

Welbeck Steel, River Road, Barking Archaeological Desk Based Assessment

Client: BE FIRST LONDON

AB Heritage Project No:60603

Date:13/12/2018

GLHER Data Licence Number: 14525

WELBECK STEEL, RIVER ROAD, BARKING Archaeological Desk Based Assessment

Client BE FIRST LONDON

Project Number 60603

Prepared By Alex Farnell

Illustrated By Pig Hill Illustrations

Approved By Andy Buckley

GLHER Data Licence Number 14525

Rev Number	Description	Undertaken	Approved	Date
1.0	DRAFT	AF	AB	13/12/2018

This document has been prepared in accordance with AB Heritage standard operating procedures. It remains confidential and the copyright of AB Heritage Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited

Enquiries To:

AB Heritage Limited (Head Office)

Jarrow Business Centre, Rolling Mill Road

Jarrow, South Tyneside, NE32 3DT

Email: info@abheritage.co.uk

Tel: 03333 440 206



CONTENTS

1.	Intr	oduction	1
	1.1	Project Background	1
	1.2	Site Location & Description	1
	1.3	Geology & Topography	1
	1.4	Proposed Development	1
2.	Aim	ns & Methodology	2
	2.2	Aims of Works	2
	2.3	Consultation & Study Area	3
	2.4	Methodology of Works	3
	2.5	Impact Assessment Criteria	4
	2.6	Limitations	5
3.	Pla	nning & Legislative Framework	6
	3.1	Introduction	
	3.2	Statutory Protection for Heritage Assets	6
	3.3	National Planning Policy	6
	3.4	Local Planning Policy	
4.	Cul	tural Heritage Resource Baseline	9
	4.1	Known Cultural Heritage Assets	9
	4.2	Previous Works in the Study Area	10
	4.3	Palaeo-environmental Evidence	10
	4.4	Archaeology & History Background	10
	4.5	Site Visit.	17
5.	Cul	tural Heritage Potential & Mitigation	21
	5.1	Known Cultural Heritage Resource	21
	5.2	Past Impact Within the Site Boundary	21
•	5.3	Potential Archaeological Resource	21
	5.4	Potential Impact of Proposed Development	22
	5.5	Conclusions	23
6.	Ref	erences	24
	6.1	Documentary and Cartographic Sources	24
	6.2	Online Sources	24

Plate 1: Extract of the 1747 Barking tithe map Plate 2: Extract from Andre and Chapman, surveyed 1772-74 Plate 3: Extract of 1740 map by the Commissioner of Sewers Plate 4: Close up of 1740 Commission of Sewers map Plate 5: Extract of the 1847 Barking tithe map Plate 6: Extract of OS first edition 6 inch map Plate 7: Extract of the 1913 OS 25 inch map Plate 8: Extract of the 1936 OS 25 inch map **PHOTOS** Photo 1: View of industrial warehousing looking northwest from River Road Photo 2: View of industrial warehousing looking southwest from River Road Photo 3: View of brick building looking southwest from River Road View of access ramp at southern end of raised quayside, looking west Photo 4: Photo 5: View to access ramp at northern end of raised quayside, looking west View of Mayes Brook along NW site boundary, looking southwest from River Road Photo 6: **FIGURES** Site Location Figure 1: Cultural Heritage Features Map Figure 2: Figure 3: Borehole survey plan Figure 4: Outline development plan **APPENDICES**

PLATES

Appendix 1

1. INTRODUCTION

1.1 Project Background

- 1.1.1 AB Heritage Limited (hereinafter AB Heritage) has been commissioned by 'Be First London' to produce an Archaeological Desk Based Assessment covering a proposed development at Welbeck Steel, River Road, Barking.
- 1.1.2 This report includes a description of the baseline conditions; an examination of readily available documentary, cartographic and known archaeological evidence; and identifies any known and potential cultural heritage receptor(s) within the application site and its surrounding area.

1.2 Site Location & Description

- 1.2.1 The proposed development site is centred on NGR TQ 45321 82908 and is currently the site of Seabrook Warehousing and Export Services at Welbeck House, 8 River Road, Barking, Essex IG11 0JE.
- 1.2.2 The site occupies c. 3.9 Hectares (ha) of land to the east of the River Roding (Barking Creek) approximately 140m to the south of the A13. It comprises a wharf with parking/storage areas, a quayside and two large modern industrial warehouse buildings. It is bounded to the west by the River Roding, to the north by Mayes Brook and the east by River Road. To the south are further wharves and light industrial buildings.

1.3 Geology & Topography

- 1.3.1 The underlying solid geology is London Clay Formation Clay, Silt and Sand. Sedimentary Bedrock formed approximately 48 to 56 million years ago in the Palaeogene Period. Local environment previously dominated by deep seas. It is overlain by superficial deposits of alluvium Clay, Silt, Sand and Peat formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by rivers.
- 1.3.2 The site is largely level, lying at around 1m aOD, rising to around 4m aOD where bounded by the River Roding, the ground having been made up here to accommodate a raised quay side.

1.4 Proposed Development

1.4.1 There are currently no detailed plans available of the proposed development.

2. AIMS & METHODOLOGY

- 2.1.1 Early consultation on the results of cultural heritage research and consideration of the implications of proposed development are the key to informing reasonable planning decisions.
- 2.1.2 The aim of this report is to facilitate such a process by understanding the historical development of the application site and the likely impact upon any surviving archaeological resource or historic building resulting from the proposed development, devising appropriate mitigation responses where necessary.

2.2 Aims of Works

- 2.2.1 The assessment has been carried out, in regard to the collation of baseline information, in line with the Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk Based Assessment (January 2017).
- 2.2.2 This assessment includes relevant information contained in various statutory requirements, national, regional and local planning policies and professional good practice guidance, including:
 - Ancient Monuments and Archaeological Areas Act, 1979
 - Planning (Listed Buildings and Conservation Areas) Act, 1990
 - The National Planning Policy Framework, 2018
- 2.2.3 The Greater London Historic Environment Record (GLHER) is the primary source of information concerning the current state of archaeological and architectural knowledge in this area. The HER Commercial dataset search reference number for this project is 14525. For reporting purposes, the HER information has been re-numbered with AB numbers, which can be viewed in Appendix 1. The information contained within this database was supported by examination of data from a wide range of other sources, principally:
 - The Heritage Gateway (www.heritagegateway.org.uk) for information from Historic England National Monuments Record, Pastscape and other research resources, including the National Archives;
 - The Historic England website professional pages, including the National Heritage List for England;
 - A site-walk over was undertaken on the 28th November 2018;
 - A visit to the Barking & Dagenham Archive and Local Studies Centre on 28th November 2018; and
 - Additional relevant documentary and online historic sources.
- 2.2.4 Information from these sources was used to understand:
 - Information on statutory and non-statutory designated sites;

- Information on heritage assets recorded on the HER;
- Readily accessible information on the site's history from readily available historic maps and photographs held at the Barking & Dagenham Archive and Local Studies Centre;
- Any information on the site contained in published and unpublished archaeological and historical sources, including any previous investigations undertaken within the study area;
- A greater understanding of key cultural heritage issues of the site and surrounding area, developed through the onsite walkover, including information on areas of past truncation within the site boundary;
- The impact of proposed development on the known and potential cultural heritage resource, resulting in the formulation of a mitigation strategy, where required, which appropriately targets any future works to those required to gain planning consent.

2.3 Consultation & Study Area

2.3.1 During consultation, Adam Single, GLAAS Advisor for North and East London, agreed with Alex Farnell, Senior Heritage Consultant at AB Heritage, that a 750m study area for the project would be sufficient. It was also highlighted that peats and geoarchaeology will be important, alongside evidence for exploitation of the riverside in the prehistoric and historic periods. A key question is about the historic records of the Kings Bridge there and what that represents.

2.4 Methodology of Works

- 2.4.1 This desk based assessment contains a record of the known heritage resource of the area. It also assesses the potential cultural heritage resource of the site, using the following scale:
 - No Potential Clear evidence of past impacts / site sterilisation
 - Low
 Very unlikely to be encountered on site
 - Medium
 Features may occur / be encountered on site
 - High
 Remains almost certain to survive on site
- 2.4.2 In relation to buried archaeological remains, where a site is known, or there is a medium or above potential for archaeology to survive, full impact assessment will be undertaken.
- 2.4.3 There is currently no standard adopted statutory or government guidance for assessing the importance of an archaeological feature and this is instead judged upon factors such as statutory and non-statutory designations, architectural, archaeological or historical significance, and the contribution to local research agendas. Considering these criteria each identified feature can be assigned to a level of importance in accordance with a five-point scale (Table 1, below).

Table 1: Assessing the Importance of a Cultural Heritage Site

SCALE OF SITE IMPORTANCE					
NATIONAL	The highest status of site, e.g. Scheduled Monuments (or undesignated assets of schedulable quality and importance). Grade I and Grade II* Listed Buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade. Conservation Areas containing very important buildings. Undesignated structures of clear national importance. Extremely well preserved historic landscape, whether inscribed or not, with exceptional coherence, time depth, or other critical factor(s).				
Grade II Listed Buildings or other designated or undesignated archaeological s addition to those listed above), or assets of a reasonably defined extent and signif or reasonable evidence of occupation / settlement, ritual, industrial activity etc. Exmay include areas containing buildings that contribute significantly to its historic chaburial sites, deserted medieval villages, Roman roads and dense scatter of finds.					
Evidence of human activity more limited in historic value than the examples above compromised by poor preservation and/or survival of context associations, though where still have the potential to contribute to local research objectives. Examples include a such as 'locally designated' buildings or undesignated structures / buildings of liming historic merit, out-of-situ archaeological findspots / ephemeral archaeological evide and historic field systems and boundaries etc.					
NEGLIGIBLE	Assets with very little or no surviving archaeological interest. Examples include destroyed antiquities, structures of almost no architectural / historic merit, buildings of an intrusive character or relatively modern / common landscape features such as quarries, drains and ponds etc.				
UNKNOWN	Insufficient information exists to assess the importance of a feature (e.g. unidentified features on aerial photographs).				

- 2.4.4 The importance of already identified cultural heritage resources is determined by reference to existing designations. Where classification of a receptor's value covered a range of the above possibilities or for previously unidentified features where no designation has been assigned, the value of the receptor was based on professional knowledge and judgement.
- 2.4.5 For some types of finds or remains there is no consistent value and the importance may vary, for example Grade II Listed Buildings and Conservation Areas. For this reason, adjustments are occasionally made, where appropriate, based on professional judgement.

2.5 Impact Assessment Criteria

- 2.5.1 The magnitude of impact upon the archaeological and heritage resource, which can be considered in terms of direct and indirect impacts, is determined by identifying the level of effect from the proposed development upon the baseline conditions of the site and the cultural heritage resource identified.
- 2.5.2 The detailed impact assessment cannot be undertaken at this time. Development proposals are currently at an early stage and there is no fixed design against which to assess the impacts of the scheme on the potential archaeological resource at the Welbeck Steel site. This assessment will form a subsequent stage of works following the formation of detailed designs.

2.6 Limitations

- 2.6.1 It should be noted that the report has been prepared under the express instruction and solely for the use of Be First London, and any associated parties they elect to share this information with. Measurements and distances referred to in the report should be taken as approximations only and should not be used for detailed design purposes.
- 2.6.2 All the work carried out in this report is based upon the professional knowledge and understanding of AB Heritage on current (December 2018) and relevant United Kingdom standards and codes, technology and legislation. Changes in these areas may occur in the future and cause changes to the conclusions, advice, recommendations or design given. AB Heritage does not accept responsibility for advising the client's or associated parties of the facts or implications of any such changes in the future.
- 2.6.3 This report has been prepared utilising factual information obtained from third party sources. AB Heritage takes no responsibility for the accuracy of such information. It should also be noted that this report represents an early stage of a phased approach to assessing the archaeological and cultural heritage resource of the application site to allow the development of an appropriate mitigation strategy, should this be required. It does not comprise mitigation of impacts in itself.

3. PLANNING & LEGISLATIVE FRAMEWORK

3.1 Introduction

3.1.1 The following section highlights the key planning and legislative framework relevant to this project, including legislative framework, national planning policy and relevant sector guidance.

3.2 Statutory Protection for Heritage Assets

- 3.2.1 Current legislation, in the form of the Ancient Monuments and Archaeological Areas Act 1979, provides for the legal protection of important and well-preserved archaeological sites and monuments through their addition to a list, or 'schedule' of archaeological monuments by the Secretary of State for Digital, Culture, Media and Sport. This necessitates the granting of formal Scheduled Monument Consent for any work undertaken within the designated area of a Scheduled Monument.
- 3.2.2 Likewise, structures are afforded legal protection in the form of their addition to 'lists' of buildings of special architectural or historical interest. The listing of buildings is carried out by the Department of Digital, Culture, Media and Sport under the Planning (Listed Buildings and Conservation Areas) Act, 1990. The main purpose of the legislation is to protect buildings and their surroundings from changes that would materially alter the special historic or architectural value of the building or its setting. This necessitates the granting of formal Listed Building Consent for all works undertaken to or within the designated curtilage of a Listed Building. This legislation also allows for the creation and protection of Conservation Areas by local planning authorities to protect areas and groupings of historical significance.
- 3.2.3 The categories of assets with some form of legal protection have been extended in recent years, and now include Registered Parks and Gardens, and Historic Battlefields. While designation as a UNESCO World Heritage Site is not a statutory designation under English planning law, such a designation is regarded as a material consideration in planning decisions, and World Heritage Sites are in practice protected from development that could affect any aspect of their significance including settings within the Site and a buffer zone around it.

3.3 National Planning Policy

- 3.3.1 The NPPF sets out government policy on the historic environment, which covers all elements, whether designated or not, that are identified as 'having a degree of significance meriting consideration in planning decisions, because of its heritage interest'.
- 3.3.2 One of the over-arching aims is to 'Conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations'. To achieve this, local planning authorities can request that the applicant describe "the significance of any heritage assets affected, including any contribution made by their setting". The level of detail required in the assessment should be "proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance". It goes on to say that "where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest,

- local planning authorities should require developers to submit an appropriate desk based assessment and, where necessary, a field evaluation."
- 3.3.3 A key policy within the NPPF is that "when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be.
- 3.3.4 With regard to non-designated heritage assets specific policy is provided in that a balanced judgement will be required having due regard to the scale of any harm or loss and the significance of the heritage asset affected.
- 3.3.5 Paragraph 194 states that 'Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of a Grade Il listed building, park or garden should be exceptional, while substantial harm to or loss of designated heritage assets of the highest significance, should be wholly exceptional'.
- 3.3.6 Paragraphs 195 & 196 explain that 'where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss.
- 3.3.7 It also advises that where a proposal involve less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

3.4 Local Planning Policy

3.4.1 The London Plan is currently under consultation. The current plan (2016) contains the adopted policies, however the new plan is a material consideration in planning decisions as it moves towards adoption. Relevant policies in both the current and draft plan are stated below:

London Plan 2016 - Policy 7.8 Heritage assets and archaeology

Policy - Strategic

- London's heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.
- b. Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site's archaeology.

Planning decisions

- c. Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.
- d. Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.
- e. New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.

The Draft London Plan 2017 - Policy HC1 Heritage conservation and growth

- c. Development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings. The cumulative impacts of incremental change from development on heritage assets and their settings, should also be actively managed. Development proposals should seek to avoid harm and identify enhancement opportunities by integrating heritage considerations early on in the design process.
- d. Development proposals should identify assets of archaeological significance and use this information to avoid harm or minimise it through design and appropriate mitigation. Where applicable, development should make provision for the protection of significant archaeological assets and landscapes. The protection of undesignated heritage assets of archaeological interest equivalent to a scheduled monument should be given equivalent weight to designated heritage assets.
- 3.4.2 In addition, the Barking and Dagenham Local Plan contains the following relevant policy regarding the historic environment:
 - POLICY CP2: PROTECTING AND PROMOTING OUR HISTORIC ENVIRONMENT
- 3.4.3 Barking and Dagenham has a rich local history. Signs of our fishing, maritime and industrial heritage can still be seen for example at Barking Town Quay, the Ford works in Dagenham, and the Malthouse and Granary buildings on Abbey Road. The Becontree Estate, the Curfew Tower and remains of Barking and Abbey, Eastbury Manor House, Valence House and Dagenham Village are also important symbols of our past.
- 3.4.4 However, compared to many other areas the Borough has relatively few protected historic environment assets such as listed buildings and conservations areas. With this in mind the Council will take particular care to:
 - Require development proposals and regeneration initiatives to be of a high quality that respects and reflects our historic context and assets.

4. CULTURAL HERITAGE RESOURCE BASELINE

4.1 Known Cultural Heritage Assets

Within the Proposed Development Site

- 4.1.1 The site lies with the Barking Level and Dagenham Marsh Archaeological Priority Area (APA) [AB 1]. The area appraisal highlights that this Tier 3 APA was once an extensive estuarine and marshland landscape that may have been exploited during the Neolithic and Bronze Age, and that deeply buried eyots and peats have archaeological and palaeo-environmental potential.
- 4.1.2 Important prehistoric features have been found in the Tier 2 APA that borders this area [AB 2]. Examples of potential finds or features are suggested to include: 'boats, fish-traps and trackways, as well as artefacts and environmental evidence' (Historic England 2016). The area also has potential to yield evidence for medieval land management and reclamation.
- 4.1.3 Four non-designated Cultural Heritage Assets are recorded on the GLHER within the development site boundary. These are as follows:
 - Wooden posts [AB 15] were recorded during work to replace sheet piling along the east bank of the River Roding at the southern extent of the development area (Mola 2007). A number of timbers were found and interpreted as part of a dismantled revetment or river wall dating prior to the 1930s when the later river wall was installed. They may have been associated with some kind of jetty for accessing the river;
 - Kings Bridge [AB 16], located at the northern extent of the development site, documentary evidence shows that Kings Bridge existed by 1608 and spanned an 'unknown tributary of the River Roding'; and
 - Flood and peat deposits [AB 7] and a Victorian bottle dump [AB 17] were both identified during archaeological monitoring in 1991 during construction of a pumping station. Peat deposits were encountered at a depth of c. 2m. They were undated and reportedly contained tree trunks of Ash.

Within the Study Area

- 4.1.4 In the wider study area, the GLHER contains a further four records for the presence of peat deposits at depth [AB 4 6 & 11]. Of these, [AB 4] was located c. 200m to the north of the site, [AB 5 & 6] were less than 100m to the east and [AB 11] was located c.700m to the east. Peat exposed here has been dated to the Bronze Age.
- 4.1.5 Three significant prehistoric finds are recorded in the study area. They include a Neolithic polished stone axe [AB 8], found before 1916, approximately 250m to the west of the site, a Neolithic 'stone axe-hammer' [AB 9] and a Bronze Age metal work hoard [AB 10], both discovered in c.1914 on the west bank of the River Roding approximately 250m to the southwest of the site.
- 4.1.6 A possible dock has been identified on aerial photography c. 700m to the west of the site [AB12]. It has been suggested that it may date from as early as the Roman period.

- 4.1.7 A further possible historic dock of medieval or post medieval date [**AB 13**], located some 250m to the south of the site, is inferred from the place name '*Dampers Dock Marshe*'.
- 4.1.8 The historic landscape surrounding the site, as stated in the APA appraisal [**AB 1**] and evidenced in peat deposits has been an estuarine marshland with periods of vegetation growth resulting in peat horizons, recorded up to 1.25m thick, within the estuarine clays.

4.2 Previous Works in the Study Area

Within the Proposed Development Site

- 4.2.1 Previous works on the site comprise two archaeological watching briefs on works in the southwest corner of the site [AB 07/17] and [AB 15] and summarised above in paragraph 4.1.3. Of particular interest was the recovery of timbers during the monitoring of sheet pile replacement along the wharf front [AB 15]. The timbers principally comprised two 'piles' made from squared pine logs, converted by sawing, possibly machine sawn (Mola 2007). Other timbers observed included horizontal members and dislodged pieces, some featured iron fixings. They most likely date from the post medieval period and certainly before 1930 when the existing wharf front was constructed.
- 4.2.2 A bore hole survey of the development site is currently underway (See Figure 3 for proposed locations). The results of this survey are not currently available.
- 4.2.3 Previous works in the wider study area comprise archaeological trenching in four locations to the north and east of the site. These relate to GLHER monument records [AB 4 6 & 11] summarised above in section 4.1.4. In each instance peat deposits were observed within the estuarine clays.

4.3 Palaeo-environmental Evidence

- 4.3.1 The potential for palaeo-environmental evidence in the surrounding area is highlighted in the Barking Level and Dagenham Marsh APA appraisal [**AB 1**] (see above paragraph 4.1.1). The development site lies within the boundary of this APA.
- 4.3.2 The presence of wetland deposits including peat layers with high palaeo-environmental potential have been recorded both on the site and in the study area. They are summarised above in paragraphs 4.1.3 & 4.1.4.

4.4 Archaeology & History Background

The Prehistoric Period (c .500, 000 BC - AD 43)

- 4.4.1 The landscape around the site during the prehistoric period was an estuarine marshland lying along the north bank of the River Thames. A variety of alluvial deposits recorded from this area suggest a dynamic environment of shifting channels and as well as extended periods of vegetation growth, including ash trees [AB 7], resulting in the formation of substantial peat deposits at depths of c.2m below existing levels (see paragraph 4.1.3).
- 4.4.2 The area is likely to have been exploited throughout the prehistoric period for fishing, gathering resources and transport. Further to the north along Ripple Road the marshland

- gives way to gravel geology. Here, the Ripple Road APA [**AB 2**] sites the potential for prehistoric settlement, trackways and ditches.
- 4.4.3 Within the vicinity of the site, prehistoric activity has been evidenced in a number of artefacts recovered in uncertain circumstances during the earlier 20th century. They include Neolithic stone tools and Bronze Age metalwork (HE 2016).

The Roman Period (c. AD 43 - AD 410)

- 4.4.4 During the Roman period the wider area appears to have remained as undeveloped marshland (HE 2016). In the Adjacent Ripple Road APA [**AB 2**], putative development of drier land to the north of the site, including the establishment of Ripple Road and possible settlement, is inferred from the discovery of 1st-2nd century cremations and a stone lined burial of probable 3rd century date (HE 2016).
- 4.4.5 Within the vicinity of the site, a putative dock of possible Roman date [AB 12] lies c.700m from the site to the west. Its presence suggests possible exploitation of the River Rodding during the Roman period.

The Medieval Period (AD 410 - AD 1536)

- 4.4.6 During the Medieval period, the area fell within Barking Manor which, from 1086, Domesday records as in the ownership of Barking Abbey. The area remained as marsh and rough grazing throughout the medieval period. In the 13th century the manor houses of Eastbury and Cockermouth were established along Ripple Road which bounded the marshland to the north, and a ribbon settlement of farmsteads fronting onto Ripple Road is recorded from the mid-15th century (HE 2016).
- 4.4.7 Marshland to the south of Eastbury Manor house, in the vicinity of the development site, was subject to flooding and a large area to the east of the site known as 'The Rant' remained underwater from the later 14th century (HE 2016).

The Post Medieval Period (AD 1537 - AD 1800)

4.4.8 During the Post Medieval period the area was partially drained, in particular the 'Rant', the northern extent of which can be seen on the tithe map of 1747 as an arcing boundary or drain to the east of the development site, extending to the east from a tidal inlet (shaded grey) known as Fleets Mouth (Plate 1).

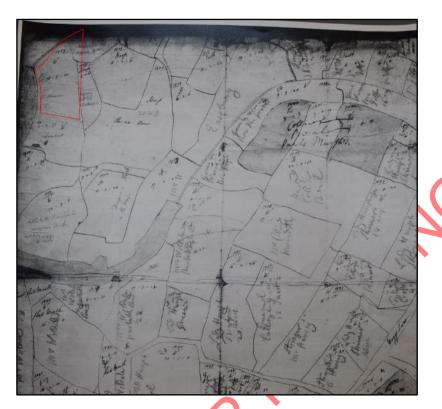


Plate 1: Extract of the 1747 Barking tithe map

4.4.9 The area remained as marshland and rough grazing. The general character of the wider area is depicted clearly on Andre and Chapmans map of the county of Essex surveyed in 1772 - 4 (Plate 2).

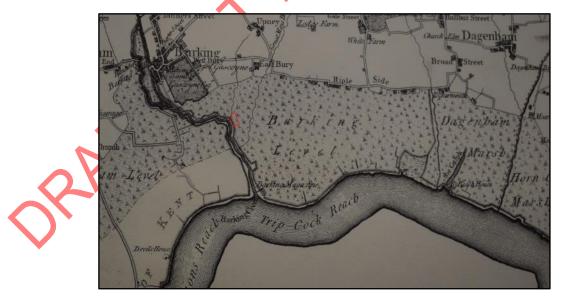


Plate 2: Extract from Andre and Chapman, surveyed 1772-74

4.4.10 During 18th century the site was largely a single pasture field, but also encroaches on an adjacent field to the northeast. It is shown clearly on mapping produce by the Commissioners of Sewers in 1740 (Plate 3), bounded to the north, as it is today, by a drain (Mayes Brook).



Plate 3: Extract of 1740 map by the Commissioner of Sewers

- 4.4.11 At its southern extent the plot is bounded by a field boundary or track at the end of which is a short dark line projecting towards the river (Plate 4). This line is of interest as it appears in the approximate location of timbers found during sheet piling works at the southern corner of the development site [AB 15].
- 4.4.12 Similar lines shown on a later map of 1858 also produced by the Commissioner of Sewers are accompanied by a partially illegible word of four letters beginning with the letter 'P'. It is possible that they represent structures, possibly piers extending out into the river. The Kings Bridge [AB 16] is also marked on this map very faintly by the words 'Kings Bridge Sluice'.

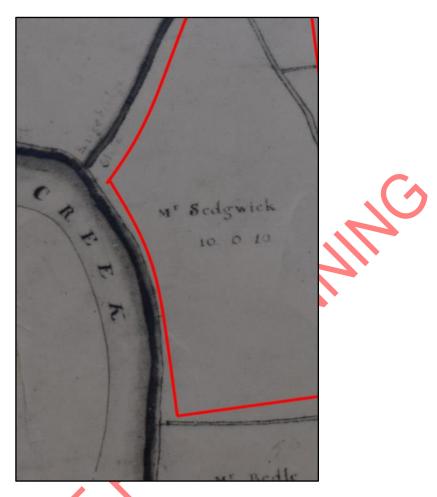


Plate 4: Close up of 1740 Commission of Sewers map

The Modern Period (AD 1801 - present)

4.4.13 The 1847 Barking tithe map (Plate 5) depicts the site once again as overlying parts of two pasture fields. The larger of the two plots (692b) is labelled in the accompanying apportionments as 'Kingsbridge Marsh, Pasture' with the smaller plot (692c) labelled 'Great Halfpenny Marshes, Pasture'. The surrounding plots are described variously as 'pasture' or 'reeds'



Plate 5: Extract of the 1847 Barking tithe map

4.4.14 The first edition OS map, surveyed in 1862, (Plate 6) shows the site little changed from the 1847 Barking tithe map. The Kings Bridge at the northwest corner of the site [**AB 16**] is once again marked.

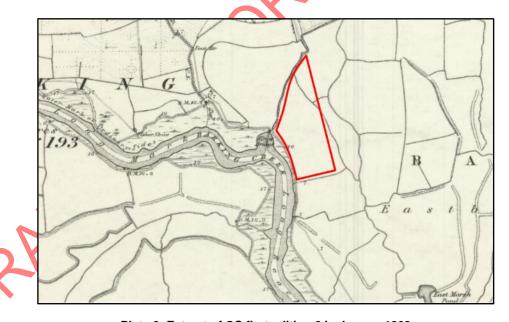


Plate 6: Extract of OS first edition 6 inch map, 1862

4.4.15 Signs of significant modern development of the marshland appear on the 1913 OS 25 inch map. The eastern boundary of the site is now depicted in its current form, bounded by River Road, shown cutting across the historic field layout.



Plate 7: Extract of the 1913 OS 25 inch map

4.4.16 The development site and the riverside to the south and west was considerably developed during by 1936. A wharf is shown on the 1936 25 inch OS map (Plate 8) labelled as 'Acme Wharf'. It shows a quay wall and series of tracks labelled 'travelling cranes' along the central and southern quayside and extending back across the wharf. Buildings are largely clustered towards the north end of the wharf.

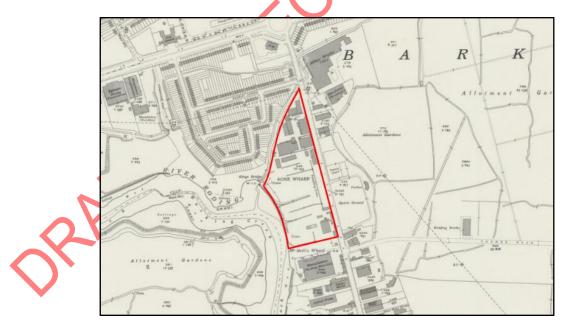


Plate 8: Extract of the 1936 OS 25 inch map

4.5 Site Visit

- 4.5.1 A site visit was undertaken by Alex Farnell (AB Heritage) on the 28th November 2018. The purpose of this visit was to gain a greater understanding of the existing land use and past impacts within the current site limits, along with an appreciation for the potential survival of below ground archaeological deposits.
- 4.5.2 At the time of the visit it was not possible to fully access the site as it remained occupied and not fully in the client's possession. However, most of the site was visible from the site boundary along River Road. Good 3 dimentional views are also available on Google Earth.
- 4.5.3 The site is currently a level wharf covered by concrete surfacing. Two very large modern industrial warehouse buildings (Photos 1 & 2) occupy a substantial part of the plot. A third, smaller, modern brick building (Photo 3) is located in the northern corner, fronting onto River Road.



Photo 1: View of industrial warehousing looking northwest from River Road



Photo 2: View of industrial warehousing looking southwest from River Road

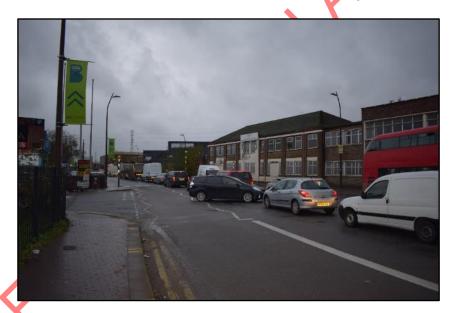


Photo 3: View of brick building looking southwest from River Road

4.5.4 Where bounded by the River Rodding to the west, the quayside is substantially raised above the level of the rest of the wharf with ramps at either end to allow vehicle access (Photos 4 & 5). It seems highly likely that this area has been built up in the post war era, as it was clearly not a feature of the original Acme Wharf which is shown on mid-20th century mapping to have had a system of travelling cranes in this location.



Photo 4: View of access ramp at southern end of raised quayside, looking west



Photo 5: View to access ramp at northern end of raised quayside, looking west

4.5.5 The water course/drain (Mayes Brook) extending along the site boundary on its north west side has been canalised with concrete walls and spanned by concrete beams at regular intervals (Photo 6). A sluice gate occupies the mouth of this channel where it enters the River Rodding. This was not accessible during the visit; however, it is visible on Google Earth as a substantial modern mechanism. This is the location of the early Post Medieval 'Kings Bridge' [AB 16]. The modern mechanism is likely to have had significant impact on any earlier or original structures here.



Photo 6: View of Mayes Brook along northwest site boundary, looking southwest from River Road

5. CULTURAL HERITAGE POTENTIAL & MITIGATION

5.1 Known Cultural Heritage Resource

- 5.1.1 The site is within the Barking Level and Dagenham March APA [AB 1] and is speculated to have been marshland until approximately 1936 when Acme Wharf was constructed. It is thought to have been utilised during prehistoric times and is known to contain peat deposits [AB 07], which may yield paleoenvironmental data regarding the local environment in prehistory. When available, the results of a borehole survey of the site will contribute to the known potential of this resource on the site.
- 5.1.2 Preserved, waterlogged timbers have been found during previous work on the site [AB 15]. These were located on the riverside in the southwest corner of site. They appeared to be Post Medieval in date and it is possible that they relate to a former pier or jetty projecting into the river at this point. It is equally possible that they are part of more widespread revetment of the river bank.
- 5.1.3 The former 'Kings Bridge' [AB 16] was located at the mouth of a watercourse/drain which joins the river Rodding at the northwest corner of the site. A sluice is marked here on the 1740 Commissioners of Sewers map (Plates 3 & 4). It is likely to have been a timber structure. Later mapping in 1860 (Plate 6) marks the Kings Bridge and shows what appears to be a trackway crossing the mouth of Mayes Brook in this location, further suggesting the presence of a structure spanning the waterway.

5.2 Past Impact Within the Site Boundary

- 5.2.1 The site is currently a modern concrete wharf. The former and existing buildings on the site are likely to have impacted below ground deposits, though whether this is partial or total truncation cannot be confirmed, and impact may be variable across the extent of the site depending on past overburder and level of construction.
- 5.2.2 The modern sluice structure (paragraph 4.5.5) positioned in the location of the former Kings Bridge [AB 16] is likely to have had a high level of impact on any earlier timber structures.

5.3 Potential Archaeological Resource

5.3.1 Paleoenvironmental evidence, in the form of waterlogged organic material and peat deposits, may be present within the site and remain preserved. The impacts of previous and existing buildings on these deposits cannot be fully known, however, the widespread nature of these types of deposits, their identification during previous work on the site [AB 7] and the likely depths at which they occur of up to 2m or more below existing levels, suggests that there is a High potential for their presence on the site. These deposits may yield information regarding the local environment in prehistory. They are considered to be of Regional Importance (in line with table 1) because they have reasonable potential to contribute to the understanding of past environment of the wider area. The London Research Framework (English Heritage 2002) outlines the current state of archaeological knowledge for London and identifies subject areas which would benefit from further research. It lists furthering understanding of the

- Ecology, Hydrology and Climate of the London area in the past as specific research objectives (TL1, TL2 & TL4 respectively).
- 5.3.2 Waterlogged deposits have the potential to preserve organic remains and as such it is possible that organic artefacts, for example wood, are present within deposits sealed by the wharf. As the APA [AB 1] appraisal suggests, examples of these types of artefacts could be, boats, fish traps and other evidence of riverside management and exploitation from prehistory to the medieval period. Such artefacts are known from the wider area in particular those recovered from within the River Rodding APA [AB2], however their occurrence is scarce and therefore the potential for their presence on the site is thought to be Low. If present, these features would constitute reasonable evidence of past industry and for this reason, and due to the relative rarity of waterlogged artefacts, they would be considered to be of Regional Importance (in line with table 1).
- 5.3.3 Structural timbers have already been recorded in the southwest corner of site. As their removal at the time was not complete and the full extent of survival not established it is considered that there is Medium potential for further structures relating to revetment of the bank or access to the river, to survive below and behind the existing quayside. These structures are likely to be later Post Medieval in date and are considered to be Local Importance (in line with table 1) because they are of more limited historic value
- 5.3.4 Physical evidence of the historic 'Kings Bridge' [AB 16] is likely to have been impacted by the modern sluice structure. However, it cannot be ruled out that some timbers survive outside of the impact of the modern sluice mechanism, particularly. It is considered that there is Medium potential for elements of the surviving earlier bridge or sluice structures to survive within the site to the south of the existing modern sluice. The extent of survival of this feature is likely to be very limited and as such is considered to be of Local Importance (in line with table 1).
- 5.3.5 Mapping of the original wharf built in c.1936 shows buildings and crane tracks across the site (Plate 8). It is not known how much, if anything, remains of these former structures below the existing concrete surfaces. However, there is considered to be Low to Medium potential for shallower remains of the earlier wharf to survive, in particular where the quayside appears to have been raised above its original height. These remains are of limited archaeological interest and considered to be of Negligible Importance in line with table 1.

5.4 Potential Impact of Proposed Development

- 5.4.1 The development proposal is at an early stage with no fixed design. It is therefore not possible to carryout a detailed impacts assessment at this stage.
- 5.4.2 Outline plans (Figure 4) indicate that works will potentially include:
 - Demolition of the existing structures;
 - Construction of a new market building;
 - A new pumping station next to Mayes Brook;
 - Possible reduction of the raised quayside;

- A new office and café block; and
- New site access at the north west corner involving works in the vicinity of the Kings Bridge.
- 5.4.3 The proposed development works, including any ground reductions, removal of existing hardstanding, foundation and service trenching and potentially piling, may partially remove or adversely affect some of the surviving archaeological resource within the site boundary, in particular, waterlogged deposits and artefacts. The impact of these works and the resulting significance of effects can only be determined in relation to the final design proposals for the development.

5.5 Conclusions

- 5.5.1 This report has worked to establish the potential archaeological resource at the site of Welbeck Steel, Barking. The existing wharf was originally constructed in 1936 (Acme Wharf) and historic mapping up to 1913 (Plate 7) shows that prior to this the development site was marshland and rough grazing.
- 5.5.2 It is considered that there is high potential for the survival of palaeoenvironmental evidence in the deposits below the existing wharf. There is also medium potential for the survival of timber structures, in particular, in the vicinity of the Kings Bridge [AB 16] and at the southern extent of the quayside [AB 15]. Evidence suggests that these structures are Post Medieval in date and localised in their extent, however, it cannot be ruled out that other previously unrecorded and unmapped structures may also be present elsewhere.
- 5.5.3 This report will be updated to include a detailed Impact Assessment and Recommendations as the results of the bore hole survey and finalised designs for the proposed development become available.

6. **REFERENCES**

6.1 Documentary and Cartographic Sources

Barking tithe map 1747 (Barking & Dagenham Archives)

Barking tithe map 1847 (Barking & Dagenham Archives)

Andre and Chapman, map of the County of Essex, surveyed 1772-74, published 1777, (Barking & Dagenham Archives)

map by the Commissioner of Sewers 1740 (Barking & Dagenham Archives)

GLHER Data Set 14525

Historic England 2016, London Borough of Barking and Dagenham, Archaeological Priority Areas Appraisal.

Mola, 2007, 8 River Road, Barking, IG11, London Borough of Barking and Dagenham: An archaeological watching brief report

OS first edition 6 inch map, surveyed 1862 (NLS website, accessed November 2018)

OS 25 inch map, 1913 (NLS website, accessed November 2018)

OS 25 inch map, 1936 (NLS website, accessed November 2018)

6.2 Online Sources

Ancient Monuments and Archaeological Areas Act 1979 http://www.legislation.gov.uk/ukpga/1979/46/contents

BGS (British Geological Society) 2017. Geology of Britain viewer http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Chartered Institute for Archaeologists Standard and Guidance for Historic Environment Desk Based Assessment http://www.archaeologists.net/sites/default/files/node-files/CIfAS&GDBA_2.pdf

English Heritage, 2002, A Research Framework for London Archaeology

Heritage Gateway http://www.heritagegateway.org.uk/Gateway/Results.aspx

National Planning Policy Framework

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Planning (Listed Buildings and Conservation Areas) Act, 1990 http://www.legislation.gov.uk/ukpga/1990/9/pdfs/ukpga_19900009_en.pdf

The Barking and Dagenham Local Plan

The London Plan 2016

The Draft London Plan 2017

DRAFT NOT FOR PLANNING
Appendices

Appendix 1 Cultural Heritage Gazetteer

This gazetteer incorporates all archaeological and historical sites identified on the GLHER, and other sources within the 750m study area.

Abbreviations

NGR - National Grid Reference CA - Conservation Area LB - Listed Building

HLC - Historic Landscape Character Area MLO – GLHER monument prefix ELO – GLHER event prefix

APA - Archaeological Priority Area

AB No.	Period	Description	Status	NGR	Reference No.
1	-	Barking Level and Dagenham Marsh Archaeological Priority Area (Tier III) This Archaeological Priority Area covers the area from the Thames foreshore, to the London, Tilbury and Southend railway line to the north. The area was largely undeveloped prior to the late 19th and early 20th centuries. The APA is classified as a Tier 3 because it is an extensive area with evidence for surviving archaeological landscapes. It is also a landscape with a high potential for the preservation of organic remains associated with a wetland environment.	АРА	TQ 4730 8228	DLO37927
2	-	Ripple Road Archaeological Priority Area (Tier II) This Archaeological Priority Area covers a corridor of archaeological potential along the Ripple Road, covering the geological change from peat deposits along the foreshore and the gravel to the north. This area has been designated as a Tier 2 APA as significant finds and features have been found close to the road, particularly dating to the prehistoric era. These include the late Neolithic to early Bronze Age Dagenham Idol, and a nearby Bronze Age trackway. Evidence of Roman activity in the form of burials and cremations as also been found in this APA. There is a potential for further archaeological remains dating from the prehistoric period onwards within this area, particularly dating to the prehistoric, Roman, medieval and post-medieval periods.	APA	TQ 4762 8344	DLO37897
3	-	River Roding Archaeological Priority Area (Tier II) The River Roding Archaeological Priority Area covers the length of Barking and Dagenham's western borough boundary between the railway line at Barking to the north, to the A13 to the south. The APA covers the river as it	APA	TQ 4416 8394	DLO37931

AB No.	Period	Description	Status	NGR	Reference No.
		stands today and its associated floodplain. The area has potential for archaeological deposits associated with the settlement of Barking and the surrounding area. The APA is classified as a Tier 2 as it is an area with a high potential for the preservation of organic remains due to its wetland environment. archaeological remains from all periods relating to the use of the river could be encountered, as the river at Barking has been in use both as a crossing point and a centre for fishing for much of its history. Prehistoric remains of trackways and platforms across the river have been found in Barking and further remains relating to the area's use prior to the founding of Barking Abbey would be of particular interest. Archaeology dating to the Iron Age may also be encountered, particularly in the northern part of the APA, which could relate to Uphall camp, a major Iron Age hillfort across the border in Redbridge.			
4	UNDATED PROBABLE PREHISTORIC	PEAT (Unknown date) 12 Parkview Gardens - excavation of two 2.5m deep trenches had exposed a peat horizon 0.2-0.3m thick containing timber and bone. The peat deposit lay c 0.5m below OD, above and below estuarine clay.	-	TQ 4512 8323	MLO25524 (MLO58258) ELO2714 (ELO5819)
5	UNDATED PROBABLE PREHISTORIC	PEAT (Unknown date) River Road (BARDAG Site) Barking: Watching Brief, the watching brief comprised of the excavation of a single trench. Peat deposits and an undated linear feature were observed	-	TQ 4545 8295	MLO74947 ELO4461
6	UNDATED PROBABLE PREHISTORIC	FLOOD DEPOSIT (Unknown date), PEAT (Unknown date), River Road [BARDAG Sports Ground] London Borough of Barking and Dagenham: Evaluation, A single trench, peat was observed at c1.00m OD and a bottom level of c2.25m OD. The clay beneath this overlay gravel at c2.70m OD	-	TQ 4546 8291	MLO71877 MLO71878 ELO4463
7	UNDATED PROBABLE PREHISTORIC	FLOOD DEPOSIT (Unknown date) PEAT (Unknown date) 8 River Road, Welbeck Steel, a watching brief before the construction of a water pumping chamber in November 91 (site code ba-ws91). deep layer of peat at a depth of 2m, containing frequent ash tree trunks, were found.	-	TQ 4530 8280	MLO58860 MLO58858
8	LATE NEOLITHIC- EARLY BRONZE AGE	FINDSPOT unspecified works in the "marshes near barking" prior to 1916 revealed a polished stone axe of basalt.	-	TQ 4500 8300	MLO3197

AB No.	Period	Description	Status	NGR	Reference No.
9	LATE NEOLITHIC- EARLY BRONZE AGE	FINDSPOT unspecified works in barking creek prior to 1914 revealed a "stone axe-hammer".		TQ 4520 8260	MLO10905
10	BRONZE AGE	FINDSPOT (Bronze Age - 2200 BC to 701 BC) Bronze metalwork hoard comprising: the remains of a bronze sword hilt, bronze socketed axe, bronze looped, square socketed axe	4	TQ 4520 8260	MLO21124 MLO21125 MLO24134
11	BRONZE AGE	PEAT Thames Road, (No 18) [Riviera Concrete], Barking, Essex, IG11: Evaluation, comprised of two trenches The peat deposit was a maximum of 1.25m thick, and reflects the changing water levels in this period.		TQ 4600 8272	MLO67279 ELO2715
12	ROMAN	DOCK (Roman - 43 AD to 409 AD) aerial photographs suggest the presence of a disused dock west of barking creek. it is suggested that this may be roman in date.	-	TQ 4457 8294	MLO22740
13	MEDIEVAL – POST MEDIEVAL	DOCK, Place name reference: 'Dampers Dock Marshe'	-	TQ 4535 8253	MLO24812
14	MEDIEVAL – POST MEDIEVAL	HOUSE, probably to be associated with the families of John & Richard Galyan/Galyon, Galyonshope, 1466. called Gallions in 1609.	-	TQ 4520 8220	MLO14192
15	POSSIBLE POST MEDIEVAL	JETTY or REVETMENT 8 River Road, Barking: Watching Brief: Service on work replacing sheet piling along the east bank of Barking Creek (River Roding). A number of timbers were found. interpreted as part of a dismantled revetment or river wall dating prior to the 1930s when the later river wall was installed. They may have been associated with some kind of jetty for accessing the river. Poorly dated – pre 1930s	-	TQ 45313 82737	MLO99280 ELO7534
16	POST MEDIEVAL	BRIDGE, documentary evidence shows that Kings Bridge existed by 1608 and spanned an 'unknown tributary of the River Roding'.	-	TQ 4523 8294	MLO14194
17	POST MEDIEVAL	VICTORIAN BOTTLE DUMP, 8 River Road, Welbeck Steel, a watching brief before the construction of a water pumping chamber in November 91. contractors verbal reference	-	TQ 4530 8280	MLO58857