Statutory Consultation 2022

Preliminary Environmental Information Report

Volume 3: Appendix 10.6 Draft Cultural Heritage Management Plan

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1 INTRODUCTION

1.1 Overview

- 1.1.1 This document presents a Draft Cultural Heritage Management Plan (CHMP), which sets out the proposed cultural heritage mitigation strategies that are required as a result of the Proposed Development. Mitigation strategies that may be required as a result of the Proposed Development comprise:
 - a. Preservation of archaeological remains during construction and operation.
 - b. Detailed excavation of archaeological remains in advance of specific construction activities.
 - c. Monitoring of cultural heritage assets to help inform future conservation strategies.

1.2 The Application Site

- 1.2.1 The Application Site, centred on NGR 12626 21530, is located approximately 45km north west of London and approximately 2km to the east of Luton Town Centre. The Application Site straddles the local authority boundaries of Central Bedfordshire Council and Hertfordshire County Council. Land to the west and north of the Application Site is largely residential and industrial with rural arable fields to the east and south.
- 1.2.2 The principal components of the Proposed Development include the refurbishment of the existing terminal (Terminal 1), creation of a new terminal (Terminal 2), replacement and additional car parks, an extension to the Luton Direct Air to Rail Transit (DART) with a station at Terminal 2, highway network improvements and landscape mitigation planting.
- 1.2.3 The Main Application Site (as defined in **Chapter 2** in Volume 2 of the PEIR) comprises approximately 472ha of land including the existing airport and land immediately to the east consisting of arable land and woodland.
- 1.2.4 The Off-site Car Parks consist of two locations to the south west of the airport, within a commercial area dominated by existing transport infrastructure. The Midland Mainline Railway passes between the two Car Parks.
- 1.2.5 Off-site Highways Interventions comprises several sites where highway improvements are required to facilitate the increase in airport capacity. Each of these interventions is in an urban context and restricted, as far as possible, to existing highway boundaries.

1.3 The Purpose and Structure of this Document

- 1.3.1 The purpose of this document is to outline the methodologies for potential archaeological mitigation strategies. Agreement and implementation of the final mitigation strategies will be secured by a requirement of the DCO.
- 1.3.2 This document will be subject to engagement with relevant local authorities and other statutory bodies prior to submission of the DCO application. This will

include Historic England, the Central Bedfordshire Council Archaeologist (CBCA) and the Hertfordshire County Council Archaeologist (HCCA). This document will be refined, as necessary, as the results of forthcoming archaeological evaluation become available and the Proposed Development design develops.

- 1.3.3 This document is structured as follows:
 - a. **Section 2** describes the background information relevant to this document;
 - b. **Section 3** describes the scope of works and aims and objectives of the fieldwork;
 - c. **Section 4** describes the works specification for preservation of archaeological remains;
 - d. Section 5 describes the works specification for detailed excavation;
 - e. **Section 6** describes the works specification for archaeological monitoring;
 - f. **Section 7** describes monitoring, progress report and meeting requirements;
 - g. **Section 8** describes the process following the completion of archaeological fieldwork;
 - h. **Section 9** describes the stage specific archaeological contractor's method statement methodology;
 - i. **Section 10** describes the fieldwork report deliverables produced following the completion of each phase of archaeological fieldwork;
 - j. **Section 11** describes the archive preparation and deposition requirements;
 - k. Section 12 describes the general project requirements; and
 - I. **Section 13** describes the insurances and health and safety requirements.

2 BACKGROUND INFORMATION

2.1 Overview

2.1.1 The heritage context for the Application Site has been set out in detail in a Desk-based Assessment (**Appendix 10.1** in Volume 3 to the PEIR) and is summarised here. Heritage assets and previous archaeological investigations are outlined in the Gazetteer (**Appendix 10.2** in Volume 3 to the PEIR) and can be seen on **Figures 10.1 to 10.4** in Volume 4 to this PEIR.

Site Location, Topography and Geology

- 2.1.2 The Site is located on a north south aligned ridge within the Chilterns. The Site sits on a series of dry valleys and lies at an elevation ranging from approximately 120m AOD to 160m AOD, with the northern and central areas of the Main Application Site having the highest elevations.
- 2.1.3 The underlying geology across most of the Site is recorded as undifferentiated Lewes Nodular Chalk Formation and Seaford Chalk Formation with bands of Holywell Nodular Chalk Formation, New Pit Chalk Formation and Chalk Rock Member running along the eastern and western extents of the Site. Overlying these chalk formations are Clay-with-flints Formation deposits. Superficial Head deposits consisting of clay, silt, sand and gravel are present in the dry valleys to the east of the Site.

2.2 Previous Archaeological Investigations

- 2.2.1 Fieldwalking (EHT4338), geophysical survey (EHT4336) and a trial trench evaluation (EHT4337) were undertaken on land at Winch Hill Farm, King's Walden in 1990 which identified a series of Romano-British features (HER 7358) probably representing a farmstead. Further fieldwalking (EBD692) was undertaken in 1996 which identified the probable site of a Romano-British building. The surface evidence identified during the survey suggested the site of at least one substantial building, with perhaps a hypocaust and/or bath house.
- 2.2.2 Fieldwalking (EBD1241) was undertaken around north east Luton in 1989-1990. This survey identified Mesolithic and late Neolithic – Bronze Age flint scatters, scatters of Iron Age, Romano-British and medieval pottery and ridge and furrow earthworks and ploughed out lynchets.
- 2.2.3 In 1997 a trench was excavated in Wigmore Valley Park (EBD1242) which cut through an extensive range of Roman occupation features including flint surfaces, pits and ditches and produced finds of Roman tile and late Iron Age Romano British pottery sherds. A subsequent geophysical survey (EBD1243) was undertaken in 2004 which identified evidence for a substantial structure.
- 2.2.4 In 2008, a geophysical survey (EBD692) was undertaken on an area measuring approximately 41ha to the north east of Luton Airport, including within the Application Site. The survey identified a small complex of magnetic responses which are probably a component of a small Romano-British site. The possible Romano-British site has previously been recorded on the HER (HER 10808) and identified through previous archaeological investigations. The anomalies

were not very well defined which suggests that the features may have been damaged by ploughing. Elsewhere, natural magnetic responses reflected localised changes in the chalk bedrock and soils.

- 2.2.5 In 2018 and 2019, two phases of geophysical survey were undertaken for the Proposed Development on land to the east of Luton Airport. The 2018 survey identified the small Romano-British site (HER 10808) that was identified during the 2008 survey. A possible pit alignment was also identified. The 2019 geophysical survey identified a small number of possible ditches across the surveyed area, but none forming groups or having diagnostic character.
- 2.2.6 In 2019, a trial trench evaluation was undertaken on land to the east of Luton Airport. The evaluation identified a single pit of Neolithic date and confirmed the presence of Late Iron Age / Early Roman and Romano-British activity in the form of a number of ditches which seemingly formed an enclosure encompassing the remains of a small building and a series of rubbish pits.
- 2.2.7 A further phase of trial trench evaluation is programmed to be undertaken in 2021, the scope of which is to be agreed with the CBCA and the HCCA.

2.3 Historical and Archaeological Background

Early Prehistoric (up to 4,000 BC)

2.3.1 The only evidence for early prehistoric activity identified within the 1km study area is a Mesolithic flint scatter (HER 15052) located approximately 500m north of the Main Application Site, just south of Brickkiln Wood, Cockernhoe.

Late Prehistoric (c. 4,000 BC – AD43)

- 2.3.2 An archaeological investigation undertaken in 2008 on land to the north-east of Luton Airport, approximately 600m north of the Main Application Site boundary, identified a pit containing Neolithic pottery sherds (HER 16290). An archaeological trial trench evaluation undertaken on land to the east of Luton Airport, within the Main Application Site boundary also identified a single pit of Neolithic date.
- 2.3.3 Extensive fieldwalking in the study area identified multiple Late Neolithic / Early Bronze Age flint scatters (HER 16076; HER 12600; HER 15053; HER 15054).
- 2.3.4 Cropmarks located approximately 300m south of the Main Application Site were identified during aerial photograph analysis (EBD447) of land south of Luton Airport. A trapezoidal enclosure was identified, with other features nearby, including a circular feature intersected by two parallel features and other linear features (HER 15090). These are likely to date from the late Bronze Age / Early Iron Age to Romano-British and a late Iron Age saddle quern was found during fieldwalking of the area.
- 2.3.5 An archaeological investigation at Wigmore Valley Park (EBD1242), located within the Main Application Site boundary comprised a single trench excavation undertaken in 1997. This investigation exposed a number of features, notably two double ditches, both containing late Iron Age and Romano British pottery sherds.

- 2.3.6 In 2019, a trial trench evaluation was undertaken on land to the east of Luton Airport which identified a number of ditches which seemingly formed an enclosure encompassing the remains of a small building and a series of rubbish pits, which contained Late Iron Age – Early Roman transitional period pottery.
- 2.3.7 A survey of earthworks (EHT6748) within Brickkiln Wood, approximately 900m north of the Main Application Site, identified a possible late Iron Age late Roman enclosure (HER 16645). An archaeological investigation during the construction of a pipeline, approximately 900m north of the Main Application Site, identified a number of features related to late Iron Age occupation and which produced late Iron Age pottery and a single urned cremation (HER 7359). Further Iron Age activity is identified by spot finds of Iron Age pottery sherds (HER 10810).

Roman (AD 43 – 410)

- 2.3.8 In 1997 a trench was excavated in Wigmore Valley Park (EBD1242), located within the Main Application Site boundary. This cut through an extensive range of Roman occupation features including flint surfaces, pits and double ditches and produced finds of Roman tile and late Iron Age – Romano British pottery sherds. A subsequent geophysical survey (EBD1243) was undertaken in 2004 which identified evidence for a substantial structure. A possible Roman occupation site (HER 10808) was known to exist in this area since an analysis of aerial photographs undertaken in 1976 identified two ring-ditches and a linear feature. Further fieldwalking (EBD692) of the area revealed pottery and tile, including tegulae, imbrex, flue and hypocaust tiles, indicating the possible location of a Roman building. In 2019, a trial trench evaluation was undertaken on the same land which identified evidence of Late Iron Age / Early Roman and Romano-British activity in the form of a number of ditches which seemingly formed an enclosure encompassing the remains of a small building and a series of rubbish pits.
- 2.3.9 A series of archaeological investigations (EHT4336; EHT4337) were undertaken at Winch Hill Farm, located to the east of Luton Airport and within the Main Application Site boundary, which identified a number of Romano-British features probably representing a farmstead (HER 7358). Later fieldwalking of the site revealed a large amount of Roman and medieval pottery (EHT4338).
- 2.3.10 In 2000, a few Iron Age/ Roman pottery sherds were identified in the backfill of a cable trench on Pasture Lane, and subsequent fieldwalking in 2008 in the field to the east identified a small scatter of Romano-British pottery sherds (HER 10810). Roman pottery sherds were also identified within a ditch (HER 1466) during construction works at the Luton Airport site in 1960. Further Roman activity has been identified in the form of findspots of Roman pottery sherds and building material (HER 11461; HER 11584; HER 12600), Roman coin (HER 1949), a copper alloy pin (HER 18285), and Roman extraction pits (HER 16293).

Early Medieval (410 – 1066)

2.3.11 A probable female inhumation (HER 1248), dated to c. 670, was found in 1913 by workmen on land between Breachwood Green and Darley Hall, King's Walden, approximately 100m east of the Main Application Site boundary. Multiple Anglo-Saxon finds were identified including four brooches however no human remains were located.

Medieval (1066 – 1540)

- 2.3.12 Wandon End (HER 1837) is an area located on the northern extent of the Main Application Site boundary within the parish of King's Walden and is purported to be a deserted medieval village, being recorded in the Domesday Book as having six households. The place-name however implies not a village but a scatter of buildings around the many ends and greens characteristic of the areas dispersed settlement pattern such as that at Crawley Green (HER 12403; HER 17102).
- 2.3.13 The probable site of St. Anne's Tower and Chapel (HER 361), thought to have been built in the early 12th century is located approximately 800m west of the Main Application Site boundary. The land was owned by the Abbots of St. Albans with the chapel being demolished in the 17th century and the tower being demolished in the early 18th century.
- 2.3.14 The site of the Hospital of St. Mary Magdalene (HER 362) is located within the Main Application Site boundary. It is thought to have been a leper hospital founded by Thomas Becket before 1170 and dissolved in c.1540. It was located to the east of Spittlesey / Spittlesea Wood, an area now occupied by Luton Airport. Spittlesea Wood is visible on historic OS mapping dated from 1885 through to 1955 with remnants of the wood still remaining as part of the current Luton Airport site.
- 2.3.15 Someries Castle (NHLE 1008452) is a late-medieval 15th century fortified manor house located approximately 250m south of the Main Application Site boundary. The remains of the original medieval manor house and gardens are now only visible as earthworks, although remains of the gatehouse, incorporating the chapel and lodge, are still partially standing (HER 360). The name Someries Castle is derived from William de Someries whose residence stood on the site in the 13th century. Sir John Wenlock built Someries Castle in the 15th century and the garden earthworks are in the style of formal gardens of the 16th and 17th centuries. The house was never completed with much of the building demolished in 1742. This is reinforced by 18th century prints which show the ruins largely as they stand today.
- 2.3.16 During the medieval period, the main economic activity in the area was agriculture. This is evidenced in extant medieval buildings, such as those at Breachwood Green which include Manor Farm (Grade II, NHLE 1102444) that dates to the 16th century or possibly earlier and Heath Farmhouse (Grade II, NHLE 1366120), a late 15th century farmhouse.
- 2.3.17 There are a number of ancient woodlands with medieval origins within the study area including George Wood (HER 13172) and Kidney/Bulls Wood (HER

13242), both located approximately 600m to the south-west of the Main Application Site boundary. There are also a number of sites of possible medieval rabbit warrens located within the study area. One at Coney Ground (HER 12372) near Someries Farm and one at Kimpton Lane (HER 12371) which is within the eastern extent of the Main Application Site boundary.

2.3.18 Further evidence for medieval activity within the study area consists of cropmarks representing former field boundaries of medieval origin (HER 12441) (HER 12442). There are also finds spots including a silver-gilt purse hanger (HER 19324) and pottery sherds (HER 13792; HER 9679).

Post-medieval (1540 – 1900)

- 2.3.19 The site of a model farm (HER 15586) is located west of the Main Application Site. Model farms were designed to research and demonstrate improvements in agricultural techniques, efficiency and building layout. The site was demolished in the 20th century to make way for the expansion of Vauxhall Motors. Medlow House (HER 15134) is a 19th century farmstead located approximately 250m east of the Main Application Site. The layout and materials used for the construction of the buildings suggest a planned layout although not using one of the contemporary model farm plans.
- 2.3.20 There are also a number of post-medieval farmsteads east of the Main Application Site which highlight the continued agricultural activity in this area as opposed to the industrialisation of Luton to the west. Wandon End Farm (HER 15464) is a post-medieval farmstead with a 16th century farmhouse (Grade II, NHLE 1102448), and range of barns, located on the northern extent of the Main Application Site boundary. Wandon End House (Grade II, NHLE 1307874) dates to the early 18th century and is constructed of brick, is located approximately 200m to the east of Wandon End Farm. Other post-medieval farmsteads include Heath Farm (HER 15138), Bailey's Farm (HER 15136) and Crouchmoor Farm (HER 11026), all of which have earlier medieval farmhouses. Located towards the north of Someries Castle is Someries Farm (HER 2027) which is an 18th century farmhouse with 19th century renovations
- 2.3.21 Many of the cottages and farmhouses in the village of Breachwood Green date back to the 17th and 18th centuries. Amongst these are The Old Homestead (Grade II*, NHLE 1176170) which has a very rare 17th century wall painting of a floral design on its plaster wall. Other 17th century houses include the Coleman's Farmhouse (Grade II, NHLE 1176193) and Moss Cottage (Grade II, NHLE 1102477).
- 2.3.22 There are three listed buildings in the hamlet of Lawrence End including the main house of Lawrence End (Grade II, NHLE 1102755), a country house constructed of chequered red brick, c1841 in a late Georgian style. Associated listed outbuildings include stable blocks, stables and a coach house and were also built c1841.
- 2.3.23 To the south-west of the Main Application Site extends the parish of Hyde formed in 1843, which includes the hamlet of Chiltern Green. Two 17th century farmhouses are located here; Chiltern Green Farmhouse (Grade II, NHLE 1114711) and Laburnum Farmhouse (Grade II, NHLE 1321300), constructed of

various materials including timber frame and brick with slated and old clay tiled roofs.

- 2.3.24 Wigmore Hall Farmhouse, an early 19th century grade II listed building (Grade II, NHLE 1321368) is situated just outside of the northern boundary of the Main Application Site (on the south side of Eaton Green Road). It was originally part of a larger farm complex which included Wigmore Hall and a series of farm buildings and a yard which lay on the north side of Eaton Green Road. This was demolished during the late 20th century when the area was redeveloped for housing. Wigmore Hall Farmhouse is now used as Wigmore Hall Conference Centre.
- 2.3.25 Luton Hoo (RPG, Grade II*, NHLE 1000578) is an 18th century landscaped park encompassing the 18th century country house (Luton Hoo, Grade I, NHLE 1321301) which is the main focus of the park, surrounded by early 20th century gardens. Luton Hoo takes its name from the Anglo Norse term "Hoo" which means "spur of the hill" and refers to the hill south of Luton and where much of Hyde Parish sits. Luton Hoo RPG lies to the south of the town with the River Lea forming its eastern boundary. Sir Robert Napier bought the Luton Hoo estate c. 1600 and during the 17th century, he enclosed a 150ha park and built a medium-sized house.
- 2.3.26 In c. 1788, John Sowerby of Hatton Garden acquired the manors of Lilley, Putteridge and Horwellbury. In Putteridge, there was a Regency mansion built in 1812, replacing an earlier structure destroyed in 1808. A landscape park (RPG, Grade II, 1000917) was laid out shortly afterwards, c. 1820 and extended southwards to its present boundaries by 1884. Members of the Sowerby family were keen naturalists and horticulturists and made changes to the park including the formation of informal gardens and pleasure grounds. In 1908, the house was acquired by Thomas Meadows Clutterbuck, a brewer who lived in Chequers from 1898 to 1909. The old house was pulled down and the mansion at Putteridge Bury (Grade II, NHLE 1347083) was rebuilt in Elizabethan style by architects Sir Ernst George and Alfred Yates. At the same time, Edwin Lutyens and Gertrude Jekyll were employed to remodel parts of the garden. In 1965, the house was acquired by Luton Corporation who converted into a college of higher education.
- 2.3.27 The Hatfield, Luton and Dunstable Branch of the Great Northern Railway (HER 14086) runs north to south to the east of the Main Application Site and is visible on historic OS mapping dating from 1885. Foundries and engineering works started to appear in the early 19th century including a brick and tile works (HER 6732) at Eaton Green, on the north-western extent of the Main Application Site boundary and the site of Cockernhoe brickworks (HER 13723) which is located approximately 1km to the north-east of the Main Application Site. The area has also undergone extensive quarrying due to its good source of basic raw materials, with clay being the most intensively extracted to provide raw material for the brickworks. A number of quarry pits are located in the study area (HER 6733; HER 12420; HER 12421; HER 12429; HER 18063).
- 2.3.28 The sharing of certain key characteristics within a diverse mixture of architectural styles gave a rather cohesive appearance to the area. Historic

buildings that survive from that period include no 61 Bute Street (Grade II, NHLE 1321364) that dates to the 1860s.

- 2.3.29 Economic growth and development in the area as well as good transport links led to the establishment of suburban development around the historic core of Luton. One of the earliest suburbs in Luton history is to the north of Luton town centre. This area is designated as High Town Conservation Area. The first buildings here started to appear by 1834. The development of the area is contributed to the Primitive Methodists who established themselves in the area in 1838. Buildings associated with the Methodists include the High Town Methodist Church (Grade II, NHLE 1114627) and High Town Methodist Hall (Grade II, NHLE 1114628).
- 2.3.30 A cluster of listed buildings in Neo-classical style is located between Wellington Street and Hastings Street and the Ceylon Baptist Church and Hall (Grade II, NHLE 1114641), dating to 1848, and associated buildings as well as Ebenezer Chapel (Grade II, NHLE 1114626) that dates to 1870s. Falconer's Hall (HER 17790) was a post-medieval mansion which was demolished at the end of the 19th century with the area now covered by the current footprint of Luton Airport. It is visible on historic OS mapping from 1885 until 1937 where it appears as an area of rubble. Within the study area, there are also a number of possible sites of post-medieval buildings (HER 15061; HER 15063), which have been identified by find spots of concentrations of tile and pottery.
- 2.3.31 Adjacent to the site of the medieval hospital of St Mary Magdalene is the site of Spittlesea Hospital for Infectious Diseases (HER 17778) which was opened in 1891. The hospital was closed in 1968 with only the 1920s administration block remaining extant today. The hospital site is visible on historic OS mapping in its entirety until 1968.
- 2.3.32 Other evidence for post-medieval activity within the study area includes linear earthworks and cropmarks representing former field boundaries (HER 10287; HER 20425; HER 20427), a human skeleton (HER 17792) identified during car park extensions at Luton Parkway Station, a cemetery (HER 8929) located on Crawley Green Road and a possible location of a dovecote (HER 12359) which was identified based on place-name evidence of the nearby Dovehouse Hill.

Modern (1901 – present)

- 2.3.33 In the early 20th century, new factories continued to establish in the hatting district within the Plaiter's Lea Conservation Area. These include 40 Guildford Street (Grade II, NHLE 1114625) an imposing hat factory that was built in 1905 using a cast iron frame.
- 2.3.34 Additional buildings in Luton that date to the early 20th century include the Hart Lane Water Tower (Grade II, NHLE 1146452), constructed of Luton grey bricks with red brick and terracotta dressings. The Bailey Hill Water Tower (Grade II, NHLE 1321343) on West Hill Road also survives from the early 20th century.
- 2.3.35 The hat making industry in Luton fell into decline later in the 20th century. However, new industries had already been established in the town including Vauxhall, a car manufacturer which came to the town in 1905. Vauxhall Iron

Works, later Vauxhall Motors, moved their production line to Luton, making it the largest car manufacturing site in the country. A number of buildings are still extant which formed part of the Vauxhall Motors Complex including the office block (Grade II, NHLE 1249000), one of the main production buildings Block AA (HER 15580) and other associated buildings (HER 15390; HER 15391; HER 15392). A war memorial (HER 16976) was unveiled in 1992 on Kimpton Street to commemorate the men and women who worked at Vauxhall Motors and who died during the First and Second World Wars.

- 2.3.36 In 1938, Luton Airport (HER 9271) was opened and owned by the Borough of Luton. The Airport was also utilised during the war, being used by the Royal Air Force as a military training airfield. A fighter squadron were based there as well as a manufacturing site where military aircraft was designed and built. Further assets related to the defensive installations at Luton Airport include an airfield battle headquarters (HER 17921) which is located largely underground, towards the northern extent of the Main Application Site boundary, in Wigmore Park, a pillbox (HER 17922) which is now demolished, earthworks including gun emplacements (HER 12423) and the site of a prisoner of war camp (HER 17937), now demolished.
- 2.3.37 Further assets related to the modern period in the study area include 20th century churches (HER 13547; HER 13550), earthworks (HER 20507) and Luton Airport Fire Station (HER 19823) which is part of the Luton Airport complex.

Unknown

2.3.38 A number of cropmarks and soilmarks are visible to the south of Winch Hill Farm, within the Main Application Site boundary. The cropmarks and soilmarks consist of faint traces of possible enclosures and an extraction pit (HER 17218), possible enclosures, pits and ditched features (HER 17219) and evidence of settlement and boundaries (HER 17234). These are all currently undated, but may be associated with known Iron Age and Roman activity in this area. Further undated cropmarks of linear features (HER 18458) are located to the south-east of Luton Airport.

2.4 Consultation

- 2.4.1 Ongoing consultation has been undertaken with the CBCA and the HCCA, as well as Historic England and the Conservation Officers for Luton Borough Council and Central Bedfordshire Council. Full details of the consultation responses are outlined in **Table 10.6** of **Chapter 10** of the PEIR.
- 2.4.2 A programme of geophysical survey (**Appendix 10.3** and **Appendix 10.4** in Volume 3 of the PEIR) and an initial phase of trial trench evaluation (**Appendix 10.5** in Volume 3 of the PEIR) have been undertaken within the boundaries of the Application Site within Central Bedfordshire. Consultation with the CBCA confirmed the requirement for additional trial trench evaluation to target areas of potential impact from the Proposed Development, as well as the requirement for preservation of archaeological remains, specifically asset (HER 10808). A Written Scheme of Investigation (WSI) for trial trenching has been agreed with

the CBCA and the works specified will be carried out to inform the ES and further mitigation strategies.

2.4.3 A programme of geophysical survey has been undertaken within the boundaries of the Application Site within Hertfordshire (**Appendix 10.3** in Volume 3 of the PEIR). Based on the results of the geophysical survey, the HCCA confirmed the requirement for a programme of archaeological trial trench evaluation. The trench layout has been agreed with the HCCA and trenches in areas of high archaeological potential will be completed in order to inform the ES and further mitigation strategies.

3 SCOPE OF WORKS

- 3.1.1 Based on the consultation responses, a programme of additional trial trench evaluation has been agreed. The scope of the trial trench evaluations has been outlined in two separate WSIs that have been agreed with the CBCA and the HCCA. The trial trench evaluations are programmed to be undertaken in 2021 and 2022. The results of the additional evaluations will inform the scope of a proportionate programme of archaeological mitigation which may include preservation of archaeological remains, detailed excavation and/ or archaeological monitoring, the scope of which will be agreed with the CBCA and the HCCA.
- 3.1.2 The works specified in this document will be undertaken (as required) on behalf of the Applicant by a competent and suitably qualified Archaeological Contractor who is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA).
- 3.1.3 Site-specific Risk Assessment and Method Statements (RAMS) will be prepared by the Archaeological Contractor for each stage of archaeological mitigation works. These will be submitted for agreement with the CBCA and the HCCA and approved by the relevant local planning authority. The RAMS will confirm the works methodology for that particular stage of mitigation in accordance with the CHMP.
- 3.1.4 All archaeological works will be carried out in accordance with this CHMP and any further specifications approved by the CBCA and the HCCA. The works will be undertaken in accordance, as required for that stage, with the guidance provided by the ClfA Code of Conduct (Ref. 1); the Standard and Guidance for Archaeological Watching Briefs (Ref. 2); the Standard and Guidance for Archaeological Excavation (Ref. 3); and other current and relevant good practice and standards and guidance (including those in Annex A).

3.2 Aims and Objectives

General Objectives

- 3.2.1 The general objectives of the archaeological mitigation works are:
 - a. to make a record of the archaeological resource that will be impacted as a result of the Proposed Development, as identified during the archaeological evaluations;
 - b. to record (where possible) the nature, depth, extent, character and date of archaeological deposits or features encountered in order to successfully fulfil the research aims of the project;
 - c. to record the condition or state of preservation of any archaeological deposits or features encountered in order to successfully fulfil the research aims of the project; and
 - d. to record and recover an adequate sample of the range, quality and quantity of artefactual and environmental evidence present in order to successfully fulfil the research aims of the project.

Site-specific aims

- 3.2.2 The site-specific aims of the archaeological mitigation works have been informed by the previous archaeological evaluations, where undertaken, and comprise preserving in-situ the archaeological remains associated with the site of Late Iron Age / Early Roman and Roman occupation (HER 10808).
- 3.2.3 Site-specific aims for areas within the Application Site that are pending archaeological evaluation will be developed as the results of those evaluations become available.

Research Frameworks and Regional Research Agendas

- 3.2.4 Consideration of research themes is key to understanding the potential evidential significance of archaeological remains. The DBA (**Appendix 10.1** in Volume 3 to the PEIR) identified the Application Site to have a high potential for archaeological remains dating to the Roman, post-medieval and modern periods; a medium to high potential for archaeological remains dating to the late prehistoric and medieval periods; a medium potential for archaeological remains dating to the early prehistoric period; and a low to medium potential for archaeological remains dating to the early medieval period.
- 3.2.5 The results of previous archaeological investigations undertaken within the Application Site to date have confirmed the presence of a Late Iron Age / Early Roman and Roman occupation site.
- 3.2.6 The broad principles of a number of existing research agendas will be applicable. Key archaeological research agendas include:
 - a. Understanding the British Iron Age: an agenda for action (Ref. 4);
 - b. Britons and Romans: advancing an archaeological agenda (Ref. 5); and
 - c. East of England Regional Research Framework (EERRF) Late Iron Age and Roman Research Agenda (Ref. 6).
- 3.2.7 Specific research themes identified from the relevant research agendas of particular relevant to the Late Iron Age / Early Roman and Roman activity identified within the Application Site include:
 - a. LIA-Rom 05: How can be better understand the Late Iron Age to Roman transition?;
 - b. LIA-Rom 13: How can we increase our understanding of Late Iron Age and Roman farmsteads?;
 - c. LIA-Rom 16: Can we better distinguish between Late Iron Age and Early Roman features and sites?;
 - d. LIA-Rom 20: How can be improve the recovery of Late Iron Age and Roman buildings?;
 - e. Dating and chronology of Iron Age and Roman pottery;
 - f. Distribution of Iron Age and Roman finds;

- g. The Iron Age Roman transition including change in the use of land or continued occupation of a site but change in building types or agricultural practices;
- h. Is there evidence for assimilation of Late Iron Age culture into the Roman period or did acculturation occur?;
- i. Consideration of settlement form and type in the Iron Age including distribution, density and dynamics;
- j. Determining the relationship between settlement and enclosure in both the Iron Age and Roman periods; and
- k. The characterisation of rural settlement in the Roman period including patterns of settlement nucleation or dispersal.
- 3.2.8 The research agendas and themes identified here are not exhaustive. Should the additional archaeological evaluations and the mitigation works produce evidence relevant to other themes and objectives identified in the research agendas, these will be considered as the project progresses and presented in site-specific RAMS.
- 3.2.9 Further research themes are outlined in the *East of England Regional Research Framework* online resource and will be consulted so that the archaeology, can, if possible, be placed within their local, regional and national context.

4 WORKS SPECIFICATION FOR PRESERVATION OF ARCHAEOLOGICAL REMAINS

- 4.1.1 Two areas within the Application Site have been identified for preservation of archaeological remains: the Late Iron Age / Early Roman and Roman occupation site (HER 10808) located east of the Main Application Site and the possible site of a Roman building (HER 7358).
- 4.1.2 The Late Iron Age / Early Roman and Roman occupation site (HER 10808) was identified during previous archaeological investigations and was confirmed during the trial trench evaluation undertaken in 2019. The site has been incorporated into the Proposed Development's landscape design and will be preserved in situ.
- 4.1.3 The location and extent of the possible site of a Roman building (HER 7358) will be defined following the completion of additional trial trenching in the area. The results of the trial trenching will inform the final layout of the fuel farm pipeline connection and access road which will be designed to avoid significant archaeological remains, should any be present.
- 4.1.4 Any further areas requiring preservation of archaeological remains will be identified following the results of the additional evaluation and agreed with the CBCA and the HCCA. Preservation of archaeological remains will comprise either temporary protective fencing during specific construction activities and/ or the permanent burying of archaeological remains beneath fill material, thereby preserving it in situ.
- 4.1.5 The works will be carried out by the Applicant's Principal Contractor and will be monitored by an Archaeological Contractor. A photographic record will be maintained and will capture the site prior to works commencing, and will document all stages of the burial.

4.2 **Protective Fencing**

- 4.2.1 Protective fencing may be required for the possible site of a Roman building (HER 7358) to protect it from damage during the construction of the fuel pipeline connection and associated access road. The fencing will be installed by the Principal Contractor in the presence of the Archaeological Contractor.
- 4.2.2 The location, type of fencing for each site, and methodology of installation will be set out in the Principal Contractor's method statement and submitted to the CBCA and the HCCA for agreement. The Applicant's appointed Principal Contractor will be responsible for regularly monitoring the condition of the fencing and will be responsible for its maintenance until construction work in that area is complete, at which time the removal of the fencing will be monitored by the Archaeological Contractor. If damage to the archaeological site arises as a result of the failure of the protective fencing system, a programme of detailed excavation may be required in order to mitigate the impact. Detailed excavation would be carried out by an appointed Archaeological Contractor in accordance with the requirements set out in this CHMP and in accordance with site-specific

RAMS produced by the Archaeological Contractor and agreed with the CBCA and the HCCA.

4.3 Preservation of Archaeological Remains Beneath Fill

- 4.3.1 The Late Iron Age / Early Roman and Roman occupation site (HER 10808), will be preserved in situ and incorporated into the Proposed Development's landscape design, which comprises meadow grassland and scrub across the site. Suitable fill material on top of a protective barrier membrane as identified in the Archaeological Contractor's RAMS will be used to bury sensitive archaeological remains, to ensure that they are not disturbed during construction activities. Sites will either be temporarily buried beneath fill (e.g. compounds or temporary roads) or permanently preserved beneath shallow (<1m deep) fill areas.
- 4.3.2 The Archaeological Contractor will include in their RAMS, methods that they intend to use to protect sensitive buried archaeological remains, including measures to prevent damage (such as deep rutting) caused by vehicles or plant.
- 4.3.3 The Applicant or their appointed Principal Contractor will describe in a Method Statement (MS) the effects of compression and loading (whether dynamic or static) and site-specific protective measures, including the extent of the area to be protected, the depth of fill required and the type of fill. The MS will set out suitable methodologies for filling areas without disturbing or impacting sensitive archaeological remains, and also for removing the fill at the end of construction. The MS will be developed in line with the principles of Historic England's Preserving Archaeological Remains guidance (Ref. 7) in consultation with CBCA and the HCCA. At each site, measures will be put in place to avoid rutting or the compaction of soft ground (topsoil and fill) until or unless adequate protection is provided (vehicles will be restricted or prohibited from traversing sensitive areas prior to fencing, the laying of a protective membrane and fill deposits/vehicle running surface, and at decommissioning).
- 4.3.4 The Archaeological Contractor will give Tool Box Talks to inform all site personnel of the archaeological and historic environment constraints on site, the protection measures that are required and their obligations under the Archaeological Contractor's RAMS and generally to ensure that these are put in place and complied with. Following construction, the protective fill material will be removed by the Applicant or their appointed Principal Contractor, under supervision by the Archaeological Contractor, leaving the sites in their original condition.

5 WORKS SPECIFICATION FOR DETAILED EXCAVATION

5.1 General Requirements

- 5.1.1 Areas for detailed excavation will be identified following the results of the additional trial trench evaluations and would be agreed with the CBCA and the HCCA.
- 5.1.2 The Archaeological Contractor will be responsible for the safekeeping of all records and artefacts recovered during the fieldwork, from the moment of creation/ discovery, until their delivery to a recipient repository.

5.2 Ecological Considerations

- 5.2.1 Prior to any invasive site works, consultation with the Applicant's Ecologist will be undertaken to identify site constraints and inform suitable mitigation. As a minimum the following restrictions should be followed for all machine excavation:
 - a. a 3m stand-off from hedgerows will be maintained;
 - b. the stand-off area for trees will comprise the extent of the canopy plus 3m; and
 - c. trees within hedgerows will also require the stand-off to comprise the extent of the canopy plus 3m.
- 5.2.2 These considerations outweigh the location of the archaeological site. The edge of excavation will be adjusted if necessary in order to observe the ecological and landscape considerations.

5.3 Machine Excavation

- 5.3.1 It is currently envisaged that the excavation areas will be set out using electronic survey equipment by the Archaeological Contractor.
- 5.3.2 The Applicant will be responsible for providing the details of an up to date search for services / utilities within the Site. The Archaeological Contractor will be responsible for identifying all hazards on site, including the location of overhead and buried services, and ensure it is safe to excavate. The excavation area will be scanned by the Archaeological Contractor using a Cable Avoidance Tool (CAT scanner) and Genny prior to and during the excavation (mechanical excavation and hand excavation) to ensure that no live services are present.
- 5.3.3 The areas of open excavation will be clearly demarcated and secured with appropriate barrier fencing (such as high visibility plastic barrier mesh fencing or Heras fencing), supplied by the Archaeological Contractor, to ensure that persons or plant cannot inadvertently traverse across the area of investigation whilst archaeological works are in progress. The fencing (to be supplied by the Archaeological Contractor) will be regularly inspected and maintained by the Archaeological Contractor until archaeological works in each area have been completed, inspected, approved, and signed off by the statutory authority.

- 5.3.4 The machine excavation will be undertaken using an appropriate 360° mechanical excavator fitted with a toothless ditching bucket. A toothed bucket or breaker may only be used temporarily if concrete, tarmac, or other hard standing is encountered. A toothless bucket is to be used at all other times. Machine excavation will be carried out using a flat bladed bucket.
- 5.3.5 Upon removal of the topsoil, the underlying subsoil shall be removed by mechanical excavator under close archaeological supervision until either the top of the first archaeological horizon or undisturbed natural deposits are encountered. Particular attention should be paid to achieving a clean and well-defined horizon with the machine. Topsoil overburden and subsoil will be stockpiled separately in accordance with the Applicant's Soil Management Plan. The mechanical excavator will not traverse any stripped areas. If archaeological remains are identified, topsoil stripping will cease in the affected areas and the archaeologists will excavate and record the remains as appropriate.
- 5.3.6 The machined surface will be hand cleaned if necessary, and inspected for archaeological features, and all identified features should be marked on the ground to ensure that they are not 'lost' during the mapping stage. Pre-excavation planning will be undertaken to record all identified archaeological features. The pre-excavation plan will form the basis for discussion on site to inform the strategy for detailed excavation of the archaeological remains.
- 5.3.7 If extensive or significant archaeological deposits and/ or features are identified, the Archaeological Contractor will notify the Applicant and/ or their Archaeological Advisor immediately. Additional archaeologists may be deployed, subject to agreement from the Applicant.
- 5.3.8 The Archaeological Contractor shall not excavate any area beyond those scheduled for the proposed works. Should archaeological features revealed within the excavation area continue outside of the area and be likely to be subject to construction impact in the current or later phases, the excavation area may need to be extended sufficiently characterise the material. This will only be undertaken with the agreement of the CBCA and the HCCA.
- 5.3.9 Areas will be recorded on a suitable digital base map/ development plan and the stratigraphy and depth of excavation will be recorded. Details on recording procedures where significant archaeology is discovered are detailed in the section below.

5.4 Hand Excavation

- 5.4.1 All archaeological features and deposits within the excavation areas will be hand excavated and recorded in an archaeologically controlled and stratigraphic manner in order to achieve suitable preservation by record and to fulfil the aims and objectives of the project.
- 5.4.2 Archaeological remains identified for excavation will be cleaned and hand excavated in an archaeologically controlled and stratigraphic manner sufficient to meet the aims and objectives of the archaeological works.

- 5.4.3 Machine-assisted excavation may be permissible if large deposits are encountered but only after consultation with the CBCA and the HCCA.
- 5.4.4 A sufficient sample of deposits/features will be investigated to record the horizontal and vertical extent of the stratigraphic sequence to the level of undisturbed natural deposits. Sample excavation will also target the interrelationships between features and major feature intersections to understand and record their relationships, where these are revealed / identified.
- 5.4.5 The areas of excavation will be located and mapped using suitable electronic surveying equipment, resulting in a digital pre-excavation plan (even if they reveal no archaeological features). The plan will be overlaid at an appropriate and recognisable scale onto the Ordnance Survey national grid (using digital map data).
- 5.4.6 The archaeological investigation strategy will be determined by the range and complexity of the archaeological features, and their artefactual and palaeoenvironmental content.
- 5.4.7 The following sampling strategies will be utilised as a generic standard within the flexible excavation strategy and may be varied to suit the research value of particular deposits:

Linear features: A minimum of 20% of the feature if less than 5m in length and a minimum of 10% of the features if greater than 5m in length (including terminals) will be excavated in order to determine its character, date, morphology and function. Each section will be excavated away from intersections with other features in order to recover an uncontaminated artefact assemblage and will measure not less than 1m long or a minimum of a 1m long section if the feature is less than 10m in length. In addition to the 25% sample all intersections will be investigated to determine stratigraphic relationships between features.

Discrete features: 50% of cut features such as pits, post-holes and other isolated features as a minimum in order to determine and record their form. Stake-holes will be fully excavated. If large pits or deposits (over 1.5m in diameter) are encountered, then the sample excavated should be sufficient to define the extent and maximum depth of the feature and to achieve the objectives of the archaeological works and should not be less than a 25% quadrant, unless otherwise agreed.

Structural remains and areas of significant and special activity: Are to be the subject of 100% excavation. Such features will be identified during pre-excavation planning to enable the input and advice of appropriate archaeological specialists. Where complex structures or activity areas are encountered, additional detailed recording and specialist environmental sampling or scientific dating may be required. Built structures such as walls will be examined prior to destruction and sampled so that their extent, nature, form, date, function and relationship to other features and deposits can be established.

Special or burnt features: such as hearths, kilns, storage pits, industrial, funerary or ritual structures or buildings are to be the subject of 100% excavation so that their extent, nature, form, date, function and relationships to other features and deposits can be established; Such features will be identified during pre-excavation planning to enable the input and advice of appropriate archaeological specialists. Where in situ burning is identified no excavation shall take place until the possible recovery of samples for scientific dating has been considered.

Structural remains: Built structures such as walls will be examined prior to destruction and sampled so that their extent, nature, form, date, function and relationship to other features and deposits can be established.

Flint scatters: Are to be the subject of 100% excavation. Where associated with buried land surfaces, in situ flint scatters will require hand cleaning and will need to be spatially defined in three-dimension to determine the limits of the scatter within the area of investigation. All lithic artefacts with a Maximum Linear Dimension (MLD) of 10mm will require three-dimensional plotting prior to recovery and individually bagged and recorded as registered finds. Non-tool fragments of less than the MLD should be bagged according to an appropriate spatial recording system consistent with context.

Human remains: During excavation human remains will be 100% excavated, recorded in situ and subsequently lifted, labelled and packed to the standard established by *Excavation and post-excavation treatment of cremated and inhumed human remains* (Ref. 8) and *Updated guidelines to the standards for recording human remains* (Ref. 9). Environmental samples will be recovered from grave fills and specific locations such as the abdominal cavity for specialist analysis. Site inspection will be made by a recognised specialist who will advise on the excavation and sampling strategy following guidelines on *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (Ref. 10). The location of each grave, inhumation/cremation and any associated grave goods will be recorded three dimensionally using metric survey-grade equipment (or its equivalent). The exhumation of any human remains will only be undertaken in accordance with current UK legislation and good practice (refer to Annex A) and any local environmental health requirements.

Tree throws: Where features are identified as tree throws or hollows a sample will be hand excavated to confirm the interpretation. Features where this interpretation is unclear should be treated as non-structural discrete features and investigated in accordance with the strategy set out above.

5.4.8 Archaeological recording will proceed in accordance with the specification outlined in this CHMP and accepted national, regional, and professional standards and guidance (refer to Annex A).

5.5 Recording

5.5.1 All archaeological remains shall be recorded to best practice standards including the *Standard and Guidance for Archaeological Excavation* prepared

by the Chartered Institute for Archaeologists. Archaeological recording is to include as a minimum:

- 5.5.2 A full written (on appropriate pro-forma recording sheets), drawn and photographic record will be made for each element of the mitigation works, even where no archaeological features are identified. Where the stratigraphic sequence or inter-cutting features are complex the relationships between contexts shall also be compiled as 'Harris matrix' diagrams (Ref. 11);
- 5.5.3 Hand drawn plans and sections of features will be produced at an appropriate scale (normally 1:20 for plans and 1:10 for sections). All plans and sections will include spot heights relative to Ordnance Datum in metres, correct to two decimal places;
- 5.5.4 Photography will be taken in line with current industry best practice. In addition to records of archaeological features, a number of general site photographs will also be taken to give an overview of the site including photographs of areas prior to and upon completion of archaeological works. Particular attention should be paid to obtaining shots suitable for displays, exhibitions and other publicity; and
- 5.5.5 Indices of context records, drawings samples and photographs will be maintained and checked. These will form part of the project archive. These indexed registers will be fully cross-referenced.
- 5.5.6 On completion of the field project the site archive will be consolidated, checked to ensure it is internally consistent and ordered as a permanent archive.

5.6 Artefact Recovery

- 5.6.1 All artefacts will be collected, stored and processed in accordance with standard methodologies and national guidelines (refer to Annex A).
- 5.6.2 The Archaeological Contractor will clarify their Selection Strategy in their Method Statement and will ensure that it is in line with ClfA (Ref. 12) guidelines. Bulk finds from feature fills of deposits will be collected and recorded by context. Each 'significant find' will be recorded three dimensionally. Similarly, if artefact scatters are encountered these should be also recorded three dimensionally. Bulk finds will be collected and recorded by context. Except for modern artefacts, all finds will be collected and retained.
- 5.6.3 All recovered artefacts will be stabilised, conserved and stored in accordance with the current national conservation guidelines and standards (refer to Annex A). If necessary, a conservator will visit the site to undertake 'first aid' conservation treatment.
- 5.6.4 Artefacts will be stored in appropriate materials and conditions and monitored to minimise further deterioration.

5.7 Environmental Bulk Sampling and Scientific Dating

5.7.1 The Archaeological Contractor's RAMS will outline an appropriate environmental sampling strategy that conforms to this specification. The

environmental sampling strategy will be targeted to answer the questions laid out in the site-specific aims and the regional research agendas.

- 5.7.2 The Historic England Regional Science Advisor will be notified of the commencement of the project and will be consulted regarding the sampling strategy proposed by the Archaeological Contractor. Provision will also be made for the recovery of material suitable for scientific dating. An appropriate dating specialist will be consulted on this in advance of and throughout the fieldwork and will be available to advise on the ongoing strategy.
- 5.7.3 Any samples taken must come from securely stratified, datable deposits with a low risk of contamination using the methodologies outlined in *Environmental Archaeology; A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (Ref. 13).
- 5.7.4 Any samples taken must come from appropriately cleaned surfaces, be collected with clean tools, and be placed in clean containers. They will be adequately recorded and labelled, and a register of all samples will be kept. Once the samples have been obtained they should be stored appropriately in a secure location prior to being sent to the appropriate specialist. Provision will be made for the ongoing processing and initial assessment of sampled material in order to provide timely feedback regarding quality of preservation and significance of specific deposits during the evaluation and to inform the ongoing strategy. Samples will be taken from stratified, dateable deposits, with a low risk of contamination.
- 5.7.5 The detailed sampling strategy will be set out in the RAMS. However, a provisional, and minima, sampling strategy is proposed in **Table 1**.

Potential Data	Method	Context Type	Sample Size (litres)	Excavated Feature Sample
Charred Plant Remains (CPR)	Bulk	Structural / occupation features	40	100%
		Pits	40	50%
		Gully / ditch (settlement)	40	10%
		Gully / ditch (outfield)	40	5-10%
Waterlogged and organic remains	Bulk	All contexts	10-20	Layer (N/A)
Small bones	Bulk	All contexts	40	50%
Molluscs	Incremental	Deposit sequence	As advised by specialist	N/A

Table 1 Provisional environmental sampling strategy for detailed excavation

Potential Data	Method	Context Type	Sample Size (litres)	Excavated Feature Sample
Pollen	Monolith	Deposit sequence	As advised by specialist	N/A

- 5.7.6 If large deposits of animal bone are encountered, the advice of the project specialist will be sought regarding recording and sampling. Animal bone groups (i.e. articulated animal remains) will be assigned a number and documented using a suitable animal bone group sheet following Historic England guidance (Ref. 14). Assessment of biological remains will follow standard assessment procedures as laid out in Historic England guidance (Ref. 15, Ref. 16, and Ref. 17).
- 5.7.7 The finds and samples will be processed (cleaned and marked) as appropriate. Each category of find or environmental/ industrial material will be examined by a suitably qualified archaeologist or specialist and the results incorporated into the fieldwork report.

5.8 Finds Processing

- 5.8.1 Initial processing of finds (and if appropriate other samples) will be carried out concurrently with the fieldwork.
- 5.8.2 The processing of finds will be finished shortly after completion of the investigations. The finds will be retained (according to the Artefact Recovery section), washed, marked, bagged, and logged on a Microsoft Access or GIS database (or equivalent), together with their locations (if applicable) according to the National Grid (eastings, northings) and Ordnance Datum (height), accurate to two decimal places.
- 5.8.3 The finds assemblage will be treated, labelled, and stored in accordance with the appropriate Historic England guidance documents, local authority guidelines (if appropriate) and the Institute of Conservation guidelines (refer to Annex A). At all times the Archaeological Contractor shall ensure that the processing of the assemblage is in accordance with the requirements of the recipient museum (to be confirmed).
- 5.8.4 If appropriate, each category of find or each material type will be examined by a suitably qualified archaeologist or specialist and the results incorporated into a fieldwork report.
- 5.8.5 The deposition of any finds collected during the archaeological works and the related archive forms the final stage of this project. The Archaeological Contractor shall provide the Applicant with copies of communication with the recipient museum and confirmation of the deposition of the archive.

5.9 Human Remains

5.9.1 Should human remains be discovered during the course of the archaeological works, the remains will be covered and protected and left in situ in the first instance, in accordance with current best practice. Should human remains be

discovered, all works within the vicinity of the relevant area of the Proposed Development Site will stop until the remains have been removed. The Archaeological Contractor will notify the Applicant and H.M. Coroner with details of the remains immediately. The removal of human remains will only take place in accordance with a licence from the Ministry of Justice and under the appropriate Environmental Health regulations and the Burial Act 1857.

5.10 Treasure

- 5.10.1 Any recovered artefacts that fall within the scope of the Treasure Act 1996 and Treasure (Designation) Order 2002 will be reported to the Applicant immediately.
- 5.10.2 The Archaeological Contractor shall maintain a list of finds that have been collected that fall under the Treasure Act and related legislation and this list shall be included in the fieldwork report.
- 5.10.3 Artefacts that are classified as 'treasure' will be removed to a safe place but where removal cannot be undertaken on the same working day as the discovery, suitable security measures must be taken to protect the finds from damage or unauthorised removal.

5.11 Land Drains

5.11.1 Prior to invasive works commencing the Archaeological Contractor will consult with relevant landowners and tenants to agree the status of land drains. A field by field (as relevant) strategy will be created which will document the location, orientation and approximate depth of active and 'redundant' land drains. If detail about land drains is unknown then any land drains encountered during the archaeological works will be left in situ, initially. A buffer of at least 300mm will be left either side of a land drain and excavation will proceed either side of it. Damage to any part of a land drain will be repaired immediately with plastic pipe. A photographic record of any damage and subsequent repair will be made. The location of the repaired land drain will be recorded and plotted onto the Ordnance Survey base map for future reference and potential compensation events. A schedule of all damaged and repaired land drains will be maintained by the Archaeological Contractor and submitted to the Applicant upon completion of the archaeological fieldwork.

6 WORKS SPECIFICATION FOR ARCHAEOLOGICAL MONITORING

6.1 General Requirements

- 6.1.1 Archaeological monitoring will be undertaken in areas of the Proposed Development Site where no specific archaeological remains have been identified but a general potential for dispersed archaeological features or where a residual risk of archaeological discoveries remains. The use of archaeological monitoring during construction will be agreed with the CBCA and the HCCA but is anticipated to be limited, with detailed excavation and where reasonably practicable, preservation of archaeological remains providing the preferred mitigation strategy. Where preservation of archaeological remains is not reasonably practicable, preservation by detailed excavation will be the alternative mitigation strategy.
- 6.1.2 The archaeological monitoring, if required, will comprise a programme of observation, investigation and recording during the main construction programme and will allow the Applicant and/or the Applicant's appointed Principal Contractor's preferred method of working to be undertaken with minimal disruption whilst providing sufficient access and time for the recording of any archaeology present.
- 6.1.3 During the archaeological monitoring, the Archaeological Contractor will monitor and observe the removal of topsoil and overburden undertaken by the Applicant's appointed Principal Contractor to the archaeological horizon or natural substrate, whichever is encountered first. Where archaeological remains are identified, selective hand investigation and recording of the archaeological deposits will be undertaken by the Archaeological Contractor.
- 6.1.4 Any requirement for archaeological monitoring will be informed by the results of the pending trial trench evaluation or other mitigation measures that are detailed in this specification.

7 MONITORING, PROGRESS REPORTS AND MEETINGS

- 7.1.1 The archaeological works may be subject to monitoring visits by the Applicant and/ or their Archaeological Advisor and the CBCA and the HCCA who will have access to the investigation, site records and any other information relating to the archaeological works. The work will be inspected to ensure that it is being carried out to the required standards and that it will achieve the stated objectives.
- 7.1.2 Verbal progress reports will be provided to the Applicant upon request and weekly written progress reports will be provided to the Applicant whilst the archaeological work is on-going. In addition, progress meetings between the Applicant and/ or their Archaeological Advisor, the CBCA, the HCCA and the Archaeological Contractor may be held on site during the course of the works.
- 7.1.3 A minimum of five working days' notice will be provided to the CBCA and the HCCA of the commencement of the works, in order to arrange monitoring visits at appropriate times.

8 COMPLETION OF ARCHAEOLOGICAL WORKS

- 8.1.1 After completion of the archaeological works, the site will be left in a tidy, professional, and safe condition, and the Archaeological Contractor will ensure that all materials brought onto site are removed.
- 8.1.2 At the end of the archaeological works, the Archaeological Contractor shall complete the following:
 - a. a short summary report of no more than 500 words for the archaeological works for submission for subsequent publication within a relevant local journal (if appropriate); and
 - b. an OASIS entry¹. If appropriate the entry should include caveats about conclusions drawn in advance of assessment and/or analysis.
- 8.1.3 The OASIS entry may be updated and re-submitted not later than three months after the completion of the final report. When completing the form, the Archaeological Contractor must make reference to the relevant research agenda.

¹ <u>http://ads.ahds.ac.uk/project/oasis/</u>

9 SPECIFICATION FOR STAGE-SPECIFIC RISK ASSESSMENT AND METHOD STATEMENT

- 9.1.1 Notwithstanding this CHMP, prior to the start of each phase of archaeological mitigation works, the Archaeological Contractor shall provide a detailed RAMS for the archaeological works for agreement with the Applicant and/ or their Archaeological Advisor, the CBCA and the HCCA.
- 9.1.2 Each RAMS shall be prepared in consultation with the Applicant and/ or their Archaeological Advisor and where required, their appointed Principal Contractor, taking account of their Environmental Management and Health and Safety Plans. The RAMS should adhere to current and relevant best practice and standards and guidance (refer to Annex A).
- 9.1.3 The RAMS should include (as appropriate):
 - a. a statement on the technical, research and ethical competencies of the project team, including relevant professional accreditation;
 - b. site location (including map);
 - c. background of the Scheme;
 - d. geological and topographical background;
 - e. archaeological and historical background;
 - f. general and specific research aims of the project, with reference to Regional Research Frameworks;
 - g. the Archaeological Contractor's methods and approach for undertaking the site-based works and off-site processes to completion;
 - h. the methods for survey and setting out works;
 - i. details of specific survey methods for on-site recording of stratigraphic profiles and topographic modelling;
 - j. the Archaeological Contractor's strategy for environmental sampling and archaeological science;
 - k. the retention and disposal policies for samples and artefacts recovered during the work;
 - I. the methodology of finds storage including packaging;
 - m. the method for excavating and recording inhumations and cremations in compliance with this CHMP;
 - n. arrangements for immediate conservation of artefacts;
 - o. the method for preparation of the required reports, archive and all associated deliverables;
 - p. the procedures for assessment of potential for analysis (post excavation assessment);
 - q. analysis and publication proposals;

- r. the method for preparation of the digital dataset, digital drawings, and digital report deliverables;
- s. a statement on compliance with relevant professional ethical and technical standards (including data standards);
- t. the Quality Assurance Plan;
- u. a resource plan and programme and CVs of key personnel including post-excavation specialists;
- v. site management plan including details of the method for preparing safe access routes to the working areas, the specifications and locations of the proposed site welfare and facilities;
- w. the safe method of working whilst undertaking machine excavation including any temporary works required;
- the Health and Safety Plan and Site-Specific Risk Assessment (including COVID-19 protection measures and unexploded ordnance if relevant); and
- y. the procedures for on-site and off-site security and emergency response plan (including environmental incidents).

10 DELIVERABLES

10.1 Overview

10.1.1 Following the completion of each phase of archaeological mitigation works, the Archaeological Contractor will prepare the appropriate deliverables. The reporting requirements for each type of investigation is described below.

10.2 Deliverables for Preservation of Archaeological Remains, including Preservation of Archaeological Remains Beneath Fill

Summary Report

- 10.2.1 Within two weeks of completion of the monitoring works associated with the preservation of archaeological remains a summary report will be prepared and submitted to the CBCA and the HCCA. It will include:
 - a. summary of the results;
 - b. plan of each mitigation area at an appropriate scale, showing the relevant features and including original and finish levels to heights above Ordnance Datum; and
 - c. photographic record of the works area showing pre-commencement views, images of works in progress and finish levels.

10.3 Deliverables for Detailed Excavation and Archaeological Monitoring

10.3.1 Areas of the Application Site identified for archaeological monitoring that result in the identification, mapping, excavation and recording of archaeological features, as set out in **Section 6** of this CHMP, will be subject to a level of reporting that equates to that for detailed excavation, unless agreed otherwise with the CBCA and the HCCA.

Interim Report

- 10.3.2 Within two weeks of the completion of the detailed excavation, an interim report will be prepared and submitted to the Applicant and/ or their Archaeological Advisor, the CBCA and HCCA. It will include:
 - a. summary of the results of the strip, map and record;
 - b. draft or sketch plan of the detailed excavation area; and
 - c. quantification of the primary archive including contexts, finds and samples.
- 10.3.3 If the results of the detailed excavation are decided by the CBCA and the HCCA to be not significant enough to warrant detailed analysis and publication, then a fieldwork report will be produced.

Fieldwork Report

- 10.3.4 A fieldwork report will be submitted in draft to the Applicant and/ or their Archaeological Advisor within eight weeks of the completion of the mitigation works. This timescale can be amended if approved by the Applicant and/ or their Archaeological Advisor and the CBCA and HCCA.
- 10.3.5 The content and scope of the report shall be depending upon the findings, but it shall be undertaken in accordance with this specification and current good practice and guidance (refer to Annex A). Typically, the report shall contain the following:
 - a. Title page or cover sheet giving key project details;
 - b. a signed QA sheet detailing as a minimum title, author, version, date, checked by, approved by;
 - c. a non-technical summary;
 - d. a site location drawing;
 - e. the archaeological and historical background (including the results of previous phases of fieldwork);
 - f. the methodology employed for the mitigation works;
 - g. the aims and objectives of the mitigation works;
 - h. the results of the mitigation works (to include full description, assessment of condition, quality and significance of the remains);
 - i. if human remains are encountered the report will include a statement that addresses the future retention of the material, including if appropriate, options for reburial;
 - j. an appendix containing specialist artefact reports, palaeoenvironmental reports or their equivalent;
 - k. an appendix illustrating specific finds and general working shots or portraits of specific features or structures as appropriate;
 - I. a list of all finds that fall within the scope of the Treasure Act and associated legislation;
 - m. a stratigraphic matrix for each area (as appropriate);
 - n. assessment/ conclusion and a statement of potential with recommendations for further work and analysis;
 - a statement of the significance of the results in their local, regional and national context cross-referenced to the Regional Research Framework;
 - p. publication proposals if warranted;
 - q. the current and proposed arrangements for long term conservation and archive storage (including details of the accredited repository details);
 - r. general and detailed plans showing the location of the survey area accurately positioned on an O.S. base map (at an appropriate and recognised scale);

- detailed plans and sections illustrating archaeological features and relationships between features (at an appropriate and recognised scale);
- t. colour photographic plates illustrating the site setting, work in progress and archaeological discoveries; and
- u. a cross-referenced index of the project archive.
- 10.3.6 One digital pdf copy (complete with illustrations and plates) of the completed draft report will be submitted to the Applicant and/ or their Archaeological Advisor. A copy of the draft report will also be submitted to the CBCA and HCCA for comment. In finalising the report, the comments of the Applicant and/ or their Archaeological Advisor and the CBCA and HCCA will be taken into account.
- 10.3.7 Following the receipt of comments on the draft report, a final digital version (PDF) will be submitted to the Applicant and/ or their Archaeological Advisor within one week of the receipt of comments. The final report shall be provided to the Applicant and/ or their Archaeological Advisor and the CBCA and HCCA.
- 10.3.8 Digital image files shall be submitted in JPEG or TIFF format; digital text files shall be submitted in Microsoft Word format; and digital illustrations shall be submitted in AutoCAD format or ArcGIS shapefile format. A fully collated version of the report shall be included in PDF format.

Post-Excavation Assessment

- 10.3.9 If the results of the detailed excavation are of sufficient significance to warrant publication, the deliverable, following on from the interim report, may take the form of a Post-excavation Assessment Report and will include an Updated Project Design (UPD) in accordance with the guidance and standards set out in Historic England's *Management of Research Projects in the Historic Environment* (Ref. 18). The report will incorporate into it the results from all other phases of archaeological work that have been undertaken for the Proposed Development. A copy of the report will be provided to the Applicant's Archaeological Representative as a draft for comment.
- 10.3.10 The Post-excavation Assessment Report and UPD will as a minimum present:
 - a. a summary of the project background, original aims and objectives;
 - b. an integrated description of the results by period for each area of archaeological mitigation;
 - c. a quantification of each artefact and ecofact type recovered during the mitigation works;
 - d. an assessment of how the results of the archaeological mitigation address the original and any new research objectives;
 - e. a proposal for a revised set of research objectives; and
 - f. recommendations for further analysis and publication.
- 10.3.11 If detailed analysis and publication are recommended by UPD, a stage of postexcavation analysis and publication will be required. The post-excavation

analysis stage of the project will comprise the detailed quantification, analysis and reporting of the recorded archaeological remains (contextual records), artefacts and ecofacts recovered during the programme of archaeological mitigation. The post-excavation analysis will be undertaken by the Archaeological Contractor supported by external specialists as appropriate.

Publication

- 10.3.12 If significant results are obtained and it is likely that further stages of archaeological work will be required (i.e. additional archaeological monitoring areas); or, if investigation of a single site (or several closely related sites) is undertaken over several phases of archaeological work; publication shall be deferred until such time as the archaeological works are substantially complete.
- 10.3.13 The format of any publication shall be commensurate with the significance of the archaeological results and will be agreed with the CBCA and the HCCA.
- 10.3.14 Online publication formats as well as traditional publication formats will be considered. An online popular publication report and illustrated document explaining the results in layman's terms should also be produced. The popular report should inform the non-expert audience about the discoveries and their significance in an accessible manner.

Monitoring

10.3.15 The preparation of the post-excavation assessment and publication report will be subject to regular monitoring meetings with the Applicant and/ or their Archaeological Advisor to ensure adherence to agreed programme and budget. A timetable for the progress meetings will be agreed with the Applicant and/ or their Archaeological Advisor prior to the commencement of the post-excavation assessment.

11 ARCHIVE PREPARATION AND DEPOSITION

11.1 Preparation

- 11.1.1 Archaeological material recovered from fieldwork is irreplaceable and data recorded in the course of fieldwork should be copied and held securely in a separate location in line with current good practice, until it can be deposited in the recipient repository (refer to Annex A).
- 11.1.2 The Archaeological Contractor should compile a Data Management Plan in line with CIfA guidelines and include it in their RAMS.
- 11.1.3 The Application Site records and assemblages (list of fieldwork interventions, notebooks/ diaries, context records, feature records, structure records, site geometry (drawings), photographs and films, finds records and associated data files) will constitute the primary Site Archive. This is the key archive of the fieldwork project and the raw data upon which all subsequent assessment and analysis and future interpretation will be based. The Site Archive will therefore not be altered or compromised.
- 11.1.4 The Site Archive should be quantified, ordered, indexed, and made internally consistent, and in line with current good practice (refer to Annex A) and local authority guidelines. All finds and coarse-sieved, and flotation samples will have been processed and stored under appropriate conditions. The Site Archive will also contain a site matrix, a summary of key findings and descriptions of artefactual and environmental assemblages. Arrangements should be made for the proper cataloguing and storage of the archive during the project lifecycle (it may be appropriate to liaise with an archive specialist). The content of an outline structure for a fieldwork archive is presented in *MoRPHE, Appendix 1, Product P1 and Product P3* (Ref. 19).
- 11.1.5 The Archaeological Contractor will, prior to the preparation of their RAMS, liaise with the recipient museum to obtain agreement in principle to accept the physical, documentary, and photographic archive for long-term storage.
- 11.1.6 The digital archive must be deposited with a Trusted Digital Repository and thus made publicly accessible (such as the ADS).
- 11.1.7 The Archaeological Contractor will be responsible for identifying any specific requirements, archiving costs or policies of the recipient repository in respect of the archive, and for adhering to those requirements.
- 11.1.8 Relevant reference numbers will be obtained from the recipient repositories in advance of the preparation of the Archaeological Contractor's RAMS, to ensure that the project is recorded in accordance with the requirements of the local authority.
- 11.1.9 The archive of finds and records generated during the fieldwork will be removed from the Application Site at the end of each day and kept secure at all stages of the project until it is deposited with the recipient repository. The Site Archive will be produced to current national standards (refer to Annex A).

11.2 Deposition

11.2.1 The deposition of the archive forms the final stage pf the project. The Archaeological Contractor shall provide the Applicant and/ or their Archaeological Advisor with copies of communication with the accredited repository and written confirmation of the deposition of the archive. The Archaeological Contractor will deal with the transfer of ownership and copyright issues.

12 GENERAL PROJECT REQUIREMENTS

12.1 Resources

- 12.1.1 All staff will be fully briefed and aware of the work required under this specification and will understand the objectives of the investigation and methodologies to be employed.
- 12.1.2 The fieldwork will be directed and supervised by an appropriately experienced senior archaeologist employed by the Archaeological Contractor who will be a corporate member of the Chartered Institute for Archaeologists.
- 12.1.3 Communication and dissemination of relevant site information are essential in all fieldwork projects. The CHMP and RAMS will be available to all site staff and a copy will be held on site for this purpose.
- 12.1.4 Where appropriate, initial processing of artefactual and ecofactual material will be carried out concurrent with fieldwork. The project team will include relevant specialists to advise on collection and sampling techniques and to ensure compliance with the approved RAMS. Updated methodologies devised on site will be agreed with the Applicant and/ or their Archaeological Advisor and consulted on with the CBCA and the HCCA as appropriate.
- 12.1.5 Regular progress meetings for site staff will be held as appropriate and relevant; information will be passed on to all contributors to ensure that all team members are kept informed of emerging site strategies and site narratives.

12.2 Programme

- 12.2.1 The programme for each stage of archaeological investigation shall be agreed between the Applicant and/ or their Archaeological Advisor and the Archaeological Contractor. The CBCA and the HCCA will be notified of the programme for fieldwork in a timely manner, so that monitoring arrangements can be put in place.
- 12.2.2 Changes to the agreed programme will only be accepted with the agreement of the Applicant and/ or their Archaeological Advisor and the Archaeological Contractor. The Archaeological Contractor shall provide early warnings for any delays to the agreed works programme.

12.3 Access Arrangements

- 12.3.1 Access to the Application Site, to carry-out the archaeological works, will be arranged and organised with the Applicant, as appropriate. Designated routes into and out of the work area(s) will be identified and will be adhered to at all times.
- 12.3.2 The locations for welfare facilities and vehicle parking will be agreed with the Applicant or their appointed Principal Contractor prior to the start of the works and shall be included in the Archaeological Contractor's RAMS.

12.4 Confidentiality

12.4.1 All communication regarding this project is to be direct through the Applicant and the Consultant. The Archaeological Contractor will refer all inquiries to the Applicant and/ or their Archaeological Advisor without making any unauthorised statements or comments.

12.5 Publicity

12.5.1 The Archaeological Contractor will not disseminate information or images associated with the project for publicity or information purposes without the prior written consent of the Applicant.

12.6 Copyright

- 12.6.1 The Archaeological Contractor shall assign copyright in all reports and documentation/ images produced as part of this project to the Applicant. The Archaeological Contractor shall retain the right to be identified as the author/ originator of the material. This applies to all aspects of the project. It is the responsibility of the Archaeological Contractor to obtain such rights from sub-contracted specialists.
- 12.6.2 The Archaeological Contractor may apply in writing to use/ disseminate any of the project archive or documentation (including images). Such permission will not be unreasonably withheld.
- 12.6.3 The results of the archaeological works will ultimately be made available for public access.

12.7 Adherence to CHMP

12.7.1 The Archaeological Contractor will undertake the works in accordance with this CHMP and in accordance with the relevant RAMS. No variation from, or changes to, the CHMP and/ or RAMS will occur except by prior agreement with the Applicant and/ or their Archaeological Advisor, and where appropriate, following agreement with the CBCA and the HCCA.

13 INSURANCES AND HEALTH AND SAFETY

- 13.1.1 The Applicant will provide the Archaeological Contractor with the results of recently conducted service and utility searches; however, the Archaeological Contractor shall be responsible for identifying any buried or overhead services and taking the necessary precautions to avoid damage to such services, prior to and during the fieldwork. The Archaeological Contractor shall at all times maintain a safe working distance from the overhead and buried services / utilities. The Archaeological Contractor may be required to undertake an updated service and utility search prior to the start of each stage of works.
- 13.1.2 The Archaeological Contractor shall, at all times, follow the health and safety policies and procedures of the Applicant or their appointed Principal Contractor as well as any site-specific instructions highlighted during the on-site induction.
- 13.1.3 The Archaeological Contractor will provide the Applicant with details of their public and professional indemnity insurance cover.
- 13.1.4 The Archaeological Contractor will have their own Health and Safety policies compiled using national guidelines, which conform to all relevant Health and Safety legislation and best practice. A copy of the Archaeological Contractor's Health and Safety policy will be submitted to the Applicant prior to the start of the archaeological investigations.
- 13.1.5 The Archaeological Contractor will not be permitted to start works at the Application Site until the Applicant has received confirmation that the RAMS are acceptable for the proposed works. If amendments are required to these reports during the works, the Applicant, and any other relevant party, must be provided with the revised document at the earliest opportunity.
- 13.1.6 All staff involved in the archaeological fieldwork should be Construction Skills Certification Scheme (CSCS) qualified to a minimum standard as an 'Archaeological Technician' (for Construction Related Occupation card), 'Professionally Qualified Person' (through accreditation with ClfA) or 'Academically Qualified Person' (through an archaeology degree) and hold a valid CSCS card.
- 13.1.7 All site personnel will familiarise themselves with the following:
 - a. site emergency and evacuation procedures;
 - b. the site's health and safety coordinator;
 - c. the first aider; and
 - d. the location of the nearest hospital and doctor's surgery.
- 13.1.8 The Archaeological Contractor's supervisor will maintain a record of site attendance and complete a daily briefing at the start of work for each day that there is a team in the field.
- 13.1.9 All site personnel will wear personal protective equipment (PPE) as defined by the Archaeological Contractor's risk assessment undertaken in accordance with mandatory requirements and in line with the requirements of the Applicant. As a

minimum, the PPE should consist of a hardhat, steel toe-capped boots with mid-sole protection, high-visibility vest or jacket, high visibility trousers, safety glasses and gloves. All personnel will complete a site induction as set out by the Applicant and adhere to site specific safety rules and regulations outlined therein. All equipment that is used in the course of the fieldwork must be 'fit for purpose' and be maintained in a sound working condition that complies with all relevant Health and Safety regulations and recommendations.

13.1.10 The Archaeological Contractor will assure the provision and maintenance of adequate, suitable, and sufficient welfare and sanitary facilities at appropriate locations for the duration of the works.

13.2 COVID-19/ Other Pandemics or High Consequence Infectious Diseases

- 13.2.1 The Health and Safety policies, Risk Assessments and project-specific Health and Safety Plan compiled by the Archaeological Contractor will address undertaking fieldwork during the Coronavirus COVID-19 pandemic, or any prevailing pandemic/ HCID outbreak at the relevant time prior to works being undertaken. All work should be undertaken in line with the Applicant's health and safety guidance for site/ project works at that time. At the time of writing, this is based on current government advice, including the Site Operating Procedures (Ref. 20).
- 13.2.2 The Archaeological Contractor's Risk Assessment and Health and Safety Plan shall address COVID-19 or other prevailing pandemic/ HCID specific hazard controls; travel, site, welfare, and accommodation; PPE and hygiene provisions; mental health and effects on people the site workers live with; and reporting procedures for site workers to raise any issues or concerns. They shall take account of changes to emergency procedures, factoring in, for example, increased emergency service response times and potential closures of Accident and Emergency departments. Toolbox talks will adhere to social distancing or other prevailing pandemic/ HCID controls prevailing at the time.
- 13.2.3 The Risk Assessment and Health and Safety Plan will be clearly communicated to site workers with sufficient time prior to travel or commencement of work. All site personnel will familiarise themselves with site-specific COVID-19 or other prevailing pandemic/ HCID mitigation measures. Signatures will be required to record that all site workers have attended appropriate site briefings and understood COVID-19 or other prevailing pandemic/ HCID procedures. Site workers must be aware that COVID-19 or other prevailing pandemic/ HCID controls (e.g. maintaining social distancing and hygiene standards) will take precedence until further notice. Site workers must adhere to the COVID-19 or other prevailing pandemic/ HCID measures, controls, and restrictions.
- 13.2.4 If tasks are identified that cannot be compliant with COVID-19 or other prevailing pandemic/ HCID procedures, then work must not take place until further mitigation is put in place to remain compliant.
- 13.2.5 COVID-19 or other prevailing pandemic/ HCID procedures will be under constant review as the situation evolves. The Archaeological Contractor will

ensure that Risk Assessments are updated to reflect any changes to government advice be issued prior to the commencement of or during the archaeological fieldwork.

13.2.6 It will be the Archaeological Contractor's responsibility to determine the relevant requirements, including any restrictions, at the time that works are undertaken.

GLOSSARY AND ABBREVIATIONS

Term	Definition
CBCA	Central Bedfordshire Council Archaeologist
CHMP	Cultural Heritage Management Plan
ClfA	Chartered Institute for Archaeologists
CLC	Construction Leadership Council
HCCA	Hertfordshire County Council Archaeologist
HCID	High Consequence Infectious Diseases
MS	Method Statement
PPE	Personal Protective Equipment
RAMS	Risk Assessment and Method Statement

ANNEX A: HERITAGE STANDARDS AND GUIDANCE

AAF 2011 Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation. Archaeological Archives Forum

ACBMG 2002 Ceramic Building Material. Minimum Standards for Recovery, Analysis and Publication. Archaeological Ceramic Building Materials Group

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Archaeology Data Service and Digital Antiquity Guides to Good Practice: Niven, K. (ed.) 2013 Caring for Digital Data in Archaeology. Archaeology Data Service /Digital Antiquity Guides to Good Practice, Oxbow Books

ADS 2011 Guides to good practice. Archaeology Data Service, University of York

ADS 2014 Data Management and sharing Plans. Version 2.0 August 2014 Archaeology Data Service, University of York

ADS 2020 Archaeology Data Service Guidelines for Depositors. Version 4.0 July 2020. Archaeology Data Service, York.

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Buikstra, J.E. and Ubelaker D.H. (eds) 1994 Standards for Data Collection from Human Skeletal Remains. Arkansas Archaeological Survey Research Series 44, Fayetteville, Arkansas

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