

## 13. Archaeology and Cultural Heritage

### 13.1 Introduction

- 13.1.1 This Chapter, which has been prepared by Waterman, provides further environmental information with regard to the potential archaeology and cultural heritage impacts arising from the Scheme with Phase 1A (North) in place (hereafter referred to as ‘the Development’). This Chapter is provided pursuant to the s.73 ES and has been provided in light of further details now being available on the detailed design as defined by the Phase 1A (North) RMAs. Archaeological reports (Outline and Site-Specific Written Schemes of Investigation) prepared to partially discharge Planning Condition 43.1 of the 2014 Permission are also addressed by this Chapter, as are the results of an initial non-intrusive geophysical survey of the Childs Hill Playing Fields Area of Special Archaeological Significance (ASAS).
- 13.1.2 A brief summary of significant changes to relevant policy, legislation and guidance which have been published since the s.73 ES is provided together with confirmation on whether the changes have any material bearing on the assessment. A review has been undertaken of the detailed design, as defined in **Chapter 2**, to identify features and elements of the Phase 1A (North) detailed design of relevance to the archaeological and cultural heritage assessment, and a summary of this is provided.
- 13.1.3 The approach to the assessment methodology is set out, including relevant significance criteria expanded from the s.73 ES, to include a grading of significance/value of heritage assets, a grading of the potential magnitude of impact the proposed development would have on these assets or groups of assets, and a grading of the significance of the effect from the proposed development on heritage. This grading is required in order to enable a quantitative assessment of both the heritage resource and the impacts from the Development. A summary of recent consultation is also provided.
- 13.1.4 A review of the baseline information presented in the s.73 ES has been undertaken and updates are presented where relevant, including recent designations, and reporting on further work undertaken by Waterman in 2014. Any new or different potential archaeology and cultural heritage impacts arising from the Development from those identified in the s.73 ES are described. Likewise, any new or different mitigation measures from those identified in the s.73 ES are presented where considered necessary and residual impacts following the application of mitigation are described.
- 13.1.5 This Chapter is supported by: **Appendix 13.1**: Site-wide Written Scheme of Investigation, **Appendix 13.2**: Phase 1A (North) Written Scheme of Investigation, and **Appendix 13.3**: Geophysical Survey of Land at Clitterhouse Playing Field.

### 13.2 Policy, Legislation and Guidance

- 13.2.1 There have been no significant changes to policy, legislation or guidance since the s.73 ES was prepared which have a material effect on the approach to or findings of the assessment. A review of material published or amended since October 2013 is set out below for reference.

[NPPF Planning Practice Guidance, March 2014 and other National Guidance](#)

- 13.2.2 The NPPF Planning Practice Guidance was published on 6 March 2014 however, this Planning Practice Guidance is not considered to materially affect the assessment of heritage assets (archaeological remains). The online Planning Policy Guidance on Conserving and Enhancing the

Historic Environment was issued by the Department for Communities and Local Government in March 2014 as a web-based resource.

- 13.2.3 Following the publication of the National Planning Policy Framework, PPS5 was deleted. However, the Historic Environment: Historic Environment Planning Practice Guide issued by English Heritage in June 2012 remains a valid and Government endorsed document. Although the references in the document to PPS5 policies are now redundant, the policies in the NPPF are very similar and the intent is the same, so the Practice Guide remains almost entirely relevant and useful in the application of the NPPF.
- 13.2.4 Additionally, English Heritage published draft written guidance intended to assist local planning authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework and the related guidance given in the Planning Practice Guidance, published by the Government in March 2014. This updated guidance comprises three separate documents:
- Historic Environment Good Practice Advice Note 1: The Historic Environment in Local Plans;
  - Historic Environment Good Practice Advice Note 2: Decision-Taking in the Historic Environment; and
  - Historic Environment Good Practice Advice Note 3: The Setting of Heritage Assets.
- 13.2.5 These documents, along with some additional more detailed information (termed ‘Technical Advice in Planning’) will replace both the PPS5 Planning and the Historic Environment: Historic Environment Planning Practice Guide (2010) and various pieces of English Heritage guidance, as part of a wider guidance review the organisation is currently carrying out. The PPS5 Practice Guide remains in place for the time being but it is expected that the Government will cancel it once the post-consultation versions of these advice notes are published.

#### Relevant National, Regional and Local Research Agendas

- 13.2.6 English Heritage has prepared a Strategy for developing Research Resources. This strategy will guide the development of a new generation of Research Frameworks and provide a prioritisation process for Reference Resources, which is based on need, timeliness and value for money. Research Frameworks provide an overview of the current state of knowledge and understanding about the historic environment, any gaps in this knowledge and a list of potential research areas and strategic priorities. They can cover a specific geographical area, period or theme; for example the Regional Research Frameworks. Reference Resources include a wide range of typologies, classifications, thesauri and works of syntheses covering such topics as archaeological and building objects, types and materials. They are the essential building blocks of historic environment research. The key Reference Resources relevant for this assessment are the Prehistoric Thematic Strategy (<https://www.english-heritage.org.uk/professional/research/strategies/research-strategies/prehistoric/>) and the Urban Historic Environment Thematic Strategy (<https://www.english-heritage.org.uk/professional/research/strategies/research-strategies/urban/>).
- 13.2.7 The Prehistoric Thematic Strategy sets out six critical priorities, of which three can be addressed within the Development process for Brent Cross, namely:
- Integrated approaches to prehistoric landscapes: filling gaps, understanding biases, improving methodologies and connecting different types of landscape;

- Understanding 'sites without structures': improving understanding of and methods of characterising ephemeral sites, especially lithic scatters; and
- Improving access to unpublished data: grey literature synthesis, archive research, backlog publications and enhancing Historic Environment Record (HER) data.

13.2.8 The Urban Historic Environment Thematic Strategy sets out nine key challenges, of which six can be addressed within the Development process for Brent Cross, Cricklewood, namely:

- Exploiting the results of develop-funded research: making research findings available, moving towards syntheses;
- Survival of early form and fabric in historic towns: what survives from the medieval and early-modern periods;
- The 20th century: the dramatic changes in our towns and cities made during the 20th century are of considerable historic importance but they are not fully understood;
- Parks, open spaces, cemeteries: spaces, as much as buildings, contribute to the character of historic towns, but they face severe problems of management and are not fully understood;
- Providing the evidence base for regeneration and renewal: ensuring that change to historic towns is informed by good understanding of significance; and
- Historic suburbs: 'densification' in some areas, decay in others, present a challenge, but greater understanding of significance can lead to better conservation.

#### Revised Early Minor Alterations to the London Plan, 2013

13.2.9 The Revised Early Minor Alterations to the London Plan was adopted in October 2013<sup>i</sup>. Policy 7.8 of the adopted Revised Plan sets out the following in respect of built heritage:

*“Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of a proposal, including securing its optimum viable use. Enabling development that would otherwise not comply with planning policies, but which would secure the future conservation of a heritage asset should be assessed to see if the benefits of departing from those policies outweigh the disbenefits”.*

*“Where there is evidence of deliberate neglect of and or damage to a heritage asset, the deteriorated state of that asset should not be taken into account when making a decision on a development proposal”.*

There are two built heritage assets within the Site boundary assessed below for impact, namely the Grade II listed Brent Cross Underground Station and Parade of Shops, which is not affected by the Development, and the non-designated Clitterhouse Farm buildings, which are retained and enhanced by the proposals. The Development is therefore compliant with this revised policy.

#### Draft Further Alterations to the London Plan, 2014

13.2.10 Draft Further Alterations to the London Plan (FALP)<sup>ii</sup> were issued for public consultation from January to April 2014. Following a review of consultation responses to the Draft FALP, the Mayor published a schedule of suggested changes in July 2014. An examination in Public of the Draft FALP

commenced on 1 September 2014. There are no alterations to the policies summarised above in the Draft FALP.

#### Sustainable Design and Construction- Supplementary Planning Guidance, 2014

13.2.11 The Mayor of London republished Supplementary Planning Guidance (SPG) on Sustainable Design and Construction in April 2014<sup>iii</sup>. The SPG provides guidance on the implementation of London Plan Policy 5.3 – Sustainable Design and Construction, as well as a range of policies that deal with matters relevant to environmental sustainability. There are no planning policies of relevance to the archaeology assessment contained within the above Sustainable Design and Construction SPG document.

### 13.3 Relevant Phase 1A (North) RMAs Details

- 13.3.1 All elements of the Phase 1A (North) RMAs which involve excavation of existing ground levels as described in Section 2 are of relevance to the assessment of archaeology and cultural heritage. These elements were assessed as part of the assessment of the Scheme in outline in the s.73 ES, however further consideration is given within this Chapter to the potential impacts on archaeology and cultural heritage now that the detailed design proposals are known.
- 13.3.2 A description of some of the ground works associated with each element of the Phase 1A (North) RMAs is provided in **Chapter 15: Ground Conditions**. It is important to note however that this information has not changed significantly since the s.73 ES, although further details are now available following detailed design which allows impacts to be refined. Further details are provided below in respect of Clitterhouse Playing Fields Improvements Part 1 as this of particular relevance to the assessment.
- 13.3.3 The proposals for Clitterhouse Playing Fields Improvements Part 1 are designed to make it a central feature of the Development as a whole, to provide a community park with sports facilities, civic spaces, play areas and nature areas. Details of the proposals are presented in **Chapter 2** of this Report and a summary of relevant features is provided here.
- 13.3.4 Retention and refurbishment of the Clitterhouse Farm Buildings is now proposed to accommodate storage facilities and offices. The s.73 Application assumed these buildings would be demolished as part of the Scheme.
- 13.3.5 Several layout options have been explored for Clitterhouse Playing Fields Part 1 and a pitch layout has been selected for the detailed design which requires a change to existing contours with regard to ground level changes. The Playing Fields currently have a ground level difference from the east side (adjacent to Clitterhouse Stream approximately 46 m AOD) to the west side (adjacent to the Farm Buildings approximately 56 m AOD) of approximately 10 metres AOD (see **Figure 13.1**). The detailed proposals include re-levelling of the playing fields to accommodate sports pitches (to Sports England standards) and construction of play areas, outdoor gym, paths, drainage swales, a central park pavilion, hard and soft landscaping including planting of woodland, marginal / swale planting, wildflower meadows. Re-levelling at Clitterhouse Playing Fields will comprise approximately 1 m of

cut in areas particularly the eastern pitch area and north of the Playing Fields, whilst approximately 0.4 m fill is proposed in areas including the southwest and far eastern areas (see **Figure 13.1**).

13.3.6 Potential sources of impacts could arise from all construction elements of the Phase 1A (North) RMAs which include:

- Building demolition or refurbishment;
- Topsoil and subsoil stripping;
- Bulk excavation;
- Excavation for foundations and utilities;
- Landscaping and tree planting;
- Changes to ground water regimes; and
- The removal of historic semi-natural landscape features.

## 13.4 Assessment Methodology and Significance Criteria

13.4.1 There have been no significant changes to planning policy, legislation or guidance since the s.73 ES which materially affect the approach to the archaeology or cultural heritage assessment.

13.4.2 The methodology and significance criteria presented in Chapter 13: Archaeology and Cultural Heritage of the s.73 ES, which was prepared by Place Archaeological Consultants Ltd, have been reviewed by Waterman. Further commentary on the assessment methodology is set out under 'Scope and Methodology'.

13.4.3 In preparing this Chapter, Waterman has undertaken a full review of the s.73 ES and Phase 1A (North) RMAs, updated baseline information and undertaken a site visit accompanied by Sandy Kidd (Principal Consultant, Greater London Archaeological Advisory Service, English Heritage) in May 2014. Further details of the approach to the baseline information update and review and further assessment of the Phase 1A (North) RMAs is provided below.

13.4.4 The baseline data update was undertaken to ensure the assessment considered the latest GLHER data set such as designations made since the data had been obtained for the purposes of the EIA and the results of recent evaluations within or close to the Site becoming available. Waterman also reviewed local listed building and conservation area designations as presented online in the LBB online resources, in order to ascertain whether any changes had been made which affected the assessment presented in the s.73 ES.

13.4.5 Since the s.73 ES was prepared an over-arching Scheme of Archaeological Investigation (covering the extent of the 2014 Permission) and a Phase-specific Scheme of Archaeological Investigation for Phase 1A (North) have been developed by Waterman setting out appropriate mitigation measures and to comply with Planning Condition 43.1 of the 2014 Permission as recommended by English Heritage and imposed by LBB as adequate mitigation which states:

*"Prior to the commencement of Development an over-arching Scheme of Archaeological Investigation will be submitted to the LPA setting out the process for assessing and mitigating the impact of development on archaeological interest, including appropriate post-excavation analysis, archiving and publication.*

*No part of the Development shall commence within any Phase or Sub Phase unless and until proposals have been submitted to and approved by the LPA for a site-specific Scheme of Archaeological Investigation to preserve or record any archaeological evidence within the Phase or Sub Phase.*

*Each Phase or Sub-Phase of the Development shall take place in accordance with the approved over-arching Scheme of Archaeological Investigation and the site-specific Scheme of Archaeological Investigation approved for that Phase or Sub-Phase.”*

- 13.4.6 The Site-wide Scheme of Archaeological Investigation is included at **Appendix 13.1** and provides an overview of the archaeological background, defining areas suitable for further investigation and also provides an overall methodology for further investigations, and determines contractor requirements.
- 13.4.7 The Phase 1A (North) Scheme of Archaeological Investigation is included at **Appendix 13.2** and provides an overview of the archaeological background, defining areas suitable for further investigation and also provides an overall methodology for further investigations, and determines contractor requirements, specifically for those ground-intrusive works identified for this phase of the Development.
- 13.4.8 The Phase 1A (North) Scheme of Archaeological Investigation reviews all the data relevant for the Phase 1A (North) RMAs presented in the s.73 ES, and additionally relies on an up-to-date search of the Greater London Historic Environment Records (GLHER), carried out on a 2 km radius from the centre of the Site. This allowed for an update of information on designated and non-designated sites within the Phase 1A (North) and the wider development, and immediate surrounds.

#### Scope and Methodology

- 13.4.9 The scope of this Chapter remains as per the s.73 ES. The methodology set out in paragraphs 13.219 to 13.220 of the s.73 ES is valid for this assessment and the following has been undertaken by Waterman in the preparation of this Chapter:
- 13.4.10 Updated search and appraisal of relevant heritage resources including:
- Greater London Historic Environment Record (GLHER);
  - Local, regional and national archives;
  - Online resources;
  - English Heritage data sets; and
  - Designated heritage assets and areas, including conservation areas, local lists and archaeological alert area designations, within the Site and in the immediate area.
- 13.4.11 Additionally, Waterman carried out:
- A walk-over survey of Site and immediate area;
  - Review and assessment of the presence of known heritage likely to be affected by the Phase 1A (North) RMAs in the context of the Development as a whole;
  - Review of the findings of the s.73 ES and re-examination of the potential for unknown heritage assets likely to be affected by the Phase 1A (North) RMAs; and

- Review and assessment of the effects of Phase 1A (North) RMAs on heritage assets, and where applicable, the settings of heritage assets, in the study area in the context of the Development as a whole.

13.4.12 The Site was visited by Waterman in May 2014. The aim of the visit and walkover was to identify any features of heritage merit, and the ground conditions. The weather was dry and bright. Most of the Site was accessible from public footpaths, roads and other rights of way. A photographic record of the visit was made. Sandy Kidd, Principal Archaeologist for Greater London Archaeology and Advisory Service (GLAAS – a department of English Heritage), accompanied the consultant during the Site visit.

13.4.13 In addition, a geophysical survey of Clitterhouse Playing Fields which lies within the Childs Hill Archaeological Priority Area was undertaken in accordance with the methodology set out in the Site-wide WSI (see **Appendix 13.2**). The interpretative results of this non-intrusive survey are presented in **Appendix 13.3**.

#### Basis of the Assessment

13.4.14 In light of the design details becoming available for Phase 1A (North) RMAs, as well as up to date baseline data being obtained, and recent archaeological investigations being published, further baseline assessment was undertaken with regard to potential impacts on heritage assets, which had been identified as significant in the S.73 ES. At the time the s.73 ES was prepared the significance of impacts from the Development on heritage assets identified as significant was limited by the level of information available at the outline stage.

13.4.15 The assessment focuses on the details for Phase 1A (North) RMAs that are now available, although impact significance ratings are presented in the context of the Development as a whole.

13.4.16 The assessment therefore focuses on the following topics:

- The potential for prehistoric activity in the local river valleys;
- The presence of any remains of Watling Street, the Roman Road;
- The development of the manorial centre at Clitterhouse Farm;
- The origins of other Roman, medieval and post-medieval settlement; and
- The potential for deposits of palaeo-environmental importance.

13.4.17 The assessment of the updated baseline, including recent designations and information from recently published reports on archaeological investigations within the study area, as well as information pertaining to the Phase 1A (North) RMAs, have allowed a quantified assessment of the potential impacts on the heritage resource within the Site. Additionally, and further to consultation with GLAAS, mitigation has been refined to appropriately address the areas of potential identified in this revised assessment. As a result, the residual impacts (with mitigation in place) are also presented as a quantitative assessment in this Chapter and therefore update those of the s.73 ES.

13.4.18 A number of features, including the Gateway Junctions defined in **Chapter 2** of this report, are approved in detail under the 2014 Permission, including:

- A406 Brent Cross Ingres/Egress Junction Improvements;
- A41/A406 Junction Improvements;
- M1/A406 and A5/A406 Junction Improvements;

- A407 Cricklewood Land/Claremont Road Junction Improvements; and
- A5/A407 Cricklewood Lane Junction Improvements.

13.4.19 The potential impacts of the Development on heritage assets have been quantified by Waterman in this Chapter in a similar way to those of the Phase 1A (North) RMAs for completeness.

#### Significance Criteria

13.4.20 The significance criteria set out in paragraph 13.2.21 of the s.73 ES separated assets into groups of national, regional, local or poor quality. As far as possible this has been quantified below for the purpose of this assessment, enabling assets to be assessed within specific significance ratings, in line with English Heritage guidance<sup>iv,v</sup>. It should be noted that professional judgement is used in the application of the guidance and to assigning significance.

13.4.21 The intrinsic significance unique to each heritage asset can be defined as the sum of tangible and intangible values which make it important to society. This may consider age, aesthetic and the fabric of an asset as well as intangible qualities such as associations with historic people or events.

13.4.22 To assess the heritage significance of the assets within the Site reference has been made to guidance from English Heritage<sup>vi,vii</sup> which recommends making assessments under the categories of: Evidential, Historical, Aesthetic and Communal Value.

13.4.23 The significance of the assets are assessed using a number of significance ratings:

- **High:** A feature, space or theme which is significant at national or international level. These will tend to have a high cultural value and form an important element of a building or site.
- **Medium:** A feature, space or theme which is significant at a regional or national level. These will tend to have some cultural merit and form a significant part of the building or site.
- **Low:** A feature, space or theme which is of local or regional significance.
- **Neutral:** A feature, space or theme which has no cultural significance but is also not considered intrusive to heritage value.
- **Intrusive:** A feature, space or theme which detracts from heritage value.

13.4.24 In order to more fully understand the effect of the proposed Development with Phase 1A (North) in place on the significance of known and potential heritage, the assessment provides a comparable analysis of the heritage significance of each asset against the predicted magnitude of impact, taking into account the detailed design. This assessment is based on the criteria set out by the Design Manual for Roads and Bridges (DRMB)<sup>viii</sup> and International Council on Monuments and Sites (ICOMOS)<sup>ix</sup>, and is a clear way of understanding the magnitude of impact, and how levels of effect vary according to the significance of the heritage asset.

13.4.25 The magnitude of impact is assessed based on the criteria set out in **Table 13.1** below.

Table 13.1: Magnitude of Impact

Magnitude of Impact	Description
<b>Major Beneficial</b>	The proposed changes will significantly improve the overall setting and character of heritage assets, revealing and/or enhancing important characteristics which

Magnitude of Impact	Description
	were previously unknown or inaccessible. There would be a substantial improvement to important elements of the asset.
<b>Moderate Beneficial</b>	The proposed changes will considerably improve the setting or overall character of the heritage asset. There may be an improvement in key uses and beneficial change (e.g. the creation of coherency) to the characteristics of the asset.
<b>Minor Beneficial</b>	The proposed changes may cause a minor improvement to the setting or overall character of a heritage asset.
<b>Negligible</b>	The proposed changes will have a minimal impact on the heritage asset or on the overall character of the surrounding context.
<b>Neutral</b>	The proposed changes will have no impact on the heritage asset.
<b>Minor Adverse</b>	The proposed changes will have minor impact on the setting or overall character of a heritage asset. Change of this magnitude may be acceptable if suitable mitigation is carried out.
<b>Moderate Adverse</b>	The proposed changes will negatively alter the setting or overall character of the heritage asset. It will likely disturb key features and detract from the overall heritage significance. Change of this magnitude should be avoided where possible, but can be minimised or neutralised through positive mitigation.
<b>Major Adverse</b>	The proposed changes will significantly damage the overall setting and/or character of heritage assets. They will cause a notable disruption to, or in some cases, complete destruction of, important features. Change of this magnitude should be avoided.

13.4.26 The significance of the effect – i.e. the overall impact - on an attribute, is a function of the significance/value of the attribute and the magnitude of impact. This is summarised in **Table 13.2**.

Table 13.2: Significance of Effect

Criteria	Significance/ Value			
	Neutral	Low	Medium	High
Major Beneficial	Slight	Slight / Moderate	Moderate / Large	Large / Very Large
Moderate Beneficial	Neutral / Slight	Slight	Moderate	Moderate / Large
<b>Magnitude of Impact</b>				
Minor Beneficial	Neutral / Slight	Neutral / Slight	Slight	Slight / Moderate
Negligible	Neutral	Neutral / Slight	Neutral / Slight	Slight
Neutral	Neutral	Neutral	Neutral	Neutral
Negligible	Neutral	Neutral / Slight	Neutral / Slight	Slight

Minor Adverse	Neutral / Slight	Neutral / Slight	Slight	Slight / Moderate
Moderate Adverse	Neutral / Slight	Slight	Moderate	Moderate / Large
Major Adverse	Slight	Slight / Moderate	Moderate / Large	Large / Very Large

#### Limitations/Constraints

13.4.27 There were no significant limitations or constraints on the assessment.

### 13.5 Consultation

13.5.1 Waterman undertook a Site visit accompanied by GLAAS in May 2014. A specification for archaeological evaluation (OSAI) was subsequently submitted to and approved in writing by GLAAS, advisors to LBB, in January 2015. GLAAS were consulted to agree basic principles regarding areas of potential value and identifying the best archaeological investigation approach for these areas, as shown in **Figure 13.2**.

13.5.2 As part of their scoping comments, LBB requested that changes that impact on the setting of the Grade II Brent Cross Underground Station and Parade of Shops should be considered in this and other phases. Comment is therefore provided in this Chapter where appropriate.

13.5.3 In the December 2014 Scoping Opinion comments were received from GLAAS, as detailed in **Table 4.1** of this Report. In their response to the Scoping Opinion, GLAAS stated that it would be appropriate to undertake the proposed field evaluation of the Childs Hill Archaeological Priority Area (as identified in the Written Scheme of Investigation) “*as an integral part of the reserved matters EIA*”. A magnetometer survey was therefore undertaken in January 2015, and the results are reported below.

### 13.6 Baseline Conditions

13.6.1 The s.73 ES was based on a desk-based review of records and other research undertaken, including that which was presented Chapter 13 of the s.73 ES.

13.6.2 The baseline information presented in the s.73 ES Archaeology and Cultural Heritage Chapter has been reviewed and some areas requiring updating have been identified. This updated information for the Site as a whole collated in 2014 is provided below and set out in full in **Appendix 13.1**.

13.6.3 Data specific to the Phase 1A (North) RMAs is provided in the Site-Specific Scheme of Archaeological Investigation (**Appendix 13.2**). The results of a geophysical (magnetometer) survey are presented in **Appendix 13.3**. This fluxgate gradiometer survey was carried out by Cranfield Forensic Institute, under direction of Pre-construct Archaeology Ltd, and in accordance with the approved specification as set out in the OSAI (Appendix B) on land at Clitterhouse Playing Fields in January 2015. In this survey a series of linear, curvilinear and rectilinear anomalies were detected in the southern half of the survey area that may reflect the presence of archaeological remains of enclosures and a driveway or track. Remnants of the former field boundaries associated with Clitterhouse Farm were recorded along with a series of parallel lines that appear to represent the

remains of ridge and furrow. In the northern half of the survey area, a highly magnetic rectangular shaped anomaly was recorded possibly a former football ground/pitch associated with the football ground immediately to its south. In the south-east corner of this former pitch, a strong magnetic rectangular shaped anomaly was recorded denoting the outline remains of a building of uncertain date but could date to the Second World War or may have once been a building associated with the Football Ground and the ferrous debris of that building has been spread across the area to its north. A sub-rectangular zone of ferrous noise to the north-east of the football ground denotes the wartime allotments when the ground was dug up as part of the 'Dig for Victory' campaign. A negative rectangular shaped anomaly was detected in the north-east corner of the playing fields that reflects the remains of the former tennis courts. Adjacent to this, a square shaped magnetic signature was recorded denoting a former pavilion. Adjacent to the former football ground, the southern end of the survey area and adjacent to the footpath along the south-eastern edge of the survey, rectangular shaped strong magnetic anomalies were recorded indicating the presence of possible war-time shelters. Other magnetic anomalies present in the resultant images reflect modern disturbances that include services and features associated with the playing fields such as goal posts.

- 13.6.4 The complete set of data is presented here for the purposes of a quantitative assessment of heritage resources across the Phase 1A (North) and the wider Site in line with English Heritage guidance. All heritage assets within the Site as a whole have been assessed in terms of significance. All those identified within the wider Site, and affected by ground intrusive works during the Development of Phase 1A (North), are assessed in terms of the magnitude of impact the Development would have on them.
- 13.6.5 The geology of the Site is described in the s.73 ES (**Chapter 15 Ground Contamination**) and the existing topography is described in **Chapter 10: Townscape and Visual Impact Assessment**.

#### Designated Heritage Assets

- 13.6.6 The only listed building within the Site boundary is the Grade II listed building that is listed as the Brent Cross Underground Station and Parade of Shops (see **Appendix 13.1**). This asset was listed in 2011. There are no proposals for this building or within its setting which form part of the Phase 1A (North) RMAs.
- 13.6.7 Other listed buildings within the 3 km radius study area include the Grade II listed The Crown Public House and the Three Lamp standards in front of it, the Grade II listed Milestone sited outside numbers 3 and 4 Gratton Terrace, the Grade II listed St Michael's Church, the Grade II listed Dollis Hill Synagogue and forecourt railings, the Grade II listed Dollis Hill House, and the Grade II\* listed public house 'The Old Oxgate'. None of these listed buildings, or their settings, would be affected by Phase 1A (North) RMAs. They are therefore not considered further in the context of the Phase 1A (North) RMAs.
- 13.6.8 The Cricklewood Railway Terraces Conservation Area is located between the south-west Site boundary and Edgware Road. The Phase 1A (North) RMA components are not expected to have any significant effects on this designated asset due to their distance from this asset. These assets are therefore not considered further in the context of the Phase 1A (North) RMAs.
- 13.6.9 Two registered parks are located within the Study Area: Golders Green Crematorium to the north-east and Hampstead Cemetery to the south-east. Given their urban setting and lack of significant

inter-visibility with the Site, they are considered sufficiently distanced not to be relevant in a planning context, and are not considered further.

- 13.6.10 The site of the Battle of Barnet is located approximately 9 km to the north-east of the Site in the area of Monken Hadley. This is sufficiently distanced from the Site not to be relevant in a planning context, and it is not considered further.
- 13.6.11 Buildings of Local Architectural or Historical Interest were identified from the LBB's online GIS facility. None of the buildings were within 200 m of the Site and thus it was not considered necessary to collect further baseline data on them.
- 13.6.12 There is one Area of Special Archaeological Significance (ASAS) which lies within the Site and Phase 1A (North) - Childs Hill (3a) - and another immediately adjacent to the south-west boundary of the wider Site – Cricklewood. The location of this ASAS is shown on **Figure 13.2**. Sites identified as containing remains of archaeological significance are afforded greater protection from potentially harmful development. Child's Hill 3a coincides approximately with the extent of Clitterhouse Playing Fields. The designation of Clitterhouse Playing Fields (Child's Hill 3a) as an ASAS is due to its potential to contain remains from a range of periods, with a much lower level of truncation than most of the surrounding, and heavily developed, area. Its location close to a main River and tributary stream highlight its potential for containing below ground archaeological assets dating from prehistory onwards. It is also proximal to a main Roman road. In late Medieval times it is believed to have been the site of the Clitterhouse Manor, and this would most likely be the most significant phase of development in terms of archaeological potential.
- 13.6.13 Archaeological Solutions Ltd were contracted to undertake an evaluation at a site referred to as ELO8488 on the GLHER, within the Cricklewood ASAS, to the south-west of the wider Site in 2006. However, upon arriving on site, it was clear that ground reduction had taken place. No archaeological finds or features survived and the site had been reduced to a depth of 2.5 m below the existing ground level. The results of this evaluation were not discussed in the s.73 ES, although given the Cricklewood ASAS will not be directly or indirectly affected by the BXC development it is therefore not considered further.
- 13.6.14 The assessment for the wider BXC Site has established that no physical archaeological remains are known to be present but that the potential exists for such remains to be present. Specifically, deposits and features associated with the manorial centre at Clitterhouse Farm (MLO14718 and MLO14719). It should be noted that these features are incorrectly mapped in the GLHER (they should be located further south-east) and are thought likely to be present within the area of Clitterhouse Playing Fields.
- 13.6.15 ELO3700, on the north-east corner of the Childs Hill (3a) ASAS was an evaluation by the Museum of London Archaeology Service in March 1993, where much of the land surface was found to have been truncated down to natural in recent times, but on the west of the Site water-lain deposits survived, possibly associated with water meadows, and nineteenth century cut features possibly connected with horticulture were recorded in the south of that site.
- 13.6.16 A watching brief undertaken by C. Halpin for HAT, in 1997 (MLO70896) during “very superficial topsoil stripping for a new car park” revealed a general levelling deposit of post-medieval brick and

tile along with lumps of concrete. No evidence for the medieval Clitterhouse Manor was discovered, although archaeological deposits may still lie below the formation level of the new car park.

13.6.17 The Childs Hill ASAS (3a) coincides for the most part with the Clitterhouse Playing Fields, and is likely to hold deposits and features associated with a manorial centre at Clitterhouse Farm, as well as having good potential for previous phases of human occupation, due to the low levels of truncation, by comparison to the surrounding urban development areas. This area is likely to be affected by the landscaping plans for this area, which involve cut and fill operations. The Childs Hill (3a) ASAS is an asset of medium (regional) significance, with high potential for archaeological remains associated with the manorial centre at Clitterhouse Farm.

#### Non-designated Heritage Assets

13.6.18 ELO7969, within the west of the wider Site, adjacent to Edgware Road, highlights an assessment of the archaeological impact of proposed development works and was carried out in 2007 by Development Planning Partnership LLP. The contractor indicated that the ELO7969 site has potential for features relating to the Roman Watling Street within the footprint of the BXC development. However, they believed that any archaeological remains are likely to have been truncated by the construction of the railway sidings and warehouse currently present on the site. The contractors believed that the construction of basement parking under the site may impact upon any surviving archaeological deposits. In order to mitigate any impact on the archaeological remains they recommended a targeted watching brief during ground works to record any archaeological remains exposed during construction.

13.6.19 The course of the Roman road from Londinium (London) to Verulamium (St Albans) runs along the west side of the Site (Edgware Road) and remains of the actual road, or associated features, may be present. Where it survives this is an asset of medium (regional) significance.

13.6.20 The s.73 ES chapter assessment concluded that there is some potential for remains of other periods in the general area. Most significantly, it has been established through geotechnical investigations that Holocene alluvium and underlying Pleistocene terrace deposits are preserved within the River Brent valley, including within discrete areas within the Site. It is possible that archaeological artefacts and other remains may be preserved within these deposits, which are in themselves of interest for palaeo-environmental studies. Paleo-environmental deposits, where they survive, are assets of medium (regional) significance. Prehistoric remains associated with the areas of Holocene alluvium and underlying Pleistocene deposits within the historic channel of the River Brent, where they survive in situ are assets of high (national) significance, and where they survive as secondary deposits are assets of low (local) to medium (regional) significance.

13.6.21 Clitterhouse Farm itself is an asset of low (local) value. The farm is believed to be sited on the location of the former Clitterhouse Manor. The current buildings are vacant and derelict, however

this post-medieval farm complex originally had a moat (depicted in several historic maps), which is no longer visible above ground. The surviving building complex was part of a later dairy farm.

13.6.22 There are no other built heritage non-designated assets whose significance would be impacted by the proposed Development.

#### Deposit Survival

13.6.23 The extent to which any potential archaeological remains survive was set out in the s.73 ES and this remains unchanged but is represented here for ease of reference. The extent will depend on the nature and extent of any subsequent impacts on the Site – namely later agricultural uses and the subsequent development and redevelopment from the mid-nineteenth century onwards.

13.6.24 In the first instance, ploughing will have damaged and possibly destroyed any above ground remains such as earthworks. Remnant floor levels and other shallow deposits and features may have been removed by these activities; however, deeper cut archaeological features would still be preserved. Widespread industrial and commercial uses from the late nineteenth century onwards will have continued this process of resource denudation, with impacts now being generated to greater depths by basements, foundations, cuttings for the railway and widespread bulk excavation to change surface levels. By the end of the twentieth century, preservation of archaeological remains would, for the most part, likely be restricted to more substantial cut features (e.g. deeper ditches, pits, wells) in small isolated areas that had escaped major development such as the Brent Cross Shopping Centre, the railway lands, the industrial estates and construction of the M1 and other major roads and junctions. It should be noted, however, that any remains buried within or beneath superficial deposits such as alluvium or colluvium, might have been protected from the impacts identified in these locations. Such deposits are also an important resource in themselves and are known to be preserved within the Site.

13.6.25 The main exception to the above is the area of the Clitterhouse Playing Fields and Clitterhouse Farm, which has not been the subject of major development. The playing fields were converted to allotments during the Second World War which, in conjunction with likely earlier ploughing, will have had a limited impact on potential archaeological remains. It is also not known to what extent in the past the playing fields have been subjected to impacts from re-grading and drainage. As discussed above, the main phases of development at Clitterhouse Farm also will have generated impacts on the archaeological resource. Notwithstanding this, it is clear that any potential archaeological deposits are likely to be much better preserved in this area than the remainder of the Site, as evidenced by the recent geophysical survey carried out in January 2015, which identified superficial deposits (ridge and furrow and historic field boundaries) and possibly deeper deposits, represented in the south-west corner of the Site, survive within the ASAS. Further (intrusive) investigation will be undertaken to characterise and record these surviving deposits, as specified in the Site-specific WSI (**Appendix 13.2**).

## 13.7 Assessment and Mitigation

### Construction

#### Potential Impacts

13.7.1 The assessment of archaeological and cultural heritage impacts presented in the s.73 ES was based on the outline parameters of those elements which are now submitted in detail as part of the Phase

1A (North) RMAs. Specific proposals now exist for the Phase 1A (North) RMAs which have been considered using a more refined approach which reflects English Heritage guidance, and as such a quantitative assessment of potential impacts from the Development is provided in this section. The sources of impact identified in the s.73 ES were divided into two categories, ‘generic’ and ‘specific’. The ‘generic’ category does not need to be updated and remains valid, however the ‘specific’ category is updated above in section 13.3, in order to take account of the specific proposals for Phase 1A (North).

13.7.2 The assessment focuses on the Phase 1A (North) RMAs in light of the further details now being available. The assessment therefore in some cases, identifies impacts which were not identified in the s.73 ES due to the details not being available previously.

13.7.3 This assessment is based on the detailed design information provided as part of the Phase 1A (North) RMAs and considers the potential effect of the Development with Phase 1A (North) RMAs in place upon the heritage significance of heritage assets and their settings, within the Site and surrounding landscape. **Table 13.3** assesses the overall effect of the Development as a whole with the Phase 1A (North) RMAs in place on heritage values and significance. This is based on the criteria presented in **Table 13.2**, which define the significance of effect as a function of the value of the asset and the magnitude of impact.

13.7.4 The assessment is broken down in **Table 13.3** to assess the effects upon individual heritage values that contribute to significance as discussed above. Further commentary is then provided below the table.

Table 13.3: Significance of the Effect of the Development on Heritage Values

Heritage Significance	Heritage Value	Magnitude of Impact	Significance of Effect
Evidential	<i>Childs Hill (3a) ASAS - medium</i>	Major Adverse  (The proposed changes to this asset would significantly damage the overall character of potential heritage assets within the ASAS. They will cause a notable disruption to, or in some cases, complete destruction of, potentially significant features.)	Moderate to Large Adverse
	<i>Watling Street - medium</i>	Minor Adverse  (The proposed changes will have minor impact on the setting or overall character of a heritage asset.)	Slight Adverse

Heritage Significance	Heritage Value	Magnitude of Impact	Significance of Effect
	<b><i>Paleo-environmental-medium</i></b>	Major Adverse  (The proposed changes to this asset would significantly damage the overall character of potential heritage assets within the ASAS and the area between the Brent Cross Shopping Centre and the A406. They will cause a notable disruption to, or in some cases, complete destruction of, potentially significant features.)	Moderate to Large Adverse
	<b><i>Prehistoric deposits in River Brent channel – high (in situ) or low to medium (secondary)</i></b>	Major Adverse  (The proposed changes to this asset would significantly damage the overall character of potential heritage assets within the historic River Brent channel. They will cause a notable disruption to, or in some cases, complete destruction of, potentially significant features.)	Moderate to Large Adverse
	<b><i>Clitterhouse Farm – low</i></b>	Major Beneficial  (The proposed changes will significantly improve the overall setting and character of heritage assets, revealing and/or enhancing important characteristics which were previously unknown or inaccessible. There would be a substantial improvement to important elements of the asset.)	Moderate Beneficial
<b>Historical</b>	<b><i>Childs Hill (3a) ASAS - medium</i></b>	Major Adverse  (The proposed changes to this asset would significantly damage the overall character of potential heritage assets within the ASAS. They will cause a notable disruption to, or in some cases, complete destruction of, potentially significant features.)	Moderate to Large Adverse

Heritage Significance	Heritage Value	Magnitude of Impact	Significance of Effect
	<b><i>Watling Street - medium</i></b>	Minor Adverse  (The proposed changes will have minor impact on the setting or overall character of a heritage asset.)	Slight Adverse
	<b><i>Paleo-environmental-neutral</i></b>	None	Neutral
	<b><i>Prehistoric deposits in River Brent channel – neutral</i></b>	None	Neutral
	<b><i>Clitterhouse Farm – low</i></b>	Major Beneficial  (The proposed changes will significantly improve the overall setting and character of heritage assets, revealing and/or enhancing important characteristics which were previously unknown or inaccessible. There would be a substantial improvement to important elements of the asset.)	Moderate Beneficial
<b>Aesthetic</b>	<b><i>Childs Hill (3a) ASAS - neutral</i></b>	None	Neutral
	<b><i>Watling Street - neutral</i></b>	None	Neutral
	<b><i>Paleo-environmental-neutral</i></b>	None	Neutral
	<b><i>Prehistoric deposits in River Brent channel – neutral</i></b>	None	Neutral

Heritage Significance	Heritage Value	Magnitude of Impact	Significance of Effect
	<i>Clitterhouse Farm – low</i>	Major Beneficial  (The proposed changes will significantly improve the overall setting and character of heritage assets, revealing and/or enhancing important characteristics which were previously unknown or inaccessible. There would be a substantial improvement to important elements of the asset.)	Moderate Beneficial
<b>Communal</b>	<i>Childs Hill (3a) ASAS – neutral</i>	None	Neutral
	<i>Watling Street - neutral</i>	None	Neutral
	<i>Paleo-environmental-neutral</i>	None	Neutral
	<i>Prehistoric deposits in River Brent channel – neutral</i>	None	Neutral
	<i>Clitterhouse Farm – low</i>	Major Beneficial  (The proposed changes will significantly improve the overall setting and character of heritage assets, revealing and/or enhancing important characteristics which were previously unknown or inaccessible. There would be a substantial improvement to important elements of the asset.)	Moderate Beneficial

#### Designated Sites (including Childs Hill ASAS)

- 13.7.5 There will be no impacts of the detailed proposals of the Phase 1A (North) RMAs on any nationally or locally designated heritage assets (including scheduled monuments, conservation areas, listed buildings, locally listed buildings, registered parks and gardens or registered battlefields).
- 13.7.6 The only exception to this is the potential impact of the Development on the Childs Hill (3a) ASAS. The Cricklewood ASAS bordering the Site, has been excluded from consideration, as set out above.
- 13.7.7 The Childs Hill (3a) ASAS was adopted in 2006, and the s.73 ES makes brief reference to this designated asset of medium significance. The effects on this area are described further below.
- 13.7.8 The Clitterhouse Playing Fields Improvements Part 1 (excluding Clitterhouse Stream Nature Park, but including plots 52 and 82), and potentially the Orchard Lane, include significant ground intrusive elements. The Clitterhouse Playing Fields will be improved by the introduction of a number of sports pitches and informal playing fields, a multi-use games area (MUGA)/tennis courts, a play area, a sports pavilion/changing rooms, maintenance store and office and a car park area. The detailed landscape drawings indicate that re-profiling will result in areas of cut (maximum of 1m) and fill (maximum 0.4m) in areas where new sports pitches are proposed (refer to **Figure 13.1**). 18 window sample logs for this area (see **Appendix 15.2**) have been reviewed and the depth of the made ground layer was found to vary in depth between 0.08 and 0.40 m (with one exception where it goes down to 1.4 m at the north-west of the playing fields). Additionally, the reworked clay combined with the made ground layer, i.e. the layers with the most archaeological potential varies between 1.0 and 1.5 m, with only two exceptions where it goes down to 3.2 m in the vicinity of where a moat may have been. Other construction activity proposed within the Clitterhouse Playing Fields is also likely to give rise to archaeological impacts as described above. These deposits are likely to be at shallow depths, and therefore any excavation could potentially impact this asset. A geophysical survey carried out in January 2015 identified a number of archaeological features, including what were interpreted as remains of ridge and furrow on the south-east of the ASAS, a possible historic field boundary running east to west around the centre of the ASAS, and a number of other discreet features on the south-west of the ASAS which were not possible to interpret from the data gathered. The geophysical survey also identified the location of the recent window sampling.
- 13.7.9 The proposed changes to this asset would cause a notable disruption to, or in some cases, complete destruction of, potentially significant features. The magnitude of impact from the Development on this asset would therefore be major adverse. The Development would therefore have an effect of **permanent moderate to large adverse significance** on the designated Childs Hill (3a) ASAS. Despite the area being designated as an ASAS, there is nevertheless a degree of uncertainty regarding the quality of this heritage asset, which cannot be completely defined until the programme archaeological evaluation, as set out in the Phase-specific WSI (**Appendix 13.2**) has been completed to confirm the level of potential, and record heritage assets identified through evaluation.

#### Watling Street

- 13.7.10 Watling Street (along the course of Edgware Road) is an asset of medium significance. The A5/A407 Cricklewood Lane Junction Improvements, and M1/A406 and A5/A406 Junction Improvements include significant ground intrusive elements. These elements of the Consented Scheme however already have detailed planning permission but are considered here for completeness. Bearing in mind the scale of this asset, the proposed changes will have minor impact on its setting or overall character. The magnitude of impact from the Development on this asset would therefore be minor

adverse. The Development would therefore potentially have an effect of **permanent slight adverse** significance on Watling Street.

#### *Paleo-environmental Deposits*

13.7.11 The likelihood of the presence of paleo-environmental deposits to be present in discrete areas within the north of the Site (between the Brent Cross Shopping Centre and the A406, has been confirmed by a number of geotechnical investigations. As stated above this is an asset of medium (regional) significance. A number of ground intrusive works would be carried out in this area, namely:

- A406 Brent Cross Ingress/Egress Junction Improvements;
- Brent Cross Pedestrian Underpass;
- Prince Charles Drive Diversion;
- Bridge Structure B1 (replacement A406 Templehof Bridge);
- Bridge Structure B6 (M1 Junction Pedestrian and Cycle Bridge);
- Eastern River Brent Alteration and Diversion Works;
- River Brent Bridges (as relevant to the Eastern River Brent Alteration and Diversion Works);
- Central River Brent Alteration and Diversion Works;
- River Brent Bridges (as relevant to the Central river Brent Alteration and Diversion Works);
- Central Brent Riverside Park;
- Western River Brent Alterations and Diversion Works;
- River Brent Bridges (as relevant to the Western River Brent alteration and diversion works);
- Living Bridge; and
- Temporary Bus Station and Bus Stops (Plots 113 and 114).

13.7.12 These works, which include significant ground intrusive elements, would significantly damage the overall character of potential heritage assets. They will cause a notable disruption to, or in some cases, complete destruction of, potentially significant features. The magnitude of impact from the Development on paleo-environmental deposits would therefore be major adverse. The Development would therefore have an effect of **permanent moderate to large adverse** significance on paleo-environmental remains within the north of the Site.

#### *Pre-historic Remains*

13.7.13 The same proposed Development works listed above, and related to infrastructure, river diversion as well as works related to the temporary bus station and bus stops, would also have a major adverse magnitude of impact on Pre-historic remains associated with the areas of Holocene alluvium and underlying Pleistocene deposits within the historic channel of the River Brent. Where these survive *in situ* are assets of high (national) significance, and where they survive as secondary deposits are assets of low (local) to medium (regional) significance. Therefore the effects from the Development would range in significance from **permanent moderate adverse** significance for secondary deposits to **permanent large adverse** significance for primary deposits, should these exist within the proposed Development boundary.

#### *Clitterhouse Farm*

- 13.7.14 Clitterhouse Farm is an asset of low (local) significance. The s.73 ES assesses this heritage asset as a component of the Clitterhouse manorial complex. The Clitterhouse Farm buildings are owned by LBB and lie adjacent to the Clitterhouse Playing Fields, for which 'Part 1 improvements' lie within Phase 1A (North) RMA works. The farm buildings were originally planned to be removed under the 2014 Permission but are now proposed to be retained and refurbished partially in Phase 1A (North) and partially in Phase 2 South (as part of Clitterhouse Playing Fields Part 2). The majority of the works on the buildings will be brought forward as part of the later development (i.e. by the Southern Developer), however as indicated below there is provision for office and maintenance storage space within the Phase 1A (North) Open Space RMA. As such, refurbishment of certain areas of the farm buildings will be undertaken within the current package of works for Phase 1A (North).
- 13.7.15 A revision to Schedule 28 to the S106 Agreement will be submitted to include the proposed works undertaken in 'Clitterhouse Playing Fields Improvements Part 1' i.e. within Phase 1A (North), this includes provision for a maintenance store and office within the farm buildings and yard, as indicated on Parameter Plan 012 of the 2014 Permission. The existing buildings are to be refurbished and in line with a revised schedule of accommodation providing space for an office and changing area, an internal store and external use.
- 13.7.16 Sympathetic restoration of this building for use as offices and storage would potentially significantly improve the overall setting and character of this heritage asset, revealing and/or enhancing important characteristics which were previously unknown or inaccessible. There would be a substantial improvement to important elements of the assets. The magnitude of impact would therefore be major beneficial. The resulting effect from the Development on this asset would be of **permanent moderate beneficial** significance.

#### Mitigation

- 13.7.17 As stated above, since preparation of the s.73 ES Waterman have carried out consultation with GLAAS, in their role as advisors to the LBB. As a result of this consultation it was agreed that the blanket approach proposed as mitigation in the s.73 ES of a watching brief over all intrusive groundworks was not appropriately refined to address the potential impacts from the Development on the different asset groups and on their significance.
- 13.7.18 This Chapter is supported by **Appendix 13.1**: Site-wide Written Scheme of Investigation and **Appendix 13.2**: Phase 1A (North) Written Scheme of Investigation. The aim of these documents is to provide a mitigation strategy for the Site as a whole, which then leads to the specific mitigation proposed for the Phase 1A (North) Development. These documents, which also set out the methodology for fieldwork, are subject to planning conditions and would be approved by GLAAS and LBB prior to the commencement of works.
- 13.7.19 In general terms, the mitigation targets:
- Archaeological remains at Clitterhouse Playing Fields and Farm, which would have significant potential for elucidating the origins and development of the Site and, in parallel, the early medieval development of Hendon. Of particular interest would be the chance to establish the relationship of the Site to the Saxon estates that subsequently made up the manor of Hendon.
  - The presence of a major Roman road and the River Brent will have been factors that may have attracted settlement during the prehistoric and Roman periods. It is also quite possible that there is additional Saxon/Medieval settlement in the Study Area associated with the known manorial

centres. The potential for these remains to be present within the Site boundary has not been confirmed.

- Holocene alluvium and earlier Pleistocene gravels/silts are preserved beneath the former floodplain of the River Brent. Consequently, there is the potential for recovering data relevant to the study of the changing local environment and landscape, and its interaction with human settlement and exploitation through time.

13.7.20 As set out in **Appendices 13.1** and **13.2**, in accordance with the Planning Condition 43.1 on the S.73 consent, it has been agreed with GLAAS that it will be necessary to provide information from non-intrusive and intrusive evaluation of parts of the Site, in order to characterise any buried heritage assets thereby revealed. This evaluation would target areas with both potential for archaeology and low levels of expected truncation, and would consist of a range of mitigation strategies including:

- Watching Brief;
- Building Recording;
- Paleo-environmental Sampling; and
- Evaluation.

13.7.21 The different mitigation strategies, devised in response to Planning Condition 43.1 on the S.73 consent, and applicable to different areas of the Development, are identified in **Figure 13.2**. The works which would affect heritage assets are identified above in section 13.3. A summary of which mitigation strategies are applicable to which sub-phases of development is set out below.

#### *Childs Hill ASAS*

13.7.22 Construction of Clitterhouse Playing Fields Improvements Part 1 (excluding Clitterhouse Stream Nature Park, but including plots 52 and 82), and potentially Orchard Lane, includes significant ground intrusive elements on the Child's Hill (3a) ASAS. The mitigation proposed for this asset consists of a programme of archaeological evaluation, which will follow on from the geophysical survey carried out in January 2015, and will be followed by trial trenching targeting specific features identified during the geophysical survey. The methodology for this watching brief is set out in **Appendices 13.1** and **13.2**. The evaluation would be designed to include community involvement, by local groups, such as the Hendon and District Archaeological Society.

#### *Watling Street*

13.7.23 The A5/A407 Cricklewood Lane Junction Improvements, M1/A406 and A5/A406 Junction Improvements already have detailed planning permission although they include significant ground intrusive elements on the course of Watling Street. The mitigation proposed for this asset consists of carrying out an archaeological watching brief over ground intrusive works which extend to Edgware Road.

#### *Paleo-environmental deposits*

13.7.24 A number of ground intrusive works would be carried out between the Brent Cross Shopping Centre and the A406, which could affect Paleo-environmental deposits namely:

- A406 Brent Cross Ingress/Egress Junction Improvements;
- Brent Cross Pedestrian Underpass;
- Prince Charles Drive Diversion;

- Bridge Structure B1 (replacement A406 Templehof Bridge);
- Bridge Structure B6 (M1 Junction Pedestrian and Cycle Bridge);
- Eastern River Brent Alteration and Diversion Works;
- River Brent Bridges (as relevant to the Eastern River Brent Alteration and Diversion Works);
- Central River Brent Alteration and Diversion Works;
- River Brent Bridges (as relevant to the Central river Brent Alteration and Diversion Works);
- Central Brent Riverside Park;
- Western River Brent Alterations and Diversion Works;
- River Brent Bridges (as relevant to the Western River Brent alteration and diversion works);
- Living Bridge; and
- Temporary Bus Station

13.7.25 These works include significant ground intrusive elements. The mitigation proposed for this asset consists of paleo-environmental sampling ahead of any ground-intrusive works (or, if appropriate, in conjunction with initial geotechnical ground investigation work). The methodology for this watching brief is set out in **Appendices 13.1 and 13.2**.

#### *Pre-historic remains*

13.7.26 The same proposed works listed above, and related to infrastructure and river diversion, would also have an impact on Prehistoric remains associated with the areas of Holocene alluvium and underlying Pleistocene deposits within the historic channel of the River Brent. The mitigation proposed for this asset consists of carrying out a watching brief over ground intrusive works related to the sub-phases identified. The methodology for this watching brief is set out in **Appendices 13.1 and 13.2**.

#### *Clitterhouse Farm*

13.7.27 Clitterhouse Farm Buildings would be the subject of a sympathetic restoration asset, to be used as offices and storage. Whilst the potential effect resulting from sympathetic restoration has been identified as permanent moderate beneficial historical building recording would be undertaken to English Heritage Level 3. The output of this building recording would inform the details of the restoration process in order to achieve the potential benefits from the Development on this asset. The building recording exercise would be undertaken by a suitably qualified Contractor with input from local groups, such as the Clitterhouse Farm Project and the Hendon and District Archaeological Society.

#### *Residual Impacts*

#### *Designated Sites*

13.7.28 The Childs Hill (3a) ASAS is an asset of medium significance. The proposed mitigation for this area consists of a programme of non-intrusive and intrusive archaeological evaluation with an element of community involvement. The first phase of this programme, a geophysical survey of the ASAS, was carried out in in January 2015. The second stage of this mitigation would target archaeological remains identified during the geophysical survey at Clitterhouse Playing Fields, which would have significant potential for elucidating the origins and development of the Site and, in parallel, the early

medieval development of Hendon. Of particular interest would be the chance to establish the relationship of the Site to the Saxon estates that subsequently made up the manor of Hendon. The intention to involve the local community, through the participation of interested parties such as the Hendon and District Archaeological Society, would be of benefit to the community's connection with their heritage, and ultimately it would lead to a greater degree of public engagement, which is assessed as a beneficial outcome of archaeological investigations. This mitigation would also be consistent with the aims of the Urban Historic Environment Thematic Strategy laid out by English Heritage, as set out in section 13.2. As set out in the s.73 ES, "*the potential negative impacts identified by the assessment would arise from the loss of physical remains. Such physical loss is irreversible and thus the potential effects, if realised, would be permanent. Likewise, any potential positive effects that arise from mitigation would also be permanent.*" The residual effect on this heritage asset would therefore remain **permanent** and of **moderate to large adverse** significance.

#### *Watling Street*

13.7.29 Watling Street (along the course of Edgware Road) is an asset of medium significance. The Development would potentially have an effect of permanent slight adverse significance on Watling Street. The mitigation would target the presence of this major Roman road. As with the Childs Hill (3a) ASAS, the residual effect on this heritage asset would remain as prior to mitigation, i.e. **permanent and of slight adverse** significance.

#### *Paleo-environmental deposits*

13.7.30 The likelihood of the presence of paleo-environmental deposits to be present in discrete areas within the north of the Site (between the Brent Cross Shopping Centre and the A406, has been confirmed by a number of geotechnical investigations. As stated above this is an asset of medium (regional) significance. The Development would have an effect of permanent moderate to large adverse significance on paleo-environmental remains within the north of the Site. The mitigation proposed (paleo-environmental sampling) would target the location of the historic course of the River Brent as a possible location for settlement during the prehistoric and Roman periods, as well as Holocene alluvium and earlier Pleistocene gravels/silts preserved beneath the former floodplain of the River Brent, which could potentially recover data relevant to the study of the changing local environment and landscape, and its interaction with human settlement and exploitation through time. This mitigation would be consistent with three of the critical priorities set out in the Prehistoric Thematic Strategy as laid out by English Heritage, namely:

- Integrated approaches to prehistoric landscapes: filling gaps, understanding biases, improving methodologies and connecting different types of landscape;
- Understanding 'sites without structures': improving understanding of and methods of characterising ephemeral sites, especially lithic scatters; and
- Improving access to unpublished data: grey literature synthesis, archive research, backlog publications and enhancing Historic Environment Record (HER) data.

13.7.31 Given the potentially significant positive contribution that this mitigation would make to the paleo-environmental record of the region, the residual effect of the Development on this asset would be reduced to **permanent** and of **moderate adverse** significance.

#### *Pre-historic Remains*

13.7.32 Prehistoric remains associated with the areas of Holocene alluvium and underlying Pleistocene deposits within the historic channel of the River Brent, where they survive *in situ* are assets of high (national) significance, and where they survive as secondary deposits are assets of low (local) to medium (regional) significance. The effects from the Development with the Phase 1A (North) RMAs in place would therefore range in significance from permanent moderate adverse significance for secondary deposits to permanent large adverse significance for primary deposits. The mitigation proposed would consist of an archaeological watching brief over ground intrusive works in the sub-phases identified above. The methodology for this watching brief is set out in **Appendices 13.1 and 13.2**. As above, this mitigation would address three of the critical priorities set out in the Prehistoric Thematic Strategy, however, the Development would still result in the complete destruction of this asset, and therefore the residual effect would remain permanent moderate adverse significance for secondary deposits to permanent large adverse significance for primary (*in situ*) deposits. It is important to note that the possibility of encountering primary deposits (*in situ*) in the area proposed for watching brief is very low, due to the very significant truncation caused by the previous diversion of the River Brent. Therefore, for the purpose of this assessment the residual effect is presented as **permanent moderate adverse** significance (for secondary deposits).

#### *Clitterhouse Farm*

13.7.33 Clitterhouse Farm is an asset of low (local) significance. The resulting effect from the Development on this asset would be of permanent moderate beneficial significance. The mitigation proposed for this asset would consist of historical building recording to English Heritage Level 3. The intention to involve the local community, through the participation of interested parties such as the Clitterhouse Farm Project and the Hendon and District Archaeological Society, would be of benefit to the community's connection with local heritage, and ultimately it would lead to a greater degree of engagement with the subject. The output of this building recording would inform the restoration process in order to achieve the potential benefits from the Development on this asset, thereby adding

to the positive contribution to the significance of this asset, which would be retained within the development. The residual effect would therefore be of **permanent large beneficial** significance.

### Operation

#### Potential Impacts

13.7.34 All potential effects on the heritage resource would take place during the construction phase, and therefore no potential impacts would arise during the operational phase of the Development.

#### Mitigation

13.7.35 No mitigation is proposed for the operational phase of the Development, as there would be no potential impacts on the heritage resource during this phase.

#### Residual Impacts

13.7.36 As there are no potential impacts during the operational phase of the Development, there would be **no residual impacts** either.

## 13.8 Summary

13.8.1 **Table 13.3** below identifies all potential impacts, agreed mitigation measures, and residual impacts, as identified in this chapter.

Table 13.4: Potential Impacts, Mitigation and Residual Impacts

Issue	Potential Impacts	Mitigation	Residual Impacts
<b>Construction</b>			
Childs Hill (3a) ASAS	Permanent Moderate to Large Adverse	Geophysical Survey (already complete) followed by Targeted Trial Trench Evaluation	Permanent Moderate to Large Adverse
Watling Street	Permanent, Slight Adverse	Archaeological Watching Brief	Permanent, Slight Adverse
Paleo-environmental deposits	Permanent, Moderate to Large Adverse	Paleo-environmental Sampling	Permanent, Moderate Adverse
Prehistoric Remains	Permanent, Moderate to Large Adverse	Archaeological Watching Brief	Permanent, Moderate Adverse (for secondary deposits)
Clitterhouse Farm	Permanent, Moderate Beneficial	Archaeological Building Recording	Permanent, Large Beneficial
<b>Operation</b>			
None	None	None	None

## References

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- <sup>i</sup> Greater London Authority (GLA), 2011. Revised Early Minor Alterations to the London Plan, 2012
- <sup>ii</sup> Mayor of London (2014); 'Draft Further Alterations to the London Plan, January 2014', Greater London Authority, London
- <sup>iii</sup> Mayor of London (2014); 'Sustainable Design and Construction – Supplementary Planning Guidance' Greater London Authority, London
- <sup>iv</sup> English Heritage, April 2008. Conservation Principles – Policies and guidance for the sustainable management of the historic environment
- <sup>v</sup> English Heritage, October 2011. The Setting of Heritage Assets
- <sup>vi</sup> English Heritage, April 2008. Conservation Principles – Policies and guidance for the sustainable management of the historic environment
- <sup>vii</sup> English Heritage, October 2011. The Setting of Heritage Assets
- <sup>viii</sup> The Highways Agency, August 2007. Design Manual for Roads and Bridges, Volume 11, Section 3, Part 2 HA 208/ 07 Cultural Heritage
- <sup>ix</sup> International Council on Monuments and Sites (ICOMOS), 2010. Guidance on Heritage Impact Assessments for Cultural World Heritage Properties