

8. Cultural Heritage

8.1. Introduction

- 8.1.1. This Chapter considers the potential likely significant effects of the Proposed Development on archaeology and cultural heritage receptors. Specifically, it considers potential direct and indirect effects of the Proposed Development on the archaeological resource of the Site and relevant built heritage assets within its environs identified as having the potential to be sensitive to indirect effects associated with a change in 'setting'.
- 8.1.2. This Chapter has been informed by the baseline information presented in **Appendix 8.1: Cultural Heritage Baseline** and should be read in conjunction with this document.
- 8.1.3. This Chapter, and **Appendix 8.1: Cultural Heritage Baseline**, have been prepared by a Senior Heritage Consultant within the Pegasus Group Heritage Team who holds an appropriate academic qualification (Postgraduate Diploma with Distinction in Conservation of the Historic Environment). It has been reviewed by the Executive Director for Heritage for Pegasus Group, a Member of the Institute for Archaeologists and a Fellow of the Society of Antiquaries of London. As required by the 2017 EIA Directive, this Chapter has therefore been prepared and reviewed by a "competent expert" with "sufficient expertise".
- 8.1.4. The Chapter, supported by the **Appendix 8.1: Cultural Heritage Baseline**, establishes the archaeological and built heritage baseline, identifies any effects on this baseline as a result of the Proposed Development (as detailed within **Chapter 4: Proposed Development & Alternatives**) and where necessary proposes mitigation measures. Specifically, the heritage baseline, as fully described in **Appendix 8.1: Cultural Heritage Baseline**, sets out the significance of the heritage resource within the Site and any contribution that the Site makes to the heritage significance of surrounding built heritage assets, where applicable. In doing this, the assessment of the Proposed Development against this identified significance can be carried out, with the resultant effects recorded and quantified.

8.2. Assessment Approach

Methodology

- 8.2.1. This assessment, and that presented in **Appendix 8.1: Cultural Heritage Baseline**, has been undertaken in accordance with relevant heritage industry guidance and best practice, including:
- Chartered Institute for Archaeologists (CIfA) (2020) Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment;
 - CIfA (2020) Standards and guidance for historic environment desk-based assessment;
 - CIfA (2022), Code of Conduct: professional ethics in archaeology;
 - English Heritage (2008) Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment; and
 - Historic England (2015) Managing Significance in Decision-Taking in the Historic Environment: Historic Environment Good Practice Advice in Planning: 2, 2nd edition;

Cultural Heritage

- Historic England (2017) The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3;
- Historic England, Historic England Advice Note 1 – Conservation Area Appraisal, Designation and Management (HEAN:1) (2nd edition, Swindon, February 2019); and
- Historic England (2019) Statements of Heritage Significance: Analysing Significance in Heritage Assets, Historic England Advice Note 12.

Determination of Baseline

- 8.2.2. A study area of 1km around the Site was used, on the basis of best practice guidance and professional judgement, to place the Site into its historical context. The assessment may include references to assets beyond this study area where appropriate, e.g. where such assets are particularly significant and/or where they contribute towards understanding the historic environment within the Site and its environs.

Data Sources

- 8.2.3. The following key sources were consulted as part of the assessment process:
- The National Heritage List for England (NHLE) for information on designated heritage assets;
 - The Nottinghamshire County Council Historic Environment Record (HER) for information on the recorded heritage resource and previous archaeological works;
 - Previous published and grey literature reports relating to archaeological investigations previously undertaken, available with the HER and/or online at the Archaeological Data Services Library;
 - Historic maps available online through The Genealogist, National Library of Scotland and Promap websites;
 - Historic maps and documentary sources held by the Nottinghamshire Archives;
 - Aerial photographs available online via Historic England's Aerial Photo Explorer and Britain from Above;
 - Planning history records held by Broxtowe Borough Council; and
 - Other online resources, including geological data available from the British Geological Survey and Cranfield University's Soilscape Viewer, and Google Earth satellite imagery.
- 8.2.4. For digital datasets, including HER data and designated heritage assets, information was sourced for a 1km study area measured from the boundaries of the Site. Information gathered is discussed within the text where it is of relevance to the potential heritage resource of the Site. A gazetteer of recorded sites and findspots is included at Appendix 1 and maps illustrating the resource within the study area are included at Appendix 2 of **Appendix 8.1: Cultural Heritage Baseline**. Heritage assets beyond the 1km study area were assessed where professional judgement deemed necessary.

- 8.2.5. Historic cartographic sources and aerial photographs were reviewed for the Site, and beyond this where professional judgement deemed necessary.

Site Visit

- 8.2.6. A walkover survey of the Site was undertaken on 25th November 2024 in order to: i) assess the Site within its wider landscape context; ii) identify/confirm any evidence for previous disturbance within the Site; iii) examine any known or suspected archaeological features within the Site; and iv) assess relevant heritage assets beyond the Site boundary.

Assessment of Value/Sensitivity

- 8.2.7. In accordance with the levels of significance articulated in the NPPF (December 2024), three levels of heritage significance are identified and have been utilised for the purposes of this Chapter. These are presented in **Table 8.1**.

Table 8.1: Criteria for establishing value/sensitivity.

Asset	Heritage Assessment
High	Areas of structures of inscribed international importance, such as World Heritage Sites. Grade I and II* Listed Buildings. Grade I and II* RPGs. Scheduled Monuments. Registered Battlefields. Conservation Areas of especial historic interest. Non-designated archaeological assets of schedulable quality. Non-designated buildings, monuments, sites or landscape that can be shown to have a particularly important quality in their fabric or historical association.
Moderate	Grade II Listed Buildings. Grade II Registered Parks and Gardens. The majority of Conservation Areas. Assets of high archaeological resource value identified through consultation.
Low	Locally Listed buildings identified on a local list. Non-designated buildings, monuments or Sites or landscapes of local importance and of modest quality. Locally important historic or archaeological assets, assets with a local value for education or cultural appreciation and of medium archaeological value. Non-designated buildings, monuments, sites or landscape that can be shown to have important qualities in their fabric or historical association. Historic townscapes with historic integrity. Parks and gardens of local interest.
Not Significant	Assets identified as being of no historic, artistic, archaeological or architectural value. Assets that are so badly damaged that too little remains to justify inclusion into a higher grade. Assets whose values are compromised by poor preservation or survival to justify inclusion in a higher category.

Cultural Heritage

Magnitude of Impact

- 8.2.8. Once a level of value/sensitivity has been assigned, the magnitude of impact as a result of the Proposed Development is assessed. Potential impacts are defined as a change resulting from the Proposed Development which affects the significance of a heritage asset. These impacts are considered in terms of being either direct (i.e., physical impacts), indirect (i.e., via a change in 'setting') or cumulative, from construction or operation. Potential impacts may be identified as temporary or permanent.
- 8.2.9. The magnitude of an impact can be judged in a five-point scale. The impact score is arrived at without reference to the value/sensitivity of the asset and the impact is assessed without taking into account any subsequent mitigation proposals but does take into account embedded mitigation derived throughout the design process.
- 8.2.10. The criteria utilised in this EIA for the establishing the level of impact which is deemed to arise is provided at **Table 8.2**.
- 8.2.11. See detailed methodology for assessing change to the overall significance of heritage assets through alterations in 'setting' set out in Appendix 3 of **Appendix 8.1: Cultural Heritage Baseline**.

Table 8.2: Criteria for establishing level of impact.

Level of Impact	Description of Impact
High	Change such that the significance of the asset is totally altered or destroyed. Comprehensive change to setting affecting significance, resulting in substantial changes in our ability to understand and appreciate the resource and its historical setting.
Medium	Change such that the significance of the asset is affected. Changes such that the setting is noticeable different, affecting significance resulting in moderate changes to significance and in our ability to understand and appreciate the resource.
Low	Change such that the significance of the asset is slightly affected. Changes to the setting that have a slight impact on significance resulting in changes in our ability to understand and appreciate the resource.
Minimal	Changes to the asset that hardly affect significance. Changes to the setting of an asset that have little effect on significance and no real change in our ability to understand and appreciate the resource.
No Change	The development results in no change or such a negligible level of change that it does not affect the significance of the asset. Changes to the setting do not affect the significance of the asset or our appreciation of it.

Residual Effect

- 8.2.12. The assessment of effects will be undertaken in two stages. The magnitude of impact is cross referenced with the value of the asset to categorise the effect that is likely to result from the Proposed Development, including embedded mitigation, prior to additional mitigation measures.
- 8.2.13. Following this stage, further consideration of additional mitigation is carried out, and the mitigation is assessed as to whether this would reduce the significance of the effect. Once additional mitigation is applied, the asset is re-assessed, allowing the residual significance of effect to be determined, as seen in **Table 8.3**.

Table 8.3: Levels of Effect

Value/Sensitivity of Asset	Magnitude of Impact				
	No Change	Minimal	Low	Medium	High
High	Neutral	Minor	Moderate	Major	Major
Moderate	Neutral	Minor	Minor/Moderate*	Moderate	Major
Low	Neutral	Neutral	Minor	Minor/Moderate*	Moderate
Not Significant	Neutral	Neutral	Neutral	Neutral	Neutral

**Professional judgement to be applied when assigning a level.*

- 8.2.14. With regard to the above, it is acknowledged that tabular and matrix-led assessments can sometimes lead to an inflation or underestimation of the true effects of a development due to the mechanical process; however, professional judgement is used where appropriate to ensure a true reflection of the impact on the heritage resource is given. This includes a narrative consideration of the impacts and effects where necessary.
- 8.2.15. The ES is required to conform to EIA Regulations and report on the 'significance' of an effect. This does not make a judgement on whether 'substantial' or 'less than substantial' harm will be caused in the terms of NPPF policy.
- 8.2.16. The NPPF does not provide a definition of what constitutes 'substantial' or 'less than substantial' harm. The guidance set out within national Planning Policy Guidance (PPG), however, clarifies that 'substantial harm' is a high test, and that it may not arise in many cases. It makes it clear that it is the degree of harm to the significance of the asset, rather than the scale of development, which is to be assessed. Furthermore, the PPG clarifies that within each category of harm ('less than substantial' or 'substantial'), the extent of the harm may vary and should be clearly articulated.
- 8.2.17. A Major Adverse effect does not necessarily equate to 'substantial' harm. Conversely, a Minor Adverse effect on an asset may cause a higher level of harm, given the relative sensitivity to change of each asset. Professional judgement has been used to equate the results of the ES process with the requirements of NPPF and a narrative conclusion is provided to equate the ES outcome with a level of harm in accordance with NPPF to aid in the decision-making process.
- 8.2.18. A 'significant' effect in EIA terms is considered to be Major effect. Moderate effects can be considered 'significant' or 'not significant' in terms of EIA. The distinction is made by applying

Cultural Heritage

professional judgement to the matrix-led process, allowing a true reflection of the effect to be considered, rather than a level of effect which has been artificially inflated due to the constraints of the EIA process.

Legislative and Policy Framework

8.2.19. This Chapter has been prepared in accordance with relevant current legislation, alongside national and local planning policy and guidance, comprising:

- Planning (Listed Buildings and Conservation Areas) Act 1990;
- National Planning Policy Framework, Chapter 16 (December 2024);
- Planning Practice Guidance – Historic Environment (2014, revised 2019);
- Broxtowe Borough Part 1 Local Plan: Core Strategy (September 2014);
- Part 2 Local Plan (October 2019); and
- Chetwynd: The Toton and Chilwell Neighbourhood Plan (May 2024).

8.2.20. Full details of heritage-based legislation and planning policy can be found in **Appendix 8.1: Cultural Heritage Baseline**.

Limitations to the Assessment

8.2.21. The assessment presented within this Chapter are based upon the baseline conditions (see below and detailed discussion in **Appendix 8.1: Cultural Heritage Baseline**), which are derived in large part from the data held and supplied by the Nottinghamshire HER. In establishing the baseline conditions, for the purposes of this ES, both the accuracy and currency of this data has necessarily been assumed.

8.2.22. No below ground archaeological investigations have taken place. Accordingly, the assessment presented within this Chapter and **Appendix 8.1: Cultural Heritage Baseline** in regard to the archaeological potential of the Site, and the value of features identified on the HER, is based on the results of a Geophysical Survey, alongside available evidence provided by the HER, a review of archival sources and onsite assessment.

8.2.23. The assessment of relevant heritage assets outside of the Site boundary was undertaken from the Site and publicly accessible locations. No other privately held land or properties were accessed. This is not, however, considered to prejudice the assessments presented within this Chapter or **Appendix 8.1: Cultural Heritage Baseline** in regard to the contribution made by the Site to the significance of the assets (via 'setting') or indirect impacts that may arise, respectively.

8.3. Scoping and Consultation

8.3.1. This Chapter considers the following potential effects:

- **Construction Phase:** physical (direct) effects upon buried archaeological remains within the Site as a result of truncation and/or removal;

- **Construction Phase:** non-physical (indirect) effects upon the significance of heritage assets within the Site environs as a result of changes to setting; and
- **Operational Phase:** non-physical (indirect) effects upon the significance of heritage assets within the Site environs as a result of changes to setting.

8.3.2. As discussed in **Chapter 2: Assessment Scope and Methodology**, the Applicant has not requested a formal EIA Scoping Opinion in relation to the Proposed Development; however, has instead followed the scope of that agreed for the larger, separate 'Toton North' scheme, which lies in close proximity to the Site. Given the primary reason for undertaking an EIA is in relation to the potential significant cumulative effects that could occur with Toton North (and other potential schemes in the locality), this is considered appropriate and robust.

8.3.3. In preparing its Scoping Opinion in relation to Toton North, dated 22nd October 2024, Broxtowe Borough Council consulted with a number of statutory consultees, including Historic England and the Nottinghamshire County Council Policy Team, to confirm the matters that should be addressed within the Toton North ES. With regard to cultural heritage, the matters raised in the Scoping Opinion are set out in the first column of **Table 8.4**. Notes on the relevance of these matters to this ES and, where relevant, how they have been addressed are recorded in the second column.

Table 8.4: Consultation Comments and Responses

Consultee	Summary of Comment	Response or location within the ES where comments are addressed
Historic England	With regard to archaeology, Historic England advise to seek independent archaeological advice (such as from the County Council) regarding appropriate and necessary evaluation work, and design and archaeological mitigation. With regard to the historic built environment, Historic England refer the Broxtowe Borough Council to the advice of their Conservation Officer and to GPA 3: The Setting of Heritage Assets.	No specific comments regarding scope of ES.
Nottinghamshire County Council Policy Team – Archaeology	The proposed approach outlined in the Scoping Request is broadly appropriate. A Geophysical Survey for the entirety of the Site should be carried out followed by evaluation via trial trenching. The geophysical survey results should form the starting point for developing the evaluation scope.	A Geophysical Survey has been undertaken across the full extent of the Site, with the results used in the preparation of this ES Chapter and Appendix 8.1: Cultural Heritage Baseline . The results of the survey will also used as

Cultural Heritage

Consultee	Summary of Comment	Response or location within the ES where comments are addressed
		a starting point for defining the scope of further works. It is proposed that a programme of archaeological evaluation (via trial trenching) be secured by way of a pre-commencement planning condition, with the scope to be agreed in consultation with the Planning Archaeologist(s) at Nottinghamshire County Council. This approach is considered appropriate given the results of the Geophysical Survey, which indicate that the Site has low potential for significant archaeological remains.
Nottinghamshire County Council Policy Team – Built Heritage	Section 2.18 of the Scoping Request does not make reference to the proximity of the Bramcote Conservation Area. This will require assessment as part of the ES.	For the reasons outlined in Appendix 8.1: Cultural Heritage Baseline , this asset is not considered potentially sensitive to the Proposed Development at Toton West. The potential impacts upon the Bramcote Conservation Area have not therefore been assessed within this ES Chapter.
	LVIA receptors must include views out of and towards the Bramcote Conservation Area and consider impacts on its 'rural setting'.	Response as per above.

8.4. Baseline Conditions

Site Description and Context

- 8.4.1. The Site extends to an area of approximately 18.96 hectares and lies to the west of the B6003 Stapleford Lane, which leads northwards, and southwards, towards the suburbs of Stapleford, and Toton, respectively. The Site comprises several parcels of arable agricultural land defined by mature hedgerows. The Site boundaries are also defined by mature hedgerows and hedgerow trees.

- 8.4.2. Further arable agricultural land extends beyond the northern site boundary. A parcel of mature trees and hedgerows abuts the north-eastern corner, beyond which lies an electricity transmission substation. The southern section of the eastern boundary is bound by Stapleford Lane, beyond which lies the Land at Toton East site for which a planning application is being prepared by the Applicant (in conjunction with Peveril Securities Ltd). An area of existing residential development associated with the suburb of Toton extends beyond the southern site boundary, with the south-western corner abutted by an area of grassland and woodland comprising the Toton Fields Local Nature Reserve. The western site boundary is similarly bound by woodland belt and grassland within the Toton Sidings Local Wildlife Site. The DB Toton Cargo Railway Terminus lies beyond.
- 8.4.3. Access to the Site is currently taken via an informal gated access from Stapleford Lane. A public right of way also extends roughly north – south through the western section of the Site, running alongside the eastern section of the northern site boundary and connecting to Stapleford Lane to the east.
- 8.4.4. Land within the Site slopes generally in an east – west direction, with the lowest point in the north-western corner of the Site. The topography of the Site falls from around 65m Above Ordnance Datum (AOD) on its eastern boundary to c.40m AOD to the north-western corner. A small stream runs roughly east – west along the eastern section of the northern site boundary.
- 8.4.5. The recorded geology of the Site predominantly comprises mudstone and siltstone of the Tarporley Siltstone Formation, sedimentary bedrock formed between 250 and 241.5 million years ago during the Triassic period. Bands of sandstone, again of the Tarporley Siltstone Formation, also run roughly east – west through the Site. Meanwhile a small area of mudstone of the Radcliffe Member, sedimentary bedrock formed between 247.1 and 241.5 million years ago during the Triassic period lies to the south-western corner of the Site. Superficial deposits are not recorded for the Site.
- 8.4.6. Soils across the Site are recorded as slightly acidic, loamy and clayey with impeded drainage.

Baseline Survey Information

Archaeological Resource

Prehistoric (pre-43 AD)

- 8.4.7. The HER records no features or findspots of Prehistoric date within the Site or surrounding study area.
- 8.4.8. Notwithstanding the above, the Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies to the southern site boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.

Romano-British (AD 43 – 410)

- 8.4.9. The HER records no features or findspots of Romano-British date within the Site, while the only evidence of activity during this time comprising the findspot of a coin of Valens found in the garden of 59 Highfield Road, Chilwell in 1970 (HER ref. MNT543), c.710m to the east of the Site. This is anticipated to represent a chance loss.

Cultural Heritage

- 8.4.10. Again, notwithstanding the above, the Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies to the southern site boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.

Early Medieval (410 AD – 1066) and Medieval (1066 – 1539)

- 8.4.11. There is no artefactual evidence of Early Medieval activity either within the Site or wider study area, with all evidence from this period being documentary in nature.
- 8.4.12. The majority of the Site historically fell, and indeed continues to fall, within the parish of Toton, while the north-western parcel falls within Stapleford parish.
- 8.4.13. The name Toton is believed to have Anglo-Saxon origins, deriving from tun or farm belonging to *Tofi*, an Old Norse name. The settlement is therefore anticipated to have been established during the Anglo-Saxon period, albeit later dominated by Norse settlers. The first specific mention of a permanent settlement at Toton was within the 1086 Domesday Survey, which recorded a village named 'Tovetune', later spelt 'Toueton' in 1230. Having been held by Healfdene prior to the conquest, the manor was given to William Peverel, lord of Nottingham Castle, and Warner (father of Robert) held under him. Toton was recorded as having a church and priest in 1086, providing further evidence that a pre-conquest settlement likely existed at this location.
- 8.4.14. A settlement at Stapleford is believed to have developed around a fording point of the river Erewash, linking the Danish boroughs of Nottingham and Derby. While evidence of this settlement is limited, an Anglo-Scandinavian cross shaft stands within the grounds of the Church of St Helen. While its exact date is unknown, it has been variously suggested to have been erected during the 7th and 20th centuries. The Domesday Survey of 1086, which again provides the earliest written reference to Stapleford, recorded the land as being held by Robert de Heriz under the authority of William Peveril, having previously comprised four manors held by Young Wulfsi, Staplewin, Goodwin and Gladwin. Stapleford was recorded as having a church and priest, again suggesting that a pre-conquest settlement likely existed at this location.
- 8.4.15. While there are no features or findspots recorded within the Site, and data within the wider study area is sparse, documentary evidence is illustrative of a Medieval landscape of dispersed settlement and agricultural cultivation that characterised the parishes of Toton and Stapleford. Land within the Site is anticipated to have formed part of this agricultural landscape, with the results of the Geophysical Survey having recorded possible buried remains of ridge and furrow cultivation across several fields. The features have, however, been truncated by later field boundary reconfigurations and ploughing activities. No upstanding physical remains or cropmarks have been identified.
- 8.4.16. The agricultural character of the wider landscape is also supported by the discovery of a series of features, interpreted as Medieval plough furrows and possible field boundaries or drainage systems within the parish of Chilwell were identified during soil stripping of an attenuation pond (HER ref. MNT27019), c.370m north-east of the Site.

Post Medieval (1540 – 1750), Early Modern (1750 – 1901), Modern (1901 – present)

- 8.4.17. While there are no features or findspots of definite post-Medieval date within the Site, a group of five small, slightly raised features of c.5 – 10m in diameter are visible on historic aerial photographs within the western section of the Site (HER ref. MNT7121). These features have been identified as possible capped shaft-heads associated with historic mining activities, albeit the HER notes that they may also be of agricultural origin. Due to the presence of mature crops at

the time of the site walkover, it was not possible to determine the presence of such remains, while the Geophysical Survey did not identify any possible below-ground remains associated with these features.

- 8.4.18. The only records of post-Medieval date within the wider study area again relate to historic mining activities, comprising the anticipated remains of former bell pits (HER refs. MNT7221 and MNT24941), c.650m to the north-east of the Site. Further possible bell pits have also been recorded c.700m to the north at Stapleford (HER refs. MNT7330 and MNT6966).
- 8.4.19. Alongside this early industrial activity, documentary sources confirm that the study area continued to comprise a landscape of dispersed settlement separated by large swathes of agricultural land during the post-Medieval period. Meanwhile the plough furrows and possible field boundaries or drainage systems identified during soil stripping c.370m north-east of the Site have been attributed to activity during both the Medieval and Post-Medieval periods (HER ref. MNT27019).
- 8.4.20. By the Early Modern period, John Chapman's Map of 1774 confirms the Site's agricultural operation. Meanwhile the 1845 Tithe Map for Toton confirms that all land parcels within the site boundary were in arable use, albeit with two small spinneys to the south-western corner. The Late Sir John Borlase Warren Baronet was recorded as landowner, albeit the parcels were occupied separately.
- 8.4.21. The north-western section of the Site, which falls within Stapleford, was not recorded by the 1850 Tithe Survey for the parish, indicating that it may have comprised untithable land. It has not been possible to confirm the exact use at this time, albeit both Chapman's late 20th-century Map and the 1st Edition Ordnance Survey Map of 1885 record the Site as undeveloped agricultural land. The surrounding agricultural landscape is also evidenced through both historic mapping and HER data, with a farmstead, Wheatgrass Farm (HER ref. MNT24941), recorded c.865m to the north-east of the Site.
- 8.4.22. From the 18th century onwards, Stapleford and the neighbouring village of Bramcote, to the north-east of the Site, became centres of the framework knitting and lace-making industry, with both settlements experiencing significant growth as a result of the economic prosperity this generated. Due to the land within the Site's hinterland location, this did not impact upon its agricultural use.
- 8.4.23. There is no documentary evidence of Toton becoming an important industrial centre, albeit historic mapping confirms that the settlement expanded considerably following development of the Toton Sidings, a major marshalling yard of the Midland Railway in which coal from the Nottinghamshire coal fields was sorted and distributed across the country, during the mid-19th century (HER ref. MNT401). The Sidings and associated railway ran parallel to the western site boundary and operate as an important locomotive maintenance depot. Numerous factories interspersed with pockets of terraced housing were also established immediately to the west of the railway line by the end of the 19th and into the early 20th centuries. This included a sawmill visible on historic maps from 1914 onwards (HER ref. MNT396 and MNT12739), c.530m to the north-west of the Site. Despite spatial proximity, historic mapping does not indicate that any operations associated with the railway extended into the Site, with the land remaining in agricultural use. The site of the former Stapleford and Sandiacre Station, opened in September 1847 as part of the Midland Railway (HER refs. MNT401 and MNT12739), lies c.530m to the north-west of the Site. The station closed in January 1967 and has since been demolished.
- 8.4.24. Within the wider study area, a single-span stone bridge constructed during the Victorian period to carry Station Road across the River Erewash (HER refs. MNT9691, MNT9692 and MNT25561),

Cultural Heritage

remains extant c.820m to the north-west of the Site. Meanwhile the site of a malthouse to the far western edge of Chilwell parish (HER refs. MNT646 and MNT12896), lies c.890m to the south-east.

- 8.4.25. There are again no Modern features or findspots recorded within the Site. Features from this period within the wider study area are associated with the First and Second World Wars and comprise two buildings (HER refs. 27607 and 27608) associated with the wider Chetwynd Barracks, which continues to occupy an area c.820m to the south-east of the Site at its most proximate point. Initially named the Chilwell Depot and Barracks, the facility was built shortly after the First World War on the site of the former National Shell Filling Factory No.6 which had been devastated by an explosion on 1st July 1918 (HER ref. MNT27193). A Grade II Listed memorial commemorating workers killed in accidents at the factory, especially in the 1918 explosion, lies c.1.2km to the south-east of the Site. Construction of the National Shell Filling Factory also catalysed further expansion of Toton during the First World War.
- 8.4.26. In April 1935, the parish of Toton was abolished and merged into the Beeston and Stapleford urban district. The urban district was itself abolished in 1974 to become part of Broxtowe. Due to the degree of expansion during the 19th and 20th centuries, Toton's agricultural origins are now only appreciable via historic cartographic sources.
- 8.4.27. The use of the land within the Site for agricultural purposes is illustrated on historic cartographic sources from the 19th-century to the present day, as discussed in **Appendix 8.1: Cultural Heritage Baseline**. This is supported by the results of the Geophysical Survey, which recorded remains of former field boundaries recorded on historic Ordnance Survey Mapping, alongside drainage systems.

Undated

- 8.4.28. Two undated records have been identified within the Site, comprising:
- As noted above, a group of five small, slightly raised features of c.5 – 10m in diameter visible in historic aerial photographs within the western section of the Site (HER ref. MNT7121). These features have been identified as possible capped shaft-heads associated with historic mining activities, albeit the HER notes that they may also be of agricultural origin.
 - A linear bank feature extending east – west across the centre of the Site (HER ref. MNT6029). The feature has been identified as a possible plough headland.
- 8.4.29. Two further undated records have been identified within the wider study area, a double ditched enclosure of unknown date visible on historic aerial photographs (HER ref. MNT382), c.45m to the south of the Site, alongside a possible enclosure recorded during a Geophysical Survey HER ref. MNT27024), c.80m to the north-east.

Significance of Identified Heritage Resource

Designated Heritage Assets

- 8.4.30. There are no designated heritage assets located within the Site.
- 8.4.31. The following designated heritage assets have been identified within the 1km study area:
- Eleven Grade II Listed Buildings; and

- One Conservation Area.

- 8.4.32. There are no Scheduled Monuments, Registered Park and Gardens, Registered Battlefields or World Heritage Sites within or immediately beyond the 1km study area.
- 8.4.33. As set out in Section 6 of **Appendix 8.1: Cultural Heritage Baseline**, by virtue of spatial and visual separation, including large-scale infrastructure associated with the intervening railway that has been present since the mid-19th century, intervisibility between the Proposed Development and all assets within the 1km study area would be wholly screened. Taken alongside the lack of any known historic or functional relationship with the Site, beyond forming part of the wider agricultural landscape to the east, it is considered that the Proposed Development would not alter any aspect of the setting of any of the assets that contribute towards their overall significance. No harm would therefore be anticipated to result via a change in setting. All designated heritage assets within the 1km study area have therefore been excluded from any further detailed assessment within this ES Chapter.
- 8.4.34. No designated heritage assets beyond the 1km were identified as potentially sensitive to the Proposed Development.

Non-Designated Heritage Assets

Possible Prehistoric to Romano-British Enclosure System

- 8.4.35. The Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies to the southern site boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.
- 8.4.36. As detailed in Section 6 of **Appendix 8.1**, any associated buried remains have the potential to be of regional significance via their contribution towards objectives identified by the West Midlands Research Framework. It should, however, be noted that the precise origins of the anomalies cannot be confirmed on the basis of existing evidence and, in any event, below ground remains would be anticipated to have been at least partially truncated by agricultural activities from the Medieval period onwards.
- 8.4.37. On the basis of existing evidence, any below ground remains associated with Prehistoric to Romano-British occupation and activities at these locations have the potential to hold significance commensurate to a non-designated heritage asset of moderate significance, and thus **Moderate Value** in EIA terms.

Possible Buried Remains of Ridge and Furrow

- 8.4.38. As outlined above, possible buried evidence of Medieval ridge and furrow cultivation was recorded across several fields during the Geophysical Survey. The features have, however, been truncated by later field boundary reconfigurations and ploughing activities. No upstanding physical remains or cropmarks have been identified.
- 8.4.39. The heritage significance of ridge and furrow is primarily derived from their fabric and historic interest, by way of their visible contribution towards the historic landscape character through the physical form of surviving earthworks. They have little intrinsic archaeological value as the earthwork ridges and infilled furrows will contain only unstratified finds within their matrices. In any event, the below-ground remains across the Site been heavily truncated by later field boundary changes and agricultural activities. Taken together, any buried remains associated

Cultural Heritage

with Medieval ridge and furrow would not be anticipated to represent heritage assets, and thus are **Not Significant** in EIA terms.

Possible Mining Remains (HER ref. MNT7121)

- 8.4.40. A group of five small, slightly raised features of c.5 – 10m in diameter are visible on historic aerial photographs within the western section of the Site. These features have been identified as possible capped shaft-heads associated with historic mining activities, albeit the HER notes that they may also be of agricultural origin. Due to the presence of mature crops at the time of the site walkover, it was not possible to determine the presence of such remains, while the Geophysical Survey did not identify any possible below-ground remains associated with these features. However, as the land has subsequently been used for arable agricultural cultivation, including the use of modern farming machinery, it is likely that any such remains would have been disturbed or truncated. Taken together, any buried remains associated with historic mining activities, if indeed present, would be anticipated to represent no more than non-designated heritage assets of local significance, and thus **Low Value** in EIA terms.

Other Potential Pre-Medieval Remains

- 8.4.41. On the basis of spatial proximity, the theoretical potential for undiscovered remains dating to the Prehistoric and Romano-British period within the wider Site is considered to be moderate to high. However, no further anomalies possibly dating to this period were recorded during the Geophysical Survey. Meanwhile, as is the case with the identified possible Prehistoric features, any additional pre-Medieval features would likely have been at least partially truncated by ploughing activities during this later period, alongside subsequent agricultural activity during the Post-Medieval to Modern periods. Taken together, the residual archaeological potential for undiscovered Prehistoric remains within the wider Site is considered to be moderate.
- 8.4.42. It is anticipated that any prehistoric heritage assets identified have the potential to be of regional significance as they can contribute to address research framework objectives and thus may represent non-designated heritage assets of low to moderate significance. Overall, any such remains would be anticipated to be of up to **Moderate Value** in EIA terms.

Other Potential Historic Agricultural Remains

- 8.4.43. The Site and its environs are known to have comprised part of the agricultural landscape of Toton and Stapleford from the Medieval period onwards and thus has potential for artefacts and deposits associated with agricultural activities from this time to the present day. Any such remains, such as buried furrows, former field boundaries, drainage channels and ponds, if present, would be anticipated to represent no more than non-designated heritage assets of local significance, and thus **Low Value** in EIA terms.

8.5. Embedded Mitigation

- 8.5.1. The following provides an overview of 'embedded mitigation' relevant to Cultural Heritage that has been taken into account in the assessment of potential effects set out in **Section 8.6** below.

Construction Phase

- 8.5.2. It is assumed that all works carried out during the construction phase would be undertaken in accordance with Best Practice Means. A full explanation of measures to control direct and

indirect effects will also be incorporated into a Construction Environmental Management Plan (CEMP) to be secured via an appropriate planning condition and/or Section 106 Agreement. Further details of the construction methodology are provided in **Chapter 4: Proposed Development and Alternatives**.

Operational Phase

8.5.3. Due to the lack of intervisibility between the Site and surrounding Cultural Heritage receptors, the key elements of the design approach for the operational phase which provide 'embedded mitigation' and evidence of avoiding and/or minimising adverse impacts on Cultural Heritage relate to the preserving a link with the Site historic form and layout. These elements comprise:

- Retention of an area of undeveloped green open space to the western section of the Site.
- The existing field pattern (with this incorporating aspects of the historic field pattern) has been incorporated into the Parameters Plan, thus helping to preserve appreciation of the historic landscape form.
- Retention of field boundary hedgerows and, where present, tree planting to the site boundaries.

8.6. Assessment of Likely Significant Effects

8.6.1. For the heritage assessment of likely significant effects below, the assessment is based on the above embedded mitigation being included.

Construction Phase

Archaeology

8.6.2. The Proposed Development comprises the construction and operation of a residential development, and associated landscaping and infrastructure works. Ground clearance and preparation, including ground investigations, topsoil stripping and levelling, the excavation of building foundation trenches, service trenches and drainage runs/swales, piling, and landscaping, including tree planting all have the potential for below ground impacts.

8.6.3. Construction activities have the potential to truncate and/or remove known and potential buried archaeological remains within the Site. Given their finite nature, the direct development effects upon the known and potential buried archaeological resource would be direct, long-term, permanent and adverse.

8.6.4. Buried archaeological remains of a series of a possible partially truncated Iron Age to Romano-British enclosure system were recorded by the Geophysical Survey adjacent to the southern site boundary. While these remains have the potential to be of regional significance as they may contribute to address research framework objectives, their intrinsic significance should be viewed within the context of the anticipated truncated status of any below ground remains as a result of subsequent ploughing activities, if indeed present. Taken together, the remains may be considered to be of a significance commensurate to a non-designated heritage asset of moderate significance, and thus Moderate Value in EIA terms. **Figure 4.1 'Parameter Plan'** indicates that the area will be given over to residential development, comprising built form, associated infrastructure and ancillary amenity space. Construction of residential development, infrastructure and relandscaping would likely result in extensive, if not total, loss of any buried features or artefacts associated with the possible Iron Age to Romano-British occupation and

Cultural Heritage

activities, if indeed the putative origins are accurate. As a worst-case scenario, complete removal of the earthworks would have a **High Impact** on assets of **Moderate Value**, resulting in a **Permanent, Major Adverse Effect**. This would be considered potentially Significant, if unmitigated.

- 8.6.5. With respect to any buried remains of Medieval ridge and furrow, as outlined at **Section 8.4**, below ground remains have little intrinsic archaeological value and will likely contain only unstratified artefactual remains within their matrices. In any event, the below-ground remains within the Site have again been truncated by later field boundary changes and agricultural activities. Taken together, any buried remains associated with Medieval ridge and furrow would not be anticipated to represent heritage assets, and thus are **Not Significant** in EIA terms. The Parameters Plan indicates that the areas of the Site recorded as containing buried ridge and furrow will be given over to a mixture of residential development, associated infrastructure, including highways, and ancillary amenity space, alongside public open space to the west. Both residential development and relandscaping would be anticipated to result in extensive, if not total, loss of cropmarks at these locations. As a worst-case scenario, complete removal of the cropmarks would have a **High Impact** on features that are **Not Significant**, resulting in a **Permanent, Neutral Effect**.
- 8.6.6. A group of five small, slightly raised features are visible on historic aerial photographs within the western section of the Site and have been interpreted as possible capped shaft-heads associated with historic mining activities. However, the HER notes that they may also be of agricultural origin and no evidence was identified during the Geophysical Survey or site walkover. Any such remains would be of **Low Value**. **Figure 4.1 'Parameter Plan'** indicates that the area will remain undeveloped albeit relandscaped to create open space. Relandscaping works have potential to result in extensive, if not total, loss of any buried resource associated with former mining activities at this location. As a worst-case scenario, complete removal of the earthworks would have a **High Impact** on assets of **Low Value**, resulting in a **Permanent, Moderate Effect**. **This is Not Significant in EIA terms.**
- 8.6.7. With respect to previously undiscovered pre-Medieval remains, if present these would be anticipated to be of Low Value. As a worst-case scenario, should buried archaeological remains be present within the Site, the construction phase would be anticipated to have a **High Impact** on assets of up to **Moderate Value**, resulting in a **Permanent, Major Adverse Effect**. **This would be considered potentially Significant, if unmitigated.**
- 8.6.8. With respect to previously undiscovered remains associated with the Site's historic agricultural use, if present these would be anticipated to be of Low Value, at most. As a worst-case scenario, should buried archaeological remains be present within the Site, the construction phase would be anticipated to have a **High Impact** on assets of **Low Value**, resulting in a **Permanent, Moderate Effect**. **This is Not Significant in EIA terms.**

Built Heritage

- 8.6.9. Due to the degree of spatial separation and visual screening afforded by intervening built form and vegetation, construction activity would not be visible or audible from any built heritage receptors. Activities during the construction phase would not therefore alter the ability to appreciate any assets within their respective settings and thus result in **No Change** to built heritage receptors. This represents a **Neutral Effect (not significant)** in EIA terms.

Operational Phase

Archaeology

8.6.10. Any effects that would occur to Cultural Heritage during the operational phase would derive from changes to the ‘setting’ of built heritage assets within the Site and its surrounds. There would be no further impacts associated with the archaeological resource of the Site.

Built Heritage

8.6.11. Further detail on assessing changes in ‘setting’ in relation to the overall heritage significance of a heritage asset is set out in detail at Appendix 3 of the **Appendix 8.1: Cultural Heritage Baseline**.

8.6.12. Due to the degree of spatial separation and visual screening afforded by intervening built form and vegetation, the Proposed Development associated with the operational phase would not be visible or audible from any built heritage receptors. The operational phase would not therefore alter the ability to appreciate any asset within their respective settings and thus result in **No Change** to built heritage receptors. This represents a **Neutral Effect (non significant)** in EIA terms

8.7. Mitigation, Enhancement and Residual Effects

8.7.1. The following provides a summary of additional mitigation measures proposed in response to identified impacts on Cultural Heritage assets.

Additional Mitigation

8.7.2. Groundworks associated with the Proposed Development would be anticipated to result in the extensive or total loss of buried archaeological remains within the Site. As outlined above, it is not considered likely that any remains would be of equivalent significance to a designated heritage asset, such that they should be subject to the policies for designated heritage assets as noted in the NPPF (2024) paragraph 213, footnote 75.

8.7.3. Based on current evidence, preservation in situ would not be a proportionate or appropriate mitigation strategy for the Proposed Development. Rather, a programme of archaeological works would be undertaken, comprising evaluation and mitigation (where required), as outlined in **Table 8.5**. The scope of additional archaeological mitigation will be specified by and agreed with the Planning Archaeologist(s) at Nottinghamshire County Council and secured via condition.

8.7.4. No additional mitigation is proposed in relation to Cultural Heritage for the operational phase beyond that which is embedded into the design of the Proposed Development, as discussed at Section 8.5, above, and summarised in **Table 8.5**.

Table 8.5: Mitigation

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How measure would be secured		
		By Design	By S.106	By Condition
Embedded Mitigation				
1	All works carried out during the construction phase would be undertaken in accordance with Best Practice Means. A full explanation of measures to control direct and indirect effects will also be incorporated into a Construction		X	

Cultural Heritage

Ref	Measure to avoid, reduce or manage any adverse effects and/or to deliver beneficial effects	How measure would be secured		
		By Design	By S.106	By Condition
	Environmental Management Plan (CEMP) to be secured via an appropriate planning condition and/or Section 106 Agreement.			
2	Retention of an area of undeveloped green open space to the western section of the Site.	X		
3	The existing field pattern (with this incorporating aspects of the historic field pattern) has been incorporated into the Parameters Plan, thus helping to preserve appreciation of the historic landscape form.	X		
4	Retention of field boundary hedgerows and, where present, tree planting to the site boundaries.	X		
Additional Mitigation				
1	Archaeological evaluation and mitigation to confirm the presence and significance of buried archaeological remains within the Site.			X

Enhancements

- 8.7.5. No enhancement(s) would be anticipated to result from the Proposed Development in respect of Cultural Heritage.

Residual Effects

- 8.7.6. **Table 8.6** provides a summary of the professional assessment of the overall residual effects resulting from the Proposed Development at both construction and operational phases, taking into account both embedded mitigation (as set out in Section 8.5) and additional mitigation (as set out in Section 8.7).

Table 8.6: Significance of Residual Effects

Environmental Effect	Sensitivity of Receptor	Impact Magnitude	Nature of Impact (Permanent/ Temporary)	Residual Effect and Significance
CONSTRUCTION PHASE				
Possible Prehistoric to Romano-British enclosures system	Moderate	High	Permanent	Moderate Not Significant in EIA terms
Possible buried remains of ridge and furrow	Not Significant	High	Permanent	Neutral

Possible mining remains (HER ref. MNT7121)	Low	High	Permanent	Moderate Not Significant in EIA terms
Other potential pre-Medieval remains	Up to Moderate	High	Permanent	Moderate Not Significant in EIA terms
Previously undiscovered buried archaeological remains (if present)	Low	High	Permanent	Moderate Not Significant in EIA terms
OPERATIONAL PHASE				
No effects on Cultural Heritage have been identified during the operational phase				

8.8. Cumulative and In-Combination Effects

Cumulative Effects

- 8.8.1. Cumulative effects are the combined effects of several development schemes (in conjunction with the Proposed Development) which may, on an individual basis be insignificant but, cumulatively, have a significant effect.
- 8.8.2. A review has been undertaken of “existing and/or approved projects” within 3km, which alongside the Proposed Development, could potentially result in cumulative significant effects. Those projects to be taken forward for assessment are listed at **Chapter 2: Assessment Scope and Methodology**.
- 8.8.3. Assessment of the potential for cumulative effects between the Proposed Development and identified existing and/or approved projects with respect to Cultural Heritage is provided at **Table 8.7**.

Cultural Heritage

Table 8.7: Existing and/or Approved Projects

Address and Reference	Description of Development	Approx. Distance from the Site	Potential for Cumulative Effect
Land at Toton North Ref: TBC	The construction of up to 880 dwellings, a link road (means of access only), local centre, country park, education provision (forest school) and associated infrastructure.	400m to the north-east	While it is acknowledged that previously undiscovered buried remains may extend beyond the requisite application boundaries, it is reasonable to assume that, if planning permission were to be approved, appropriate mitigation measures would be carried out in line with national and local planning policy requirements, including evaluation and recording (as required). The individual effects of each scheme would not therefore result in additional impacts to the buried archaeological resource when considered in combination. With regard to indirect effects during the construction phase, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, there will be no cumulative effects in combination with Land at Toton North. The Proposed Development is not anticipated to result in direct effects during the operational phase. As such, there will be no cumulative effects in combination with Land at Toton North. With regard to indirect effects during the operational phase, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, there will be no cumulative effects in combination with Land at Toton North.

Environmental Statement

Cultural Heritage

Address and Reference	Description of Development	Approx. Distance from the Site	Potential for Cumulative Effect
Land at Toton East Ref: TBC	The construction of 155 dwellings with associated open space and infrastructure.	20m to the north-east	While it is acknowledged that previously undiscovered buried remains may extend beyond the requisite application boundaries, it is reasonable to assume that, if planning permission were to be approved, appropriate mitigation measures would be carried out in line with national and local planning policy requirements, including evaluation and recording (as required). The individual effects of each scheme would not therefore result in additional impacts to the buried archaeological resource when considered in combination. With regard to indirect effects during the construction phase, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, there will be no cumulative effects in combination with Land at Toton East. The Proposed Development is not anticipated to result in direct effects during the operational phase. As such, there will be no cumulative effects in combination with Land at Toton East. With regard to indirect effects during the operational phase, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, there will be no cumulative effects in combination with Land at Toton East.
Southfields Farm, Common Lane, Bramcote,	Construction and operation of two adjacent Battery Energy Storage Systems (BESS) facilities operating at different voltages (132kV and 33kV) in order to fully support the local electricity network. Both facilities are adjacent to each other within a	59m to the north-west	While it is acknowledged that previously undiscovered buried remains may extend beyond the requisite application boundaries, it is reasonable to assume that, if planning permission were to be approved, appropriate mitigation measures would be carried out in line with

Cultural Heritage

Address and Reference	Description of Development	Approx. Distance from the Site	Potential for Cumulative Effect
Nottinghamshire NG9 3DT 24/00066/ FUL	single new overall site compound comprising: the erection of battery containers, switchgear containers, inverters, control building, and new substations; installation of new underground cable circuits to connect the new BESS substations; improvements to access from Common Lane; establishing new internal access roads, resurfaced compound, and turning area; installation of perimeter fencing and access gate; associated ground works; and landscaping (revised scheme.		national and local planning policy requirements, including evaluation and recording (as required). The individual effects of each scheme would not therefore result in additional impacts to the buried archaeological resource when considered in combination. With regard to indirect effects during the construction phase, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, there will be no cumulative effects in combination with the Southfields BESS. The Proposed Development is not anticipated to result in direct effects during the operational phase. As such, there will be no cumulative effects in combination with the Southfields BESS. With regard to indirect effects during the operational phase, no built heritage receptors have been identified as being sensitive to the Proposed Development. As such, there will be no cumulative effects in combination with the Southfields BESS.

In-Combination Effects

- 8.8.4. The potential for in-combination effects, caused by the combination of a number of individual effects on sensitive receptors, has been considered as part of the embedded mitigation and assessment presented at Sections 8.5 and 8.6, where appropriate. The potential effects include noise and vibration, dust generation, noise, traffic and landscape impacts. These are primarily associated with the construction phase of the Proposed Development.
- 8.8.5. A Construction Environmental Management Plan (CEMP) will be implemented, secured by planning condition and/or Section 106 Agreement. This will ensure the potential effects associated with the construction phase are appropriately mitigated in line with best practice methods.
- 8.8.6. On this basis, no in-combination effects would be anticipated to result from the Proposed Development in respect of Cultural Heritage.

8.9. Summary**Introduction**

- 8.9.1. This Chapter has considered potential effects upon the significance of archaeological and built heritage receptors. Specifically, it considers potential direct and indirect effects of the Proposed Development on the potential archaeological resource of the Site and relevant built heritage assets within its environs.

Baseline Conditions

- 8.9.2. While there are no records of Prehistoric to Romano-British date within the Site, the Geophysical Survey recorded a number of anomalies adjacent to the southern boundary that have been interpreted as forming a possible partially truncated Iron Age to Romano-British enclosure system. The potential for identification of remains of dating to the Prehistoric to Romano-British periods within this section of the Site is therefore considered to be moderate to high.
- 8.9.3. On the basis of spatial proximity, the theoretical potential for undiscovered remains dating to the Prehistoric to Romano-British periods within the wider Site is moderate to high. However, no further anomalies possibly dating to this period were recorded during the Geophysical Survey. Meanwhile, as is the case with the identified possible Prehistoric to Romano-British features, any additional features would to be anticipated to have been at least partially truncated by agricultural activities from the Medieval period onwards. Taken together, the residual archaeological potential for undiscovered Prehistoric to Romano-British remains within the wider Site is considered to be low to moderate.
- 8.9.4. On the basis of available evidence, the potential for remains of Early Medieval date is considered to be low.
- 8.9.5. The Site appears to have comprised part of the agricultural hinterland associated with the settlements of Toton and Stapleford from the Medieval period onwards and thus has some potential for artefacts and deposits associated with agricultural activities from the Medieval to Modern periods.
- 8.9.6. While records are focused within the settlement centres, the surrounding landscape is characterised by various records of agricultural field systems, including ridge and furrow earthworks, former field boundaries and drainage systems. While no such records are recorded

Cultural Heritage

within the Site, the Geophysical Survey identified possible buried remains of ridge and furrow cultivation across several fields. The features have, however, been truncated by later field boundary reconfigurations and ploughing activities. The Geophysical Survey also recorded below-ground evidence of former field boundaries recorded on historic Ordnance Survey Maps.

- 8.9.7. Desk-based research has also identified potential evidence of post-Medieval mining activities within the southern section of the Site, which takes the form of five small, slightly raised features interpreted as possible capped shaft-heads. The HER notes that the features may also be of agricultural origin. Due to the presence of mature crops at the time of the site walkover, it was not possible to determine the presence of such remains, while the Geophysical Survey did not identify any possible below-ground remains associated with these features. However, as the land has subsequently been used for arable agricultural cultivation, including the use of modern farming machinery, it is likely that any such remains would have been disturbed or truncated.
- 8.9.8. There are no designated heritage assets located within the Site, while eleven Grade II Listed Buildings and one Conservation Area are located within the 1km study area.
- 8.9.9. By virtue of spatial and visual separation, including large-scale infrastructure associated with the intervening railway, intervisibility between the Proposed Development and all assets within the 1km study area would be wholly screened. Taken alongside the lack of any known historic or functional relationship with the Site, beyond forming part of the wider agricultural landscape to the east, it is considered that the Proposed Development would not alter any aspect of the setting of any of the assets that contribute towards their overall significance. No harm would therefore be anticipated to result via a change in setting. All designated heritage assets within the 1km study area have therefore been excluded from any detailed assessment within this ES Chapter.
- 8.9.10. No designated heritage assets beyond the 1km study area were identified as potentially sensitive to the Proposed Development.

Likely Significant Effects

- 8.9.11. Two potentially significant effects have been identified as resulting from the Proposed Development, if considered in isolation and unmitigated. This comprises the removal of buried remains associated with the possible Iron Age to Romano-British enclosure system and other previously undiscovered Pre-historic to Romano-British remains which have the potential to be of up to Moderate Value in EIA terms. No cumulative effects would be anticipated in combination with any of the identified cumulative developments.

Mitigation and Enhancement

- 8.9.12. Further archaeological investigations will be required to establish the presence, extent, character, significance and level of development impact of the potential buried archaeological resource within the Site and to formulate specific mitigation strategies, as appropriate.

Conclusion

- 6.1.1. This Chapter has identified **No Significant Effects in EIA terms** with respect to Cultural Heritage.
- 6.1.2. **Table 8.8** provides a summary of effects, mitigation and residual effects.

Table 8.8: Summary of Effects, Mitigation and Residual Effects

Receptor / Receiving Environment	Description of Effect	Nature of Effect	Sensitivity Value	Magnitude of Effect	Geographical Importance	Significance of Effects	Mitigation / Enhancement Measures	Residual Effects
Construction Phase								
Possible Prehistoric to Romano-British enclosures system	Physical Change	Permanent Direct	Moderate	High	Local to Regional	Major Adverse	Further archaeological investigations and mitigation (as required)	Moderate Not Significant in EIA terms
Buried remains of ridge and furrow	Physical Change	Permanent Direct	Not Significant	High	Local	Neutral	N/A	Neutral
Possible mining remains (HER ref. MNT7121)	Physical Change	Permanent Direct	Low	High	Local	Moderate Adverse	Further archaeological investigations and mitigation (as required)	Moderate Not Significant in EIA terms
Other potential pre-Medieval remains	Physical Change	Permanent Direct	Moderate	High	Local to Regional	Major Adverse	Further archaeological investigations and mitigation (as required)	Moderate Not Significant in EIA terms
Previously undiscovered buried archaeological remains (if present)	Physical Change	Permanent Direct	Low	High	Local	Moderate Adverse	Further archaeological investigations and mitigation (as required)	Moderate Not Significant in EIA terms
Operational Phase								
No effects on Cultural Heritage have been identified during the operational phase								
Cumulative and In-Combination								
<i>Cumulative Effects</i>								
No cumulative effects on Cultural Heritage assets have been identified.								
<i>In-Combination Effects</i>								
No in-combination effects on Cultural Heritage assets have been identified.								