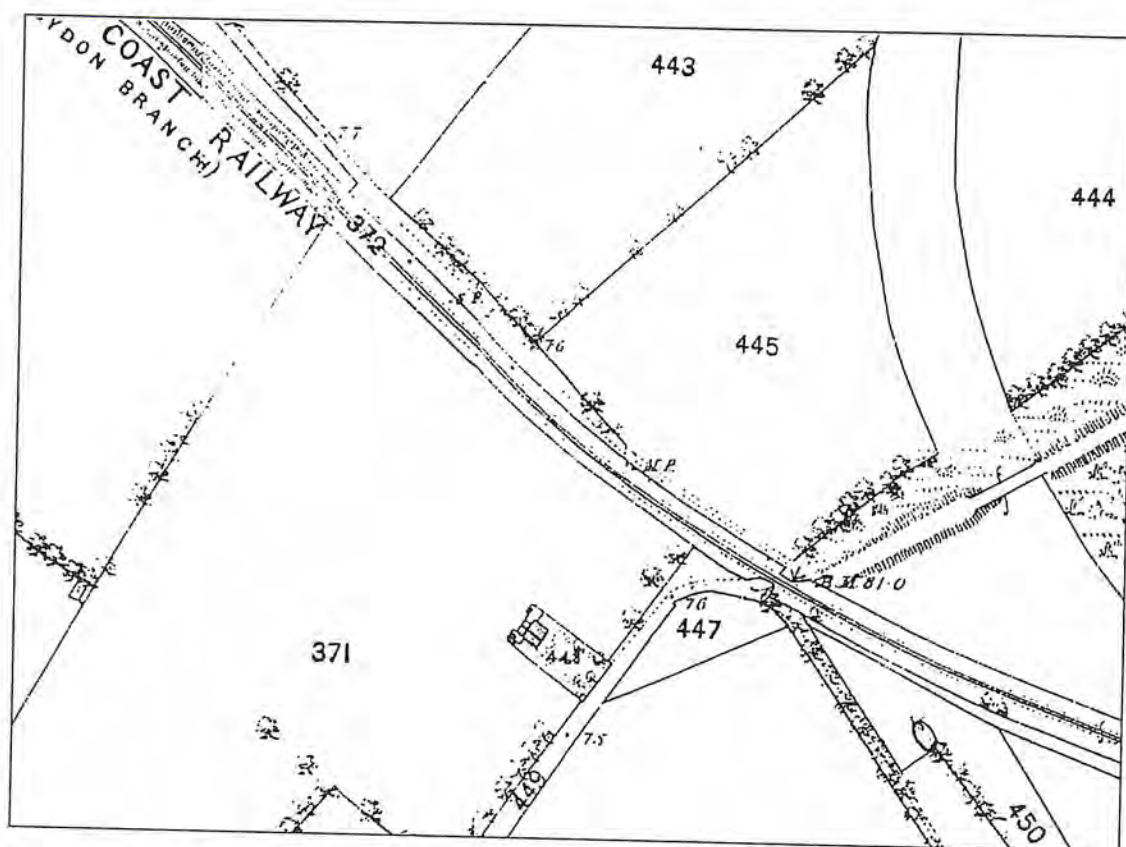


Figure 10: Extract from the First Edition Ordnance Survey Map – AD 1867 (not to scale)

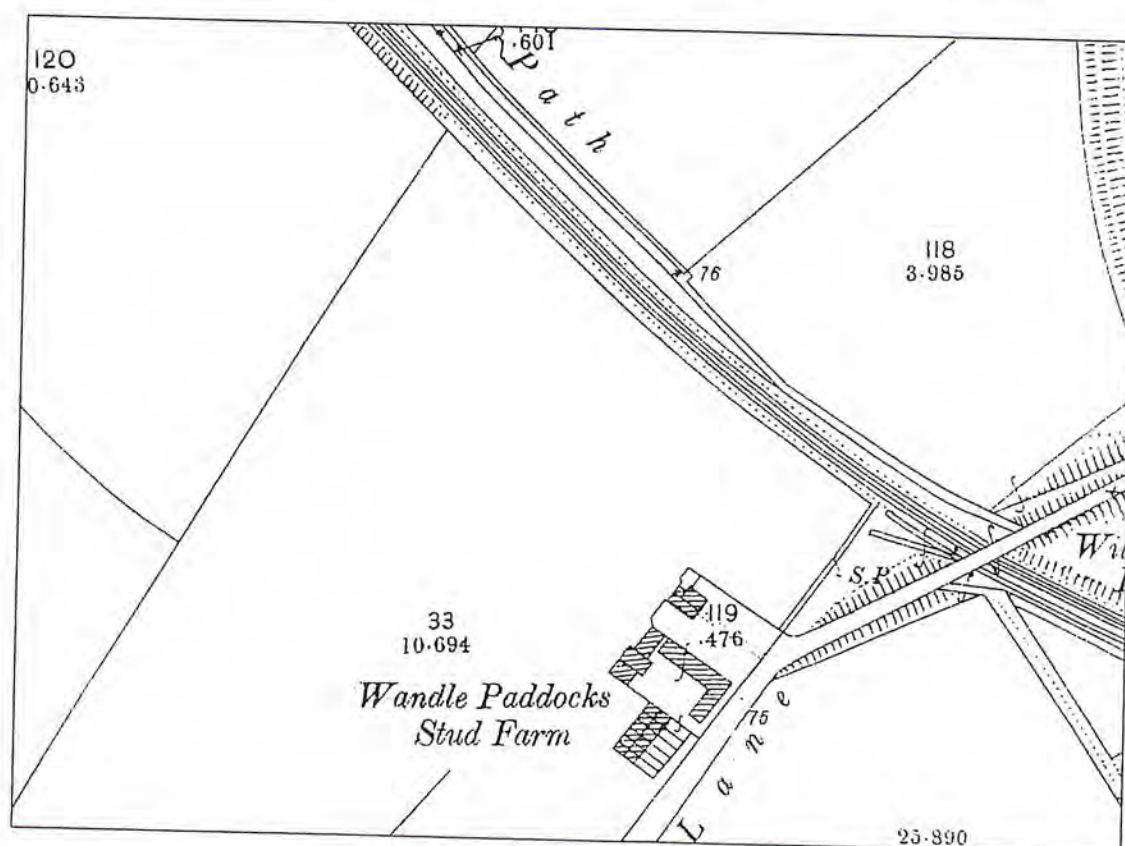


Figure 11: Extract from the Second Edition Ordnance Survey Map – AD 1895 (25 inch scale)

The final nineteenth century view of the area provided by the second edition Ordnance Survey map of AD 1895 depicts a very different scene (Figure 11). The present course of Willow Lane along the south-eastern boundary of the development had been established. This followed the fence line of the earlier triangular land parcel (Figure 10, 447), demonstrating unequivocally that the site of the former cottage and garden (Figure 9, 1390) coincides with the north-eastern corner of the development. The embankment carrying the road across the railway ran along the edge of the site in its north-eastern corner (Figure 11). This area was additionally crossed by sidings running towards the London Brighton and South Coast branch line.

The houses first shown in AD 1847 (Figure 9, 1391) remained in place, but other buildings including stables had been constructed immediately to the south-west (Figure 11). These are named on the map as the Wandle Paddocks Stud Farm.

4.3.3 The Area of the Development in the Earlier Twentieth Century (Figures 12 to 13)

The area was little changed when the revised edition Ordnance Survey map of AD 1913 was published (Figure 12). All of the earlier structures at the Wandle Paddocks Stud Farm remained in place, although there seems to have been some alteration to the buildings on the south-western edge of the complex. The position of these outlying structures places them just outside the development area to the south-west of Wandle Way. A new outbuilding had additionally been constructed to the south-west of the original houses (Figure 9, 1391; and Figure 12). By this time there was only one railway siding on the land corresponding with the north-eastern corner of the site (Figure 12).

There had been a far more substantial alteration to the character of the area by AD 1932, when the next Ordnance Survey map revision was published (Figure 13). The land now occupied by the development site had taken on an industrial appearance. It was crossed by a series of sidings which were linked directly to the mineral railway. These skirted the edge of a large rectangular cut, coinciding with the south-western part of the development area. This was almost certainly a gravel quarry, which judging by the symbols on the map for marshy vegetation (Figure 13) appears to have been redundant by AD 1932.

Some of the earlier structures remained in place including the houses first shown on the Tithe map of AD 1847 (Figure 9, 1391; and Figure 13). A few of the former buildings of the Wandle Paddocks Stud Farm had been demolished, while others had been slightly extended. Two large structures had been built to the north-east alongside the railway line, with two smaller ancillary buildings nearby to the south-east (Figure 13).

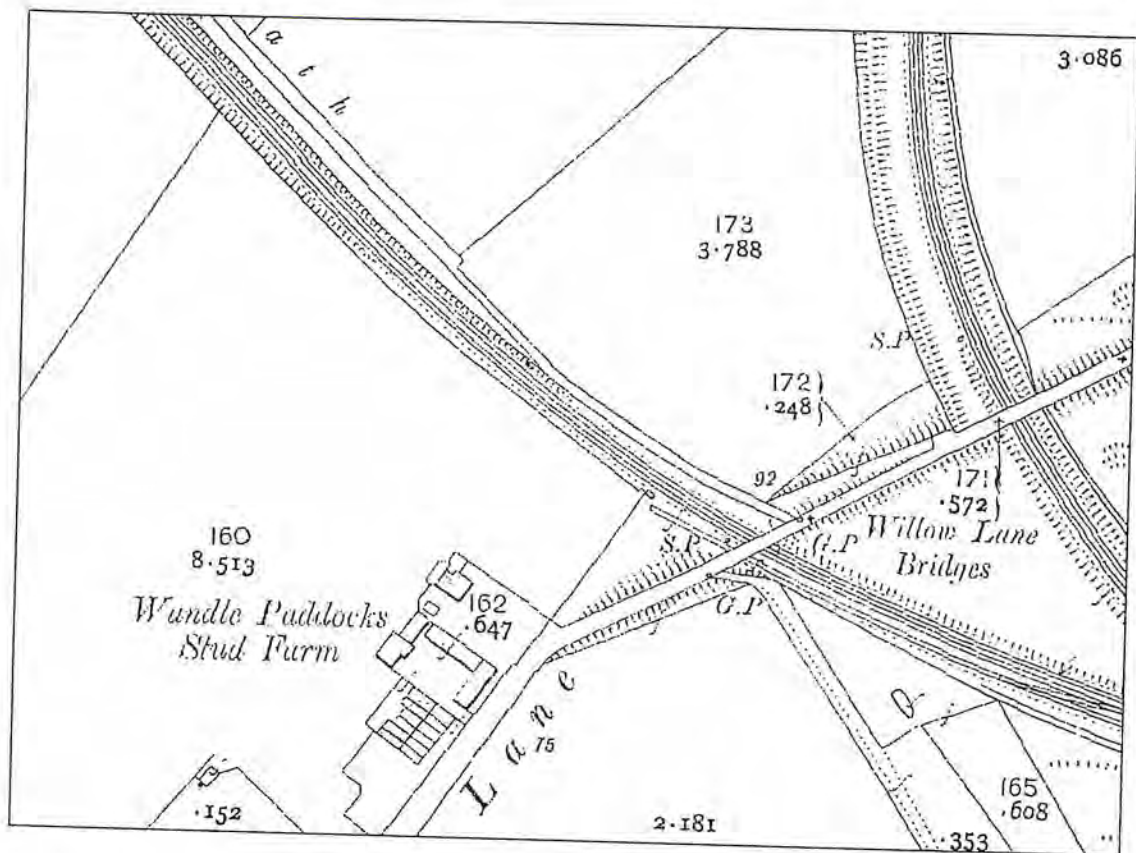


Figure 12: Extract from the Revised Edition Ordnance Survey Map – AD 1913 (25 inch scale)

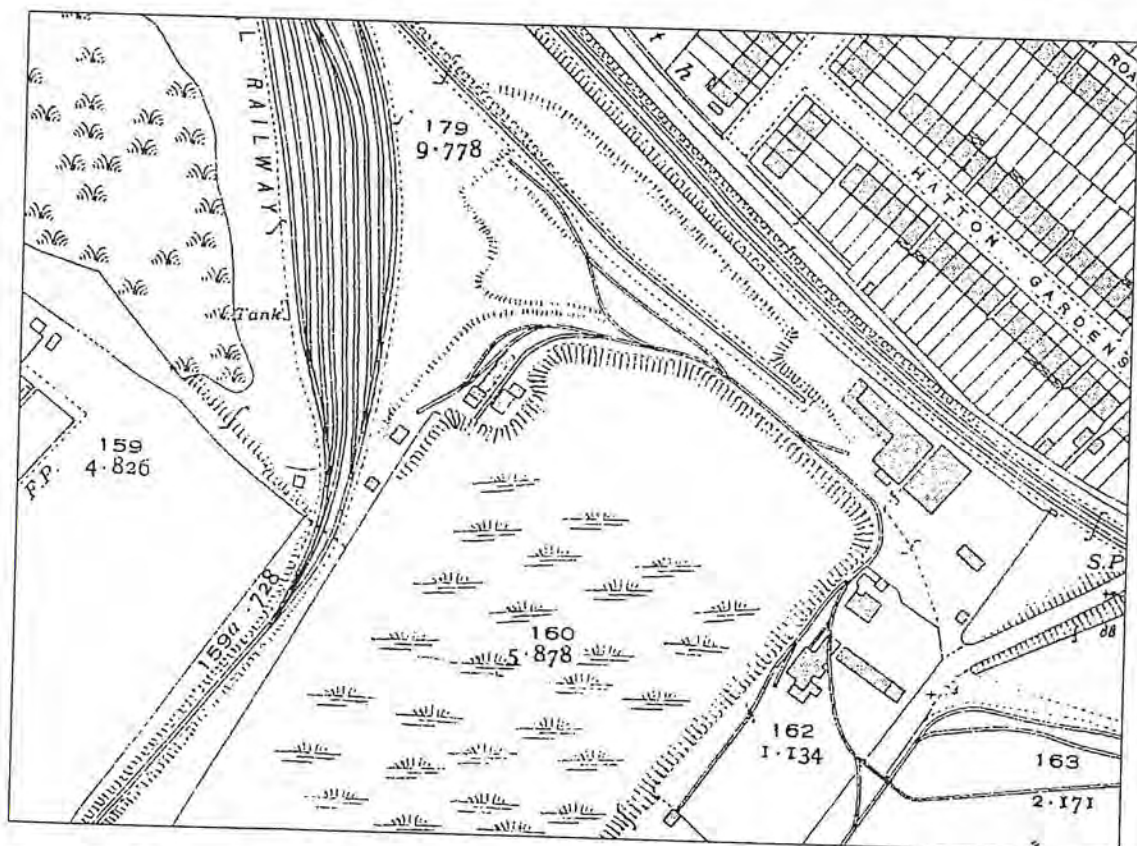


Figure 13: Extract from the Revised Edition Ordnance Survey Map – AD 1932 (25 inch scale)

4.3.4 The Area of the Development in the Later Twentieth Century (Figures 14 to 18)

By AD 1951 (Figure 14), all of the buildings shown on the maps dating between AD 1847 and AD 1913 had been demolished (Figures 9 to 12). Five of the structures first depicted in AD 1932 (Figure 13) remained in place and were the only buildings on the site at the time (Figure 14). These included a small structure linked with the railway sidings, just to the south-east of the former gravel pit, together with the large buildings alongside the railway line and the two ancillary structures (Figure 14).

The appearance of the site had changed dramatically by AD 1953 (Figure 15). The former gravel pit had been backfilled and the two large buildings adjacent to the railway line had either been redeveloped or rebuilt. One of the ancillary structures on the site at the western end of the Willow Lane embankment was still in place and was being used as an electricity sub-station (Figure 15). The other two small buildings first shown on the site in AD 1932 (Figure 13) had been demolished (Figure 15). New structures occupied the north-eastern corner of the site, while a large building had been constructed in its south-eastern quadrant, with adjacent ancillary buildings to the north-west (Figure 15).

This layout of buildings, again with changes to the two structures alongside the railway line, was still in place in AD 1968 (Figure 16). A few small ancillary buildings had additionally been constructed near to the engineering works. The current site boundaries had been established along with Wandle Way to the south-west.

By AD 1976 a major new building had been constructed in the south-western quadrant of the development site (Figure 17). The layout was largely unaltered in AD 1986, apart from minor extensions to the two large structures in the southern part of the site (Figure 18).

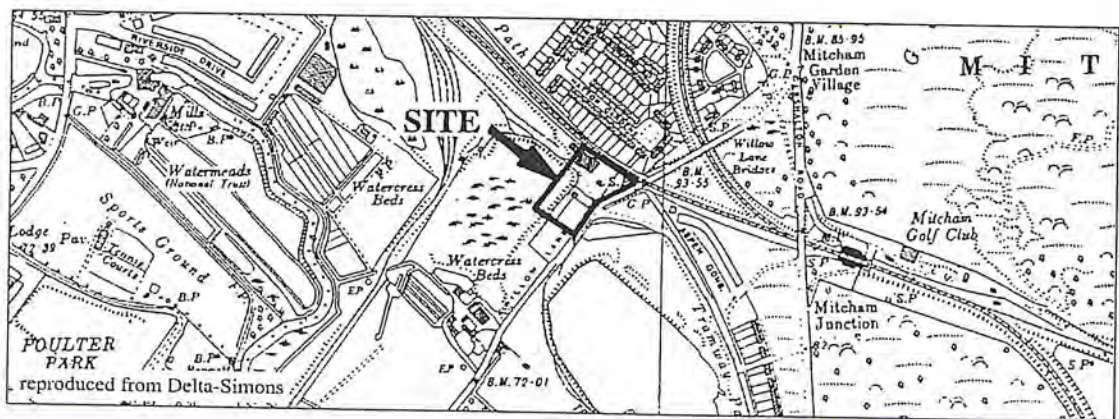


Figure 14: Extract from the Revised Edition Ordnance Survey Map – AD 1951 (1 to 10560 scale)

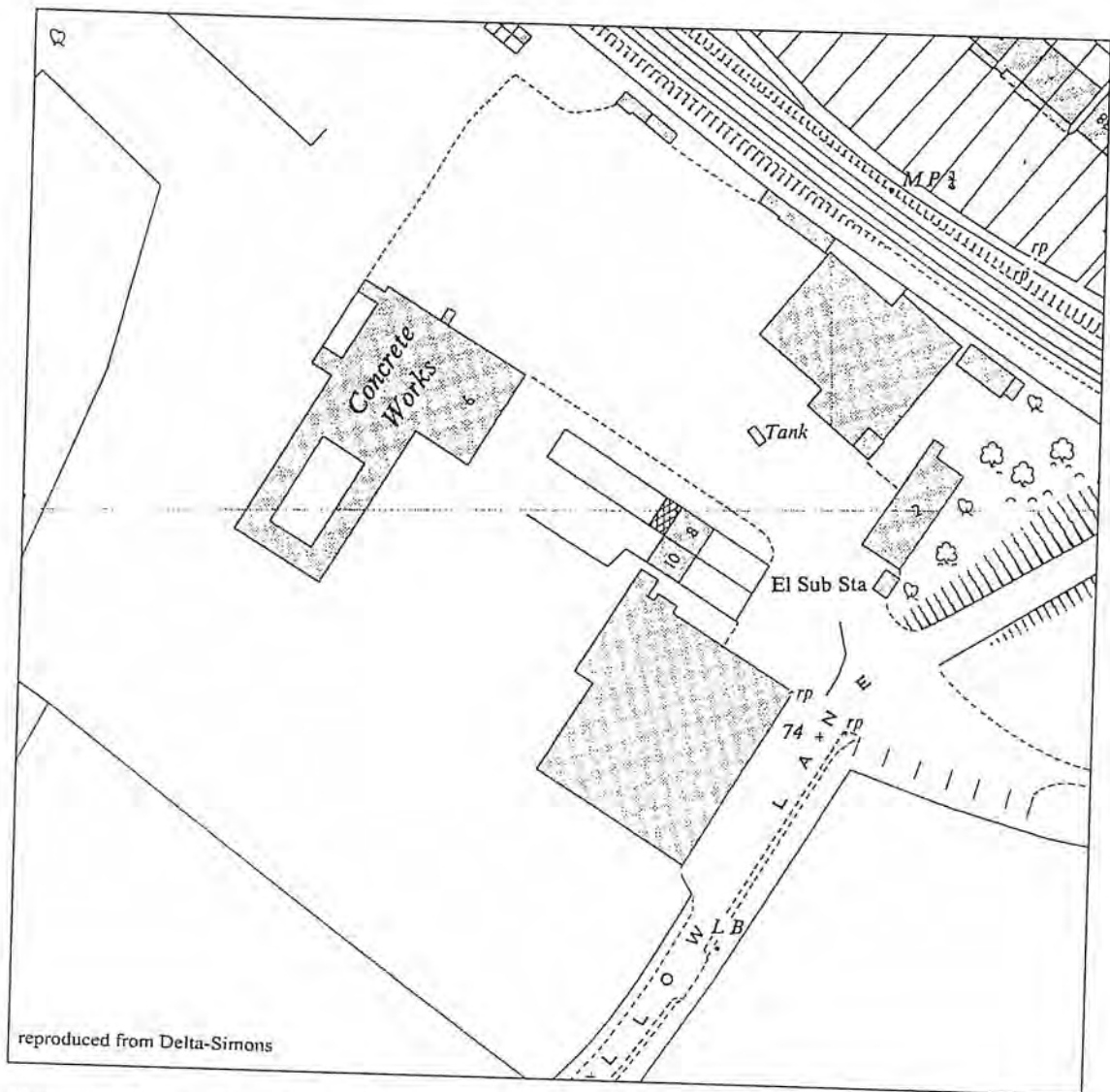


Figure 15: Extract from the Revised Edition Ordnance Survey Map – AD 1953 (1 to 1250 scale)

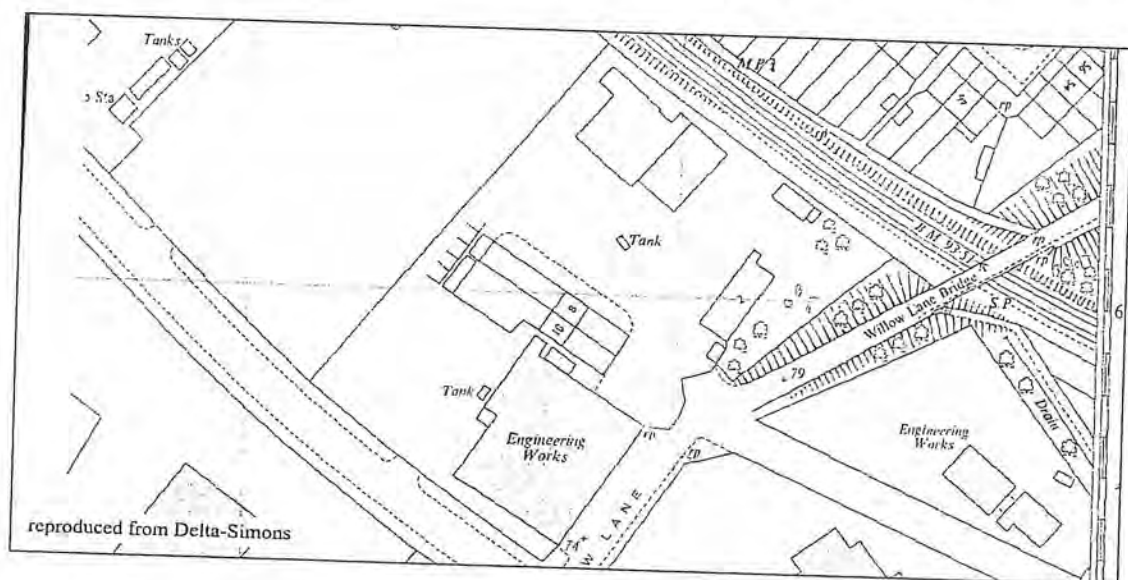


Figure 16: Extract from the Revised Edition Ordnance Survey Map – AD 1968 (1 to 1250 scale)

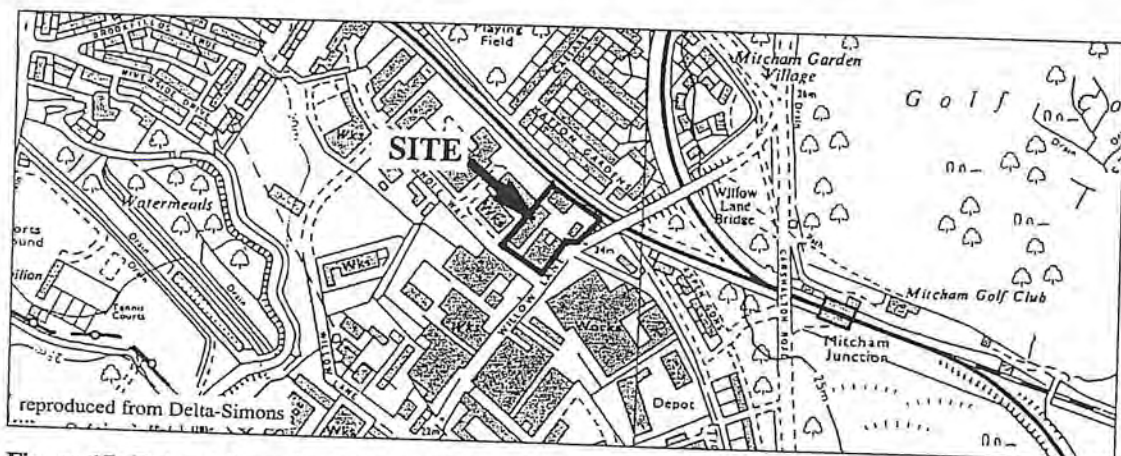


Figure 17: Extract from the Revised Edition Ordnance Survey Map – AD 1976 (1 to 10 000 scale)

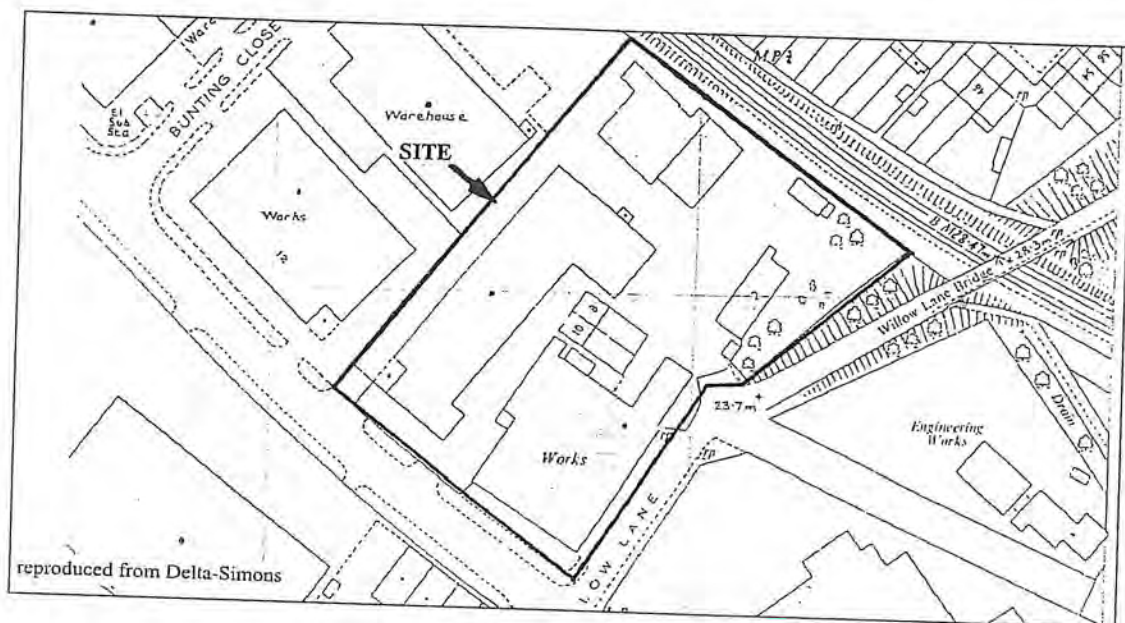


Figure 18: Extract from the Revised Edition Ordnance Survey Map – AD 1986 (1 to 1250 scale)

5 DISCUSSION

5.1 The Potential of the Site

The development site has a low archaeological potential. There is no indication that it would have been the focus of significant prehistoric activity. The Palaeolithic material from the Taplow Gravel is scattered, derived from elsewhere and is not associated with buried land surfaces. Finds of this type from secondary contexts have a reduced significance since they can make only a limited contribution to an understanding of the period.

The single Neolithic axe has an uncertain provenance and was not necessarily found within the study area. It is in any case an isolated artefact likely to reflect a single transient event and there is little reason to suppose that it signals the presence of a major Neolithic site. Similarly, the middle Bronze Age palstaves do not necessarily

point to a nearby contemporary settlement since hoards of this type were frequently buried away from areas of occupation.

When considered in isolation, there does appear to be an increased potential for the occurrence of Roman remains within the development area. The discovery of a ditch containing brick and tile close to the grave points to Roman occupation somewhere in the vicinity. This has yet to be found and is of uncertain character. The available information from the surrounding area, although slender does not seem to indicate the likely presence of significant Roman archaeology within the development area. An evaluation just 250 metres to the north of the development site at Caesar's Walk was entirely negative (Palmer and Hopkinson 1997). A trench excavated only 100 metres away at 3 to 9 Willow Lane was similarly empty of archaeological features and finds (Ritchie 2002). Roman settlements are characterised by concentrations of artefacts and if a site of this type had been located somewhere nearby, at the very least a light scatter of associated pottery and other finds should have been present. The recovery of occasional Roman finds during evaluations further to the south suggests that contemporary activity may have extended in this direction away from the burial and 2 to 4 Willow Lane.

It is highly improbable that Saxon or significant Medieval remains would be encountered on the site. The large Saxon cemetery is outside the study area, and the only evidence for associated occupation suggests that it is most likely to have coincided with the historic core of Mitcham, well to the north-west of the development land.

The main focus of Post-Medieval settlement was similarly remote from the development area and none of the recorded industries encroached on the site. The watercress beds are clearly marked on the historic maps and again do not impinge on the development land. The area was divided into fields in the late eighteenth century which were being used as meadows in the mid-nineteenth century. It is probable that this land-use continued into the early twentieth century, since stud farms are normally associated with plentiful grazing. After this period the area became the focus of gravel extraction and other industries.

The development land was certainly occupied by a cottage and two houses from AD 1847 and by the buildings of the Wandle Paddocks Stud Farm from AD 1895. The cottage had been demolished by AD 1867, while the houses and all of the buildings of the former stud farm had been removed by AD 1951.

The earliest of the structures standing on the site prior to the recent demolition was built between AD 1913 and 1932. This was located in the north-western quadrant alongside the tramway, and had clearly been modified or even rebuilt in subsequent years. The building in the south-eastern quadrant was constructed between AD 1951 and 1953, while the L-shaped structure in the south-western quadrant was built between AD 1968 and 1976. The site was additionally occupied by a couple of brick outbuildings. The position of these is uncertain, but the analysis of the historic maps has demonstrated that they must have post-dated AD 1913 since all of the buildings of this and earlier phases had been demolished by AD 1951.

5.2 The Impact of Previous Land-Use and Development on Potential Remains

All potential archaeological deposits in the south-western part of the site, within the former gravel pit, will have been destroyed. The edges of the extraction area roughly coincide with the footprint of the L shaped building. The geotechnical survey has indicated that the backfilled gravel pit is between 5.3 and 6.2 metres deep shelving upwards to the south-east to between 3.4 and 4.3 metres. The identification of potentially natural deposits at a depth of 1.5 metres (Figure 3, DSWS8) within the former gravel pit is anomalous and might indicate that this feature has an uneven base.

Although the south-east quadrant was largely unexplored by the geotechnical survey, trial holes along its edges indicated made ground to depths of between 1.75 and 2.0 metres. This is the area which was occupied by the nineteenth century houses and the buildings of the Wandle Paddocks Stud Farm.

The made ground in this and other parts of the site is likely to partly be a levelling deposit built up above the former ground surface. Clearly it also represents backfill in areas of recent disturbance, most obviously within the gravel pit. The extent to which the original ground surface may have been truncated by earlier phases of development within the site is unclear.

Potential archaeological deposits within the former gravel pit in the southern part of the north-west quadrant will have been destroyed. The north-western end of this area below the early twentieth century buildings is less disturbed, with made ground to a depth of between 1.1 and 1.8 metres.

The Terrace Gravel is closer to the surface in the north-eastern quadrant, being recorded at depths of between 0.8 and 1.0 metres. This may indicate a lesser degree of truncation in this part of the site, which was undeveloped until AD 1932 and since that date was only occupied by small buildings. It may also reflect a rise in the natural ground surface.

The site of the former cottage first shown in AD 1847 coincides with the north-eastern corner of this quadrant. However, it is almost certain that no traces of this habitation would survive, since this location was close to a direct hit from a high explosive bomb during World War II (Figure 19). This may be the origin of the made ground recorded to a depth of at least 1.6 metres in one of the probe-holes (Figure 3, DSWS1).

An existing sewer is also known to run across the north-eastern end of the site. This will have destroyed or severely truncated any archaeological deposits along its line. Local sources have additionally suggested that there is a conduit crossing the development area, but there is no evidence to support this anecdotal information.

The recent removal of the reinforced concrete, other hard-standings and the footings of buildings across the site will have disturbed the underlying deposits. This will only have had an impact on potential archaeological remains at the north-eastern end of the site where previously undisturbed stratigraphy lay close to the surface.

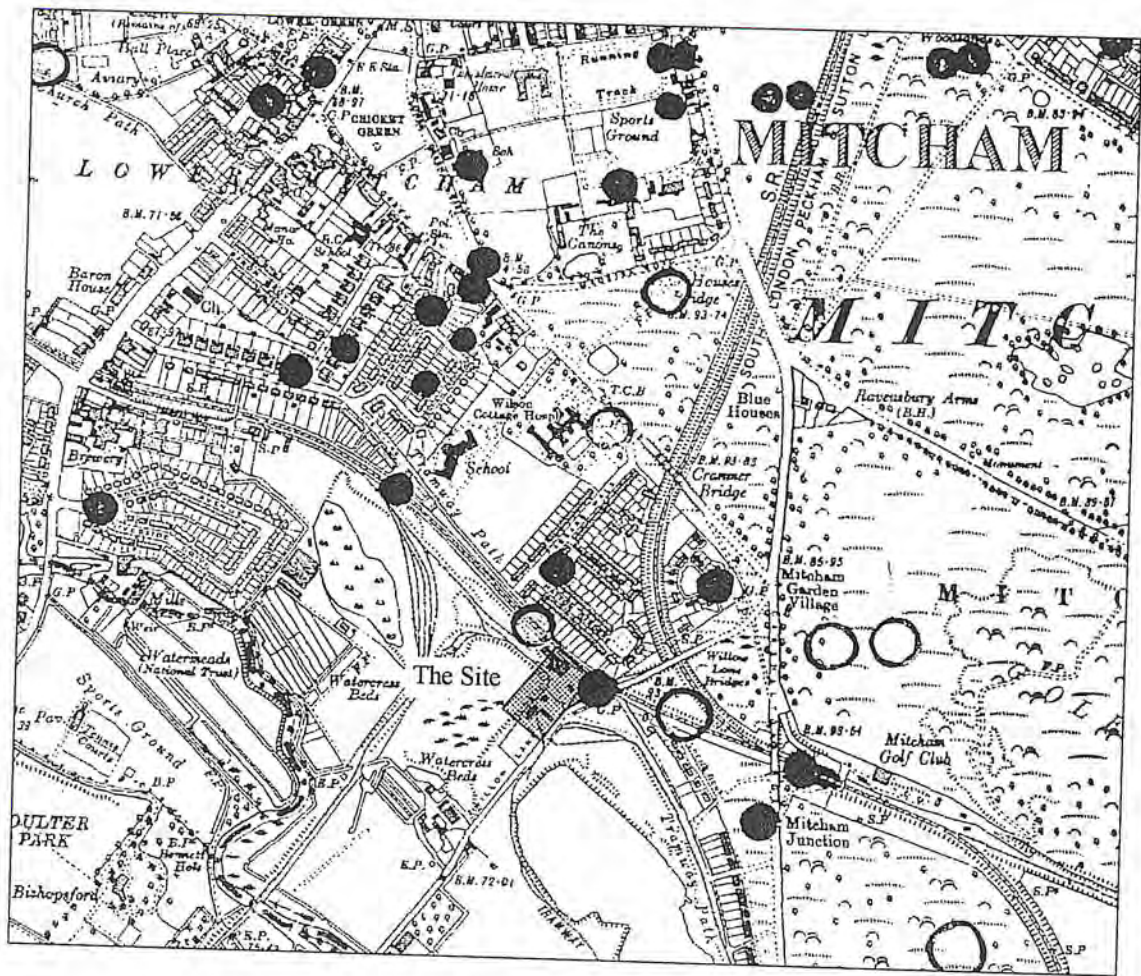


Figure 19: Extract from World War II Incident Map Showing Bomb Strikes (6 inch scale)

5.3 The Impact of the Proposed Development on Potential Remains

The proposed development will have a minimal impact on any archaeological remains that might survive on the site. The new building on the north-western side of the development area mostly occupies the former gravel pit, where potential archaeological deposits will have been destroyed. Furthermore, the use of shallow spread foundations means that virtually all of the pads will sit well above the undisturbed levels. The only possible exception is at the north-eastern corner of this building, where natural deposits are thought to lie directly below the concrete and tarmac (Figure 3, DSW3). The foundations in this area will penetrate these layers by a depth of 0.6 metres. The damage will be confined to the area of the pads and will affect a tiny proportion of the site. Furthermore, there is already likely to have been disturbance in this area resulting from the recent building demolition.

The potential impact of the second of the two buildings will be slightly greater. The foundations of the south-western end of this structure are unlikely to affect any archaeological deposits. Even allowing for the fact that the reinforced concrete has been removed, the geotechnical information suggests that the pads will sit within the made ground and will be separated from undisturbed deposits by at least 0.4 metres. Even if there are any surviving remains of the nineteenth century houses and of the

Wandle Paddocks Stud Farm buildings in this part of the site, they will not be affected by the development.

By contrast, the foundations supporting Unit 5 at the north-eastern end of this new building are likely to penetrate undisturbed deposits by up to 0.6 metres. In reality the potential impact will be less severe, since the upper stratigraphy would probably have been disturbed when the hard-standings were originally laid. In spite of this, any archaeological remains below the top 0.2 or 0.3 metres are likely to survive intact. These would be truncated during the ground works for the new development, but only by 0.3 to 0.4 metres in the confined area of the pads.

6 CONCLUSIONS AND RECOMMENDATIONS

The appraisal of the known distribution and character of archaeological and historic remains near to the development area indicates that it has a low archaeological potential. The only significant features known to have existed on the site include a late post-Medieval cottage and two houses, together with the buildings of a late nineteenth century stud farm. All of these had been demolished by AD 1951.

The cottage is close to the landing site of a high explosive bomb and it is unlikely that any traces would survive. It is in any case to the north-west of the new buildings and will not be affected by the ground works. It is uncertain whether any remains of the other structures would have survived subsequent land-use and development. Even if this is the case, the likely depth of made ground above the sites of these buildings means that the development will have no impact on remains of this type.

The use of shallow spread foundations will result in a minimal impact even in areas where the undisturbed stratigraphy may lie close to the surface. The geotechnical survey indicates that such deposits are confined to Unit 5 at the north-eastern end of one of the new buildings, and does not coincide with the sites of any of the early structures.

The chances of damaging archaeological remains which cannot be anticipated from the local distribution are also low. The size of the area below Unit 5 where the natural may be close to the surface is small. The extent of affected ground is further reduced by the use of shallow foundation pads which will limit the potential impact. The probability of encountering unexpected archaeological remains in such a confined area is somewhat remote.

In summary, the low archaeological potential, the extent of previous disturbance, the depth of made ground and the character of the foundations, suggest that the impact of the development on any archaeological remains would be non-existent or minimal. Under the circumstances, there would seem to be little justification for an archaeological field investigation within the development area.

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7.2 Gazetteer of Known Sites**7.2.1 Prehistoric to Medieval Sites (Shown on Figure 5)**

Site	SMR No.	NGR	Description
1	LO470 LO9013	TQ 2800 6700	Palaeolithic animal bones (Montague 1992); and a Neolithic polished flint axe
2	LO10723 LO8977	TQ 2830 6760	Middle Bronze Age hoard of palstaves found in the 19 th century (Needham 1987)
3	LO10708	TQ 2781 6751	Late Roman grave and associated features (Bidder 1942)
4	LO58872	TQ 2795 6711	Roman sherd from later alluvial silt (MOLAS evaluation 1993)
5	LO77175	TQ 2730 6750	Sherds of Roman pottery (Evaluation 2001)
6	LO71299 LO71300	TQ 2734 6810	A few sherds of Roman pottery, brick and tile from later contexts; an early to middle Saxon pit (Molas evaluation August 1997)
7	LO10729	TQ 2786 6835	Medieval farmstead, possibly with a moat
8	LO491	TQ 2740 6830	Doubtful site of Medieval moat
9	LO61445 LO61457	TQ 2735 6823	Possible Medieval midden deposit; and a late Medieval or early post Medieval floor (SAS evaluation December 1993)
10	LO76331	TQ 2730 6750	Two Medieval ditches associated with one sherd of 13 th to 14 th

7.2.2 Post-Medieval Sites (Shown on Figure 6)

Site	SMR No.	NGR	Description
11	LO61458 LO61460 LO61461	TQ 2735 6823	Mid-16 th to 18 th century building; 18 th to 20 th century surfaces; 19 th century buildings (SAS evaluation December 1993)
12	LO71900 LO71901 LO71899	TQ 2714 6793	Post-Medieval wall foundations; a brick culvert; and a brick-earth quarry (AOC evaluation February 1998)

Site	SMR No.	NGR	Description
13	LO67193 LO67194 LO75982	TQ2802 6842	Construction trench for 18 th century wall; pit with 18 th to 19 th century brick and tile (AOC evaluation February 1996)
14	LO71302	TQ 2734 6810	17 th century and later pottery from plough soils (Molas evaluation August 1997)
15	LO501	TQ 2720 6800	Post-Medieval brewery at 425 London Road
16	-	TQ 2776 6748	The Willow Works – linen and calico bleaching and print works (Montague 1996)
17	LO534 LO63665 LO63667	TQ 2760 6730 TQ 2759 6730	Mitcham Flour Mill and the Eagle Leather Works; an evaluation revealed A timber barrel and a 17 th to early 18 th century brick wall on chalk foundations possibly related to the tanning industry (MOLAS evaluation May 1992)
18	-	TQ 2763 6726	The Logwood Mills off Willow Lane (Montague 1996)
19	LO535 LO545 LO77977	TQ 2730 6780 TQ 2730 6783	Grove Mill and Crown Mill include standing buildings of 19 th century date relating to 18 th century mill; also used as a workshop for the Surrey Iron Railway; three iron wheels from the railway wagons; watching brief recorded earlier chalk footings and a timber structure (Evaluation and watching brief January 2004)
20	-	TQ 2790 6775	Surrey Iron Railway
21	LO480	TQ 2724 6813	Mitcham Railway Station - supposed to be originally on Surrey Iron Railway opened in 1803
22	LO536	TQ 2720 6780	Glover's Morden snuff mill
23	LO58873	TQ 2795 6711	Six 18 th and 19 th century drainage gullies (MOLAS evaluation 1993) century pottery (Evaluation 2001)

7.3 Gazetteer of Listed Buildings (Shown on Figure 7)

Site	SMR No.	NGR	Description
24	LO19891 LO49218 LO49297 LO49385	TQ 2725 6781	475 to 479 London Road – Grade II houses
25	LO19890	TQ 2723 6813	409 and 411 London Road – Grade II building
26	LO19896 LO49220 LO49386	TQ 2722 6817	470 to 472 London Road – Grade II houses
27	LO20005 LO49221 LO49387	TQ 2720 6814	482 to 484 London Road – Grade II houses
28	LO19912	TQ 2725 6789	10 Riverside Drive – Grade II house
29	LO19445	TQ 2799 6841	54 Commonside – Grade II house
30	LO19452	TQ 2758 6839	Cricket Green – Grade II almshouse
31	LO26718 LO26825	TQ 2786 6835 TQ 2790 6833	The Canons, Madeira Road – Grade II* 17 th century house with Grade II dovecote

7.4 Historic Maps and Schedules

AD 1768	John Rocque's map of Surrey, Merton Local Studies Library
AD 1847	The Mitcham tithe map, Merton Local Studies Library
AD 1848	The Mitcham tithe apportionments, Merton Local Studies Library
AD 1867	The first edition Ordnance Survey map, Sheet XIII.4, 25 inch version at a reduced scale, Merton Local Studies Library
AD 1895	The second edition Ordnance Survey map, Sheet XIII.4, 25 inch version, Merton Local Studies Library
AD 1913	The revised edition Ordnance Survey map, Sheet XIII.4, 25 inch version, Merton Local Studies Library
AD 1932	The revised edition Ordnance Survey map, Sheet XIII.4, 25 inch version, Merton Local Studies Library
AD 1951	The revised edition Ordnance Survey map, 1:10560, from Delta-Simons 2003
AD 1953	The revised edition Ordnance Survey map, TQ 2767 NE, 1:1250, Merton Local Studies Library

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| AD 1968 | The revised edition Ordnance Survey map, TQ 2767 NE, 1:1250, Merton Local Studies Library |
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| AD 1986 | The revised edition Ordnance Survey map, 1:1250, from Delta-Simons 2003 |