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STRATEGIC RAIL FREIGHT INTERCHANGE

Preliminary Environmental Information (Work in Progress) Report (PEIR)

Draft Environmental Statement
Chapter 10: Heritage (Built and Archaeology)

On behalf of
Oxfordshire Railfreight Limited

Prepared by RPS Consulting
May 2022

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10.1 INTRODUCTION

10.1.1 This draft chapter assesses the likely significant environmental effects of the proposed development on the historic environment. In particular, it considers the potential effects of known and potential buried archaeological remains within the Application Site and existing built heritage in the wider area.

10.1.2 This draft chapter describes the methods used to assess the effects, the baseline conditions currently existing within the Application Site and in its surroundings. This draft chapter also provides an initial, preliminary assessment of some of the potential direct and indirect effects of the proposed development arising from the construction and the operational phase, and the mitigation measures required to prevent, reduce, or offset the effects to minimise the likely residual effects.

10.1.3 This chapter is supported by the following figures and appendices:

- Figure 10.1 – Map of Archaeological Receptors
- Figure 10.2 – Map of Built Heritage Receptors
- Appendix 10.1 – Archaeological Desk-Based Assessment
- Appendix 10.2 – Geophysical Survey Report
- Appendix 10.3 – Archaeological Trial Trench Summary
- Appendix 10.4 – Built Heritage Statement
- Appendix 10.5 – Assessment of Airborne Remote Sensing Data and Satellite Imagery for Archaeology

10.1.4 As explained in Section 10.4, this draft draws on assessment work undertaken to date, some of which is ongoing (particularly regarding the proposed Highways Works).

Competency Statement

10.1.5 It has been written by Richard Smalley BA (Hons) MCI(A) FSA and Hannah Hamilton-Rutter BA (Hons) PGDip MA Assoc IHBC of RPS Consulting. Richard Smalley is Deputy Operations Director for RPS Consulting. He has a degree in Archaeology from the University of Newcastle-upon-Tyne (BA Hons), is a Member of the Chartered Institute for Archaeologists (MCI(A)) and is a Fellow of the Society of Antiquaries (FSA). Richard has 19 years' experience working in the archaeology sector including fieldwork (geophysics, trial trenching, excavation), research, graphics, and consultancy. As a consultant Richard has provided archaeology and heritage advice and project management to clients for a variety of developments including residential, infrastructure, commercial and renewable energy.

10.1.6 Hannah Hamilton-Rutter BA(Hons) PGDip MA AssocIHBC has ten years' experience working in both local authority and private consultancy as a historic buildings

specialist. At RPS, Hannah has undertaken numerous ES chapters for commercial, residential and infrastructure schemes throughout the UK.

10.2 ASSESSMENT SCOPE AND METHODOLOGY

- 10.2.1 Assessment of likely significant environmental effects on cultural heritage resources within the site has been conducted in line with the latest and most comprehensive guidance provided in the “Design Manual for Roads and Bridges (DMRB) published by the Highways Agency in 2007 (updated 2020), and the Chartered Institute for Archaeologists Standard and Guidance for historic desk-based assessment (updated October 2020). These documents do not provide a prescriptive approach to assessment but identify principles and good practice that have been applied in the methodology for this assessment. This chapter refers to the same elements of the proposed development as those described and defined in draft ES Chapter 2.
- 10.2.2 Consultation has been undertaken with the Lead Archaeologist of Oxfordshire County Council Archaeology team since late 2020, and is ongoing. Dialogue and consultation has also been held with Historic England, and is ongoing, including a site visit held in April 2022.

Study Area

- 10.2.3 The Application Site is described and defined in Chapter 2.
- 10.2.4 This assessment uses an initial study area of 2km from the boundaries of the Main Site to identify heritage assets that may be sensitive to the proposed development. This study area was also supported by the site visit and review of the draft Landscape and Visual chapter of the ES (Chapter 7).

Survey and Data Sources

- 10.2.5 The Main Site has been subject to a series of archaeological investigations comprising a desk-based assessment in February 2021 (RPS Consulting), a geophysical survey in 2021 (Sumo Services Ltd) and evaluation trenching, also in 2021 (Archaeology Warwickshire), details of which can be found at **Appendix 10.1**, **10.2** and **10.3** respectively. An assessment of airborne remote sensing data and satellite imagery has also been undertaken (Air Photo Services 2021, **Appendix 10.5**). It should be noted that since the desk-based assessment (**Appendix 10.1**) was undertaken the Proposed Development, including the Application Site boundaries, have evolved. Furthermore, subsequent geophysical survey work (**Appendix 10.2**) and trial trenching work (**Appendix 10.3**) provide a more detailed understanding of the Application Site’s heritage and archaeological potential.
- 10.2.6 Archaeological geophysical surveys are currently (April 2022) underway for the Heyford Park Link and access routes. The geophysical survey will be followed by

archaeological trial trenching where appropriate, the scope of which will be agreed with the County Archaeologist.

- 10.2.7 A Built Heritage Statement (**Appendix 10.4**) has also been prepared to understand the impacts from the proposed development on built heritage assets – this Built Heritage Statement will be updated following the finalisation of the red line and the scheme. This will also be cross-referenced with the assessment and associated technical appendices (including the visualisations) of the Landscape & Visual chapter of the ES (Chapter 7).
- 10.2.8 The Environment Agency LiDAR data was accessed in order to assist in identifying any unknown archaeological features within the site and to help confirm the presence of those already recorded. Light Detection and Ranging (LiDAR) is an airborne mapping technique which employs a laser to measure the distance between an aircraft and the ground. Up to 100,000 measurements per second are recorded, which allows for a highly detailed terrain model to be made of the ground at special resolutions of between 0.25m and 2m.

Significance Criteria

- 10.2.9 The determination of magnitude of effect is based on the level of effect that the development may have on cultural heritage resources, together with the current state of survival/condition of the receptor, taking into account the nature of past development or management effects. These effects could include temporary or permanent land take or excavation, ground disturbance and compaction.
- 10.2.10 The assessment in this chapter is qualitative and the evaluation of significance is ultimately a matter of professional judgement. The baseline assessments have been prepared in accordance with current national guidance and policy, and follows the staged assessment set out in GPA2 and GPA3 (see References at the end of the Chapter).
- 10.2.11 Development effects can be characterised as to whether they would be:
- Direct or Indirect;
 - Beneficial or Adverse;
 - Short, Medium or Long Term;
 - Reversible or Irreversible; and/or
 - Cumulative.
- 10.2.12 The magnitude of effect is assessed by taking into consideration the extent/proportion of the site/feature affected, its type, its survival/condition, its fragility/vulnerability and its potential amenity value. In considering the above factors the criteria for assessing magnitude of predicted change on cultural heritage resources are given in Table 10.1

below. Both physical and setting effects are included as harm to significance can result through loss to or development within the setting of a heritage asset.

Table 10.1: Criteria for Appraisal of Magnitude of Effect on Heritage Receptors

Magnitude	Definition
High	<ul style="list-style-type: none"> Total or substantial loss of the significance of a heritage asset. Substantial harm to a heritage asset's setting, such that the significance of the asset would be totally lost or substantially reduced (e.g. the significance of a designated heritage asset would be reduced to such a degree that its designation would be questionable; the significance of an undesignated heritage asset would be reduced to such a degree that its categorisation as a heritage asset would be questionable).
Moderate	<ul style="list-style-type: none"> Partial loss or alteration of the significance of a heritage asset. Harm to a heritage asset's setting, such that the asset's significance would be materially affected/considerably devalued, but not totally or substantially lost.
Low	<ul style="list-style-type: none"> Slight loss of significance of a heritage asset. This could include the removal of fabric that forms part of the heritage asset, but that is not integral to its significance (e.g. the demolition of later extensions/additions of little intrinsic value). Some harm to the heritage asset's setting, but not to the degree that it would materially compromise the significance of the heritage asset. Perceivable level of harm, but insubstantial relative to the overall interest of the heritage asset.
Negligible	<ul style="list-style-type: none"> A very slight change to a heritage asset. This could include a change to a part of a heritage asset that does not materially contribute to its significance. Very minor change to a heritage asset's setting such that there is a slight impact not materially affecting the heritage asset's significance.
No Impact	<ul style="list-style-type: none"> No change to a heritage asset or its setting.

10.2.13 The sensitivity of a heritage asset depends on factors such as the condition of the asset and its perceived heritage value/importance. The sensitivity of the heritage asset is also defined by its importance in terms of national, regional or local statutory or non-statutory protection and designations.

10.2.14 The non-statutory criteria used by the Secretary of State for Scheduling Ancient Monuments provide relevant criteria to assist this process, as does the advice contained in Historic England's Historic Environment Planning Practice Guide and the NPPF. Table 10.2 sets out the criteria for assessing sensitivity.

Table 10.2 Criteria for Assessing Sensitivity of Receptors

Sensitivity	Definition
High	<ul style="list-style-type: none"> World Heritage Sites Scheduled Monuments and archaeological sites of demonstrable schedulable quality & importance Protected Wreck Sites Registered Battlefields

	<ul style="list-style-type: none"> Grade I and II* listed buildings Grade I and II* registered parks and gardens
Medium	<ul style="list-style-type: none"> Local Authority designated sites and their settings Undesignated sites of demonstrable regional importance Grade II listed buildings Grade II registered parks and gardens Registered Historic Landscapes Conservation Areas
Low	<ul style="list-style-type: none"> Sites with specific and substantial importance to local interest groups Sites whose importance is limited by poor preservation and poor survival of contextual associations Locally Listed Buildings and buildings of some quality in fabric or historic association (i.e. non-designated heritage assets)
No Importance	<ul style="list-style-type: none"> Sites with no surviving archaeological or historical component
Unknown	<ul style="list-style-type: none"> Importance cannot be ascertained

10.2.15 The sensitivity of the receiving environment, together with the magnitude of effect, defines the significance of the effect on the cultural heritage receptor. The significance of effect has been established with reference to the matrix set out in Table 10.3. The environmental effect outlined below represents the effect on the significance of the heritage assets without mitigation. A significance of effect of ‘major’ or ‘moderate’ would be considered to equate to significant impacts highlighted in the context of EIA Regulations.

10.2.16 This process is not quantitative, but relies upon professional judgement at each step. However the factors considered in informing these judgements and in arriving at the various rankings and magnitudes of effect are observable facts (i.e., numbers of assets, special relationships, designations, impacts). This matrix approach is not intended to mechanise judgement on the significance of effect, but to act as a check to ensure that judgements regarding sensitivity, magnitude of impact and significance of effect are reasonable and balanced, in order to allow for professional judgement.

10.2.17 Designated heritage assets such as scheduled ancient monuments and listed buildings are all of high or medium sensitivity and so even low levels of predicted magnitude of change to these features can be significant. Assessment of the effect of development on the setting of heritage assets follows the guidance issued by Historic England.

Table 10.3 Criteria for Assessing Significance of Effect

Sensitivity of Resource	Significance of Effect				
	High	Moderate	Low	Negligible	None
High	Major Adverse	Moderate Adverse	Minor Adverse	Negligible	No Impact
Medium	Moderate Adverse	Moderate to Minor Adverse	Minor Adverse to Negligible	Negligible	No Impact
Low	Minor Adverse	Minor Adverse to Negligible	Negligible	Negligible	No Impact

No Importance	Negligible	Negligible	Negligible	Negligible	No Impact
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Limitations and Assumptions

- 10.2.18 Archaeological evaluation of some areas of the Main Site could not be carried out due to the presence of ecological constraints relating to Great Crested Newts. The County Archaeologist was kept aware of the constraints throughout the process and a suitable methodology was agreed in order to proceed.
- 10.2.19 The evaluation trial trenching report for the Main Site is in production, but not yet complete.
- 10.2.20 The archaeological evaluation of the Highways Works and Heyford Park Link have not yet been undertaken in full, but geophysical surveys have begun within the area of the proposed Ardley Bypass.
- 10.2.21 In undertaking the built heritage assessment, there are a number of assumptions and limitations to be aware of:
 - The site visit was limited to the area of the Application Site, the Upper Heyford Airfield, public rights of way and other public areas; and
 - The visualisations referred to the draft Landscape & Visual chapter (Chapter 7) are representative static views; they do not reflect the kinetic experience of the proposed development within the surrounding area.

10.3 POLICY CONTEXT

National Planning Policy

The National Networks National Policy Statement (NN NPS)

- 10.3.1 The NN NPS sets out the need for, and Government’s policies to deliver, development of nationally significant infrastructure projects (NSIPs) on the national road and rail networks in England. It provides planning guidance for promoters of NSIPs on the road and rail networks, and the basis for the examination by the Examining Authority and decisions by the Secretary of State.
- 10.3.2 Paragraphs 5.120-5.142 of the NN NPS relate to the Historic Environment.

National Planning Policy Framework (NPPF)

- 10.3.3 Section 16: Conserving and Enhancing the Historic Environment of the NPPF is relevant to the proposed development. It provides guidance for planning authorities and others on the consideration of the historic environment in the planning system.

Local Planning Policy

- 10.3.4 The following local planning policies are relevant to the proposed development:

- Policy ESD15: The Character of the built and historic environment (Cherwell Local Plan 2011-2031, adopted July 2015);
- Policy C18 Development proposals affecting a Listed Building, Policy C21: Proposals for re-use of a listed building, Policy C23 Retention of features contribution to a character or appearance of a Conservation Area & Policy C25: Development affecting the site or setting of a Scheduled Ancient Monument (Saved Policies in Local Plan 1996, adopted November 1996); and
- Policy PD4: Protection of important views and vistas, Policy PD4: Building and Site Design & Policy PD6: Control of Light Pollution (Mid-Cherwell Neighbourhood Plan, made May 2019).

Other Relevant Policy, Standards and Guidance

- 10.3.5 The following national and local policy and guidance is relevant to the proposed development:

- Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (Historic England, 2015);
- Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2nd Edition) (Historic England, 2017);
- Standard and Guidance for Historic Environment Desk-Based Assessment (ClfA, 2017, updated 2020);
- Design Manual for Roads and Bridges (DMRB, updated 2020)

10.4 BASELINE CONDITIONS

- 10.4.1 This draft chapter is supported by the initial findings of an archaeological desk-based assessment, the results of a geophysical survey, some archaeological trench evaluation (which is ongoing) and a Built Heritage Statement. The archaeological desk-based assessment informed the scope of the surveys for the geophysical survey and trial trench evaluation undertaken to date, and the further planned surveys.

- 10.4.2 A number of heritage receptors are known within the Application Site and the surrounding area. Those which could be affected by the proposed development are

discussed below. A plan showing the location of the archaeological resources in relation to the Main Site is provided in Figure 10.1 and the built heritage receptors are shown in Figure 10.2.

Table 10.4 Archaeological and Heritage Receptors

Receptor ID	Description	Sensitivity	On Application Site or Off Application Site
SM1	Scheduled Cold War Structures	High	Off Application Site
SM2	Ardley Wood Moated Ringwork	High	Off Application Site
AR1	Undated linear features and former field boundaries	Low (local)	On Site
AR2	Iron age ditches	Low (local)	On Application Site
AR3	Roman stone structure	Medium (regional)	On Application Site
AR4	Post-Medieval Structure	Low (local)	On Application Site
AR5	Roman enclosures	Low (local)	On Application Site
AR6	Iron Age banjo enclosure	Medium (regional)	On Application Site
AR7	Iron Age enclosure and cremations	Low (local)	On Application Site
AR8	Roman structure	Medium (regional)	On Application Site
AR9	Iron Age pit	Low (local)	On Application Site
AR10	Iron Age banjo enclosures	Unknown	On Application Site
BHR1	Barn approximately 30m north of Ashgrove Farmhouse (Grade II Listed Building)	Medium	On Application Site
BHR2	Ashgrove Farm (non-designated heritage asset)	Low	On Application Site
BHR3	Trow Pool Water Tower (Grade II Listed Building)	Medium	Off Application Site
BHR4	Troy Farmhouse (Grade II Listed Building)	Medium	Off Application Site
BHR5	Lodge Farmhouse (Grade II Listed Building)	Medium	Off Application Site
BHR6	Middleton Park (Grade II Registered Park & Garden)	Medium	Off Application Site
BHR7	Ardley Conservation Area	Medium	Off Application Site
BHR8	RAF Upper Heyford Conservation Area	Medium	Off Application Site

- 10.4.3 There are no designated archaeological assets, such as Scheduled Monuments or Registered Battlefields, located within the Application Site. Scheduled Monuments located in the local landscape include (see Fig 10.1):
- Ardley Wood Moated Ringwork (NHLE 1015554, **SM2**), 400m north-east of the Main Site;
 - Cold War Structures at the former Upper Heyford Airbase (NHLE 1021399), 500m west of the Main Site; and
 - Middleton Stoney Castle (NHLE 1015164), 1km south-west of the Main Site.
- 10.4.4 The significance and settings of the Scheduled Monuments has been discussed in the archaeological desk-based assessment (Appendix 10.1) and will not be repeated here.
- 10.4.5 With regards to Middleton Stoney Castle and the Ardley Wood Moated Ringwork (**SM2**), the desk-based assessment determined that the proposed development would have no impact on the setting or significance of these Scheduled Monuments. This is due to the distance between the site and the assets, the lack of intervisibility between them caused by topography and dense vegetation/modern development, and the lack of any known contextual relationship. Consequently, these two assets will not be considered further in this Chapter.
- 10.4.6 The Cold War Structures at Upper Heyford Airbase (**SM1**) includes five areas: the Quick Reaction Alert areas in the north-western part of the airbase, including aircraft shelters, security fencing, watchtower, fuel supply point and hardened crew building; the Northern Bomb Stores and Special Weapons Area in the north-eastern part of the airbase; the Avionics Maintenance Facility, close to the western edge of the airbase; the Hardened Telephone Exchange; and the Battle Command Centre in the southern part of the airbase. The only area of **SM1** with potential to be impacted (to its setting only) by the proposed development is the Northern Bomb Store. As a Scheduled Monument this receptor is of national significance and high sensitivity.
- 10.4.7 The archaeological fieldwork has identified ten archaeological receptors within the Application Site boundary to date (see Table 10.4 Receptors above). None of the archaeological receptors evaluated within the Application Site are of sufficient preservation or rarity to be considered of high sensitivity. Therefore, in accordance with Table 10.3 (Criteria for Assessing Significance of Effect above), there will be no Major Adverse effects on these assets. As noted above, further survey work is programmed and will be undertaken across the Highways Works areas as part of the final ES.

Archaeological Receptors on the Main Site

- 10.4.8 Archaeological Receptor **AR1** (see **Figure 10.1**) comprises a series of linear ditches, some of which have been shown to be former field boundaries. Other, undated linear

- features were identified in the trial trenching. This area was almost entirely devoid of finds, these restricted to small very small pottery fragments and an iron object. **AR1** is therefore considered to be a Low sensitivity receptor of local interest.
- 10.4.9 **AR2** comprises a complex of Iron Age ditches representing a number of different phases of activity. Iron Age activity is well representing in the local landscape, and as such **AR2** is considered to be of Low sensitivity and of local importance.
- 10.4.10 Archaeology Receptor **AR3** is the remains of the stone footings for a rectangular Roman building. The building was associated with a large amount of roof tile and finds included pottery fragments, coins, slag, nails and a brooch. The building seems to have been of some status during the Roman period, and the trial trenching indicates potential for the recovery of further remains relating to the structure. **AR3** is considered to be a Medium sensitivity asset of up to Regional importance.
- 10.4.11 **AR4** comprises the stone foundation of a Post-Medieval agricultural building. This building is shown on the 1839 Tithe Map, but is not evident on the 1881 Ordnance Survey, suggesting that it was demolished in the intervening period. **AR4** is a Low sensitivity asset of limited archaeological importance.
- 10.4.12 **AR5** relates to a large triangular enclosure with two sub-square internal enclosures. Roman pottery was recovered from the ditches together with a brooch and the fragments of a fire bar, possibly associated with a kiln. **AR5** is considered to be a Low sensitivity asset of local importance.
- 10.4.13 To the north-west of AR5 is an Iron Age banjo enclosure (**AR6**). Trial trenching of this receptor recorded pottery and animal bone. An internal post-hole, possibly contemporary with the enclosure was also identified. **AR6** is considered to be a Medium sensitivity asset of up to Regional importance.
- 10.4.14 **AR7** is an ovoid Iron Age enclosure with internal features and a small pit. Associated finds included a thick sheet of rivetted copper alloy. Two possible cremations were recorded to the south of the enclosure, which may represent part of a larger Iron Age cemetery. **AR7** is considered to be a Low sensitivity receptor of local interest.
- 10.4.15 **AR8** comprises a series of Roman ditches associated with the remains of a rubble surface or floor. Remains of fine pottery table wares were recovered, along with coins, brooches and a hair pin, suggesting an elevated status for the inhabitants of what seems to have been a domestic structure. **AR8** is considered to be a Medium sensitivity asset of up to Regional importance.
- 10.4.16 **AR9** is an isolated Iron Age pit of Low sensitivity.

Archaeological Receptors on the Highway Works

10.4.17 **AR10** comprises two interconnected Iron Age banjo enclosures, identified through aerial photograph survey (see Appendix 10.5). These receptors have not yet been investigated by field evaluation and as such their sensitivity is currently unknown. Archaeological trial trenching will be undertaken on this receptor and the results will be included in the next version of the chapter.

Built Heritage Receptors

10.4.18 There are a number of built heritage receptors located within the Application Site and the surrounding 2km study area. The significance of those which could be affected by the development is summarised below and they are identified on **Figure 10.2**. A full assessment of significance is provided in the draft Built Heritage Statement (see **Appendix 10.4**).

10.4.19 Located within the Main Site is **BHR1**; the Barn (Grade II Listed Building, NHLE: 1046879), approximately 30 meters north of Ashgrove Farmhouse hereafter referred to as the 'Barn'. This is a receptor of Medium sensitivity. The Barn is associated with **BHR2** Ashgrove Farm, a non-designated heritage asset and receptor of Low sensitivity.

10.4.20 The significance of the Barn derives in part from its historic special interest as the oldest surviving element of an eighteenth century Oxfordshire farmstead (Ashgrove Farm) that was one of the first outlying farms to be constructed following the Enclosure of land in Ardley. The Barn also provides a record of a once common, but now obsolete, agricultural building type developed specifically for the processing and storing of wheat; this understanding has been lessened over time by later changes and the physical degradation of the building. The Barn also illustrates local vernacular styles and construction techniques from the eighteenth century. The more recent lean-to structures to the rear are not of special interest.

10.4.21 With regard to the setting of the Barn, its immediate setting is defined by the farmstead of Ashgrove Farm (**BHR2** – considered separately below), of which it forms a constituent part. The other buildings that form the farmstead including the farmhouse were all constructed later than the Barn. Nevertheless, these buildings help to place the asset in its functional, agricultural context, as well as providing an understanding of the historic development and changing functions of Ashgrove Farm over time, contributing to the special interest of the Barn. It is also within this immediate context that the Barn's historic structure can be most readily seen, and its historic and architectural special interest most strongly experienced and appreciated. The immediate setting of the Barn consequently makes a strong positive contribution to its significance.

- 10.4.22 The wider setting of the asset principally comprises the surrounding open fields to the north, south and west of the farmstead and much of this land has been functionally connected to Ashgrove Farm since at least the turn of the eighteenth century. It therefore shares an enduring functional connection to the asset and helps to place it in its historic rural and agricultural context. There is, however, only limited intervisibility between the Barn and the surrounding agricultural landscape as a result of the local topography and the audible presence of the M40 also detracts from the Barn's rural context. The Barn's wider setting therefore makes a mixed contribution to its significance; where this contribution is positive, it is secondary to the contribution made by its historic form, fabric and immediate setting.
- 10.4.23 The Barn lies within the northern part of the Main Site, as does the entirety of the Ashgrove Farm buildings and much of the agricultural land comprising the Barn's wider setting. The Main Site is therefore considered to make a positive contribution to the Barn; with its immediate setting of the farmstead (BHR2 also located within the Main Site) the most important element. The south-eastern part of the site comprising the area of the Middleton Stoney Relief Road shares no known historic functional connection with the Barn, nor any visual association and it is not considered to contribute to the Barn's significance.
- 10.4.24 **BHR2** comprises Ashgrove Farm (HER ref: MOX27753), a non-designated heritage asset of Low sensitivity. The farm possesses low, local heritage significance which is derived in part from its historic interest as one of the earliest post-Enclosure outlying farms in Ardley. The later buildings also further illustrate changes over time in local farming practices, which also contribute to the farm's significance. The farm is considered to be of only limited aesthetic value, but it does possess a degree of local architectural interest where its traditional farm buildings display vernacular styles and materials. The modern buildings at Ashgrove Farm are of no historic or architectural interest.
- 10.4.25 The setting of **BHR2** largely comprises the surrounding open fields to the north, south and west of the farmstead. Much of this land forms part of the farm's landholding and has done since the turn of the eighteenth century. It therefore shares an enduring functional connection to the farmstead and places it within its historic and agricultural context, contributing to its low significance. The setting of the farm is also not wholly rural; the edge of RAF Upper Heyford is visible from the farmstead and the M40 is an audible presence. The Viridor Ardley ERF also features in views from and to the farmstead. These aspects of the farm's setting represent more recent urban and industrial interventions in the local area and detract somewhat from an understanding of the asset's historic rural context. Therefore, whilst setting makes an important contribution to the significance of Ashgrove Farm, some elements make a lesser or negative contribution.
- 10.4.26 Ashgrove Farm lies wholly within the northern part of the Main Site, as does much of the agricultural land comprising its setting. This part of the site therefore positively

contributes to the significance of the farmstead. There is no known historic functional association between the farm and the south-eastern part of the Application Site including the area containing the Middleton Stoney Relief Road and no visual connection; this part of the site is not considered to contribute to its significance.

- 10.4.27 **BHR3** comprises the Trow Pool Water Tower (Grade II Listed Building, NHLE: 1389392), a receptor of Medium sensitivity. The Tower's significance relates to its historic special interest in illustrating the developments in the provision of public water supplies that took place in the late-nineteenth and early-twentieth centuries. The Tower also illustrates the wealth, social status and philanthropic role of local landowners in the early-twentieth century. Although functional in its purpose, the Water Tower is treated architecturally, demonstrating that aesthetic considerations were important and the Tower was clearly interested to make an impressive visual statement.
- 10.4.28 Due to the height of **BHR3**, its setting is extensive and it is visible from a large swathe of the surrounding landscape. These views allow for a clear appreciation of its architectural special interest as well as imbuing the asset with landmark status. Whilst it was built to serve the residents of Bucknell, the construction of the M40 has severed the Water Tower from the village and much of the parish, weakening the legibility of this historic relations. The proximity of the M40 to the Water Tower also has a substantially detrimental affect on the ability to appreciate the historic and architectural interest of the receptor.
- 10.4.29 The Main Site principally lies to the west of **BHR3** and it is not readily visible from within this area. There are views of the receptor from the south-eastern part of the Main Site, including the proposed area of the Middleton Stoney Relief Road and this is considered to contribute to the ability to appreciate its significance.
- 10.4.30 **BHR4** comprises Troy Farmhouse (Grade II Listed Building, NHLE: 1225639), a receptor of Medium sensitivity. The significance of the farmhouse derives in part from the historic interest the asset possesses as an example of an historic Oxfordshire farmhouse with early-eighteenth century origins. Its significance also relates to its architectural interest; the principal range of the farmhouse illustrates local vernacular design and methods of construction from the eighteenth century, with later additions demonstrating nineteenth-century fashions and the increased availability and use of imported materials. The farmhouse is of considerable aesthetic value, which has been enhanced by a patina of age. It also possesses some archaeological interest as the right-hand bay appears to pre-date the rest of the building and may relate to the earlier fifteenth-century manor house that previously stood in the location of **BHR4**.
- 10.4.31 The immediate setting of Troy Farmhouse comprises the large plot in which it is situated and this makes a positive contribution to its significance. Beyond this, the farmhouse is surrounded by agricultural fields, some of which share a historic functional association with the asset and help to place it within its historic context; this

also positively contributes to its significance. However, the agricultural character of the farmhouse's wider setting has been impinged upon by the arrival of the railway which passes close by and also by the development of RAF Upper Heyford. These elements are considered to detract from the ability to appreciate the farmhouse's historic and agricultural setting.

- 10.4.32 The north-easternmost corner of the Main Site lies c.1km from Troy Farmhouse at its closest point and there are some glimpsed views of the receptor from this part of the site. However, this forms only a very small part of the agricultural surroundings of the farmhouse, appears in the context of the adjoining airfield and is not visible from the farmhouse itself, nor its immediate setting. Furthermore, these glimpsed views provide little to no appreciation of the significance of the farmhouse. The north-eastern part of the site therefore makes only a limited positive contribution to **BHR4**, and the remainder of the site is not considered to form part of its setting.
- 10.4.33 **BHR5** comprises Lodge Farmhouse (Grade II Listed Building, NHLE: 1200299), a receptor of Medium sensitivity. The significance of the farmhouse derives partly from its historic interest as a material record of a rural agricultural building and dwelling dating from the eighteenth century. It also derives from the architectural interest and aesthetic value the asset possesses, including the illustration of local vernacular styles and construction techniques from this period.
- 10.4.34 The immediate setting of **BHR5** is formed of the large plot within which it is situated; this makes a positive contribution to the asset's legibility as a historic working farmhouse. Within the wider setting of the farmhouse, an oil depot lies immediately to the north and is considered to be a detracting element. Otherwise, the farmhouse's wider setting largely comprises agricultural fields across which there are long-distance views in all directions due to the elevated location of the farmhouse. This surrounding agricultural land – some of which shares a historic functional connection with the farmhouse – helps to place the asset in its historic context, thereby contributing to its special interest. However, this is detracted from somewhat by the M40 which has a notable audible presence in the immediate setting of the farmhouse.
- 10.4.35 The Middleton Stoney Relief Road passes to the south of **BHR5** and there is some inter-visibility between them; the farmhouse also features in views of the asset from the B430 bridge over the M40. The south-eastern area of the site therefore comprises part of the asset's wider agricultural surroundings and allows for the appreciation of the historic and architectural interest of the asset, positively contributing to its significance in this regard. It is however considered that the contribution from this part of the site is secondary to that made by its historic form, fabric and immediate setting. The Main Site does not share any known historic functional association with the farmhouse and is not inter-visible with the asset; this part of the site therefore does not form part of its setting.

- 10.4.36 **BHR6** comprises the Grade II Middleton Stoney Registered Park & Garden (NHLE: 1001405) and is a receptor of Medium sensitivity (hereafter referred to as ‘Middleton Park’). Middleton Park derives its significance from the remaining and often fragmentary built and landscape elements within its boundary that illustrate its past use and design from the eighteenth to the twentieth century. It is a multi-layered landscape in which each surviving phase contributes to Middleton Park’s significance through demonstrating changing styles and fashions of landscape design and architecture, as well as changing demands of the owners of the Middleton Park estate. The Park’s significance is also attributed to its historic association with leading designers of the period. Not all elements of Middleton Park contribute to its significance, however, with areas of ploughed land in particular considered a detracting element, having resulted in the loss of areas of treed parkland.
- 10.4.37 The surroundings of Middleton Park have remained largely unchanged since the parkland was expanded to its current extent in the early-nineteenth century and it is set within a largely agricultural landscape. It therefore continues to be experienced as a largely isolated country seat. The relationship between Middleton Park and Middleton Stoney also makes an important contribution to the significance of the asset. However, relatively few of the design features of the Park or the buildings within can be seen from beyond its boundaries as a result of the well-treed boundaries. Consequently, the significance of Middleton Park is difficult to appreciate from its setting.
- 10.4.38 The Application Site lies c.600m north east of **BHR6** at the closest points and presently forms part of the Park’s wider agricultural setting which contributes to its appreciation as an isolated country seat. There is also a historic functional association with some areas of the Main Site and Middleton Park. However, there is no strong visual connection between the Main Site and Middleton Park; there are some glimpsed views towards parts of the Main Site from the B430 where it adjoins Middleton Park but the well-planted nature of the Park’s boundaries means the Main Site is unlikely to be visible from within the Park itself. Furthermore, return views of Middleton Park from the Main Site only comprise mature specimen trees and very little of its heritage significance can therefore be appreciated. This is similar to how Middleton Park is experienced from the south-eastern part of the site where the Middleton Stoney Relief Road is proposed. The Application Site is therefore considered to only make a small positive contribution to the significance of Middleton Park, which derives from it forming a part of the asset’s agricultural setting.
- 10.4.39 **BHR7** comprises Ardley Conservation Area (designated 2005) which is a receptor of Medium sensitivity. The significance of this receptor relates to the historic and architectural interest of its built form, which is largely vernacular and is grounded in its agricultural history, and its archaeological interest.
- 10.4.40 The setting of **BHR7** makes a mixed contribution to its significance. The Conservation Area is surrounded to the south, east and west by agricultural fields and woodland,

which contributes positively to an understanding of its historic interest as a rural settlement whose economy and development depended upon agriculture for most of its history. However, the residential development to the north has resulted in the coalescence of Ardley and Fewcott which detracts from the ability to appreciate them having developed as distinct settlements, and therefore the historic interest of the Ardley Conservation Area. The agricultural land to the south has also been cut through by the railway; this physically severs the Conservation Area from the land to the south but as it is located within a cutting has a low visual impact. Indeed, the visual connection between the Conservation Area and the surrounding landscape is somewhat limited due to the screening effect of the trees and hedgerows within and around the edges of the Conservation Area. As a result, it is difficult to appreciate the historic, architectural and archaeological interest of the Conservation Area from beyond its boundaries.

- 10.4.41 The northern boundary of the Main Site, and the proposed Ardley Bypass, lie in relatively close proximity to **BHR7** and form part of the settlement's agricultural hinterland for much of its history. The northern part of the Main Site is experienced as part of the Conservation Area's wider agricultural surroundings when approaching the village from the south along the B430, although the rural character of this route has been somewhat detracted from by the presence of the quarry and the energy from waste power plant along this route. However, there is no direct intervisibility between the Main Site and the Conservation Area as a result of the local topography and the screening effect of Ardley Woods and other trees to the south of the Conservation Area. The northern part of the site is therefore considered to only make a very low contribution to the significance of Ardley Conservation Area. The majority of the Application Site, including much of the Main Site, and the proposed Heyford Park Link and Middleton Stoney Relief Road are not considered to form part of the receptor's setting.
- 10.4.42 **BHR8** comprises the RAF Upper Heyford Conservation Area (designated 2006) and is an asset of Medium sensitivity. The Conservation Area derives some significance from having been the model on which many RAF airfields were based in the Interwar period, and from its active role during WWII. However, the significance of the Conservation Area is primarily as a Cold War Airbase that is of particular importance due to its completeness. The Conservation Area also includes a number of separately designated heritage assets.
- 10.4.43 The location of RAF Upper Heyford on the Upper Heyford Plateau was no doubt an important consideration in its selection to build the airfield in 1916. However, in its active role in WWII and in its later, more significant roles as a USAF SAC base during the Cold War, it was not intended to interact with, or be integrated into, its surroundings. The perimeter fencing therefore marks a clear boundary between the two landscapes of vastly differing character; the functional Cold War landscape of the airbase and the rural, agricultural landscape that surrounds it. By virtue of its elevated location there are long-distance views available from the Conservation Area over the

surrounding landscape, particularly to the west. However, these views are incidental and with the exception of the views towards RAF Croughton to the north, they are not considered to contribute to the Conservation Area's core significance as a USAF SAC Cold War airbase. It is also difficult to appreciate the historic and architectural interest of the Conservation Area from beyond its boundaries. As such, setting therefore makes a very limited contribution to the significance of BHR8.

10.4.44 The western boundary of the northern part of the Main Site directly abuts the Conservation Area's boundary. However, the site shares no functional relationship with the Conservation Area and whilst the airbase is a dominant visual feature from the north-western edge of the Main Site, such views provide no meaningful understanding of the airbase's layout and little overall appreciation of the overall significance of the Conservation Area. Also, none of the separately designated structures within the Conservation Area are visible from the site. It is therefore considered that the Main Site does not contribute to the significance of the RAF Upper Heyford Conservation Area. The area comprising the proposed Middleton Stoney Relief Road also shares no visual connection with the Conservation Area (nor any historic or functional connection to the airbase) and therefore does not form part of its setting.

Future Baseline

10.4.45 The Application Site currently comprises a number of parcels of agricultural land used for a mix of pasture and arable purposes. The archaeological evaluation undertaken on the Application Site identified areas of Iron Age and Romano-British activity.

10.4.46 In terms of the future baseline, it is considered that without the implementation of the project, the Application Site would remain in use as agricultural land. The likely evolution of the current archaeological environment would include the unrecorded loss of the archaeological receptors on the Application Site through continued agricultural practices.

10.4.47 In respect of built heritage, there would be no physical changes to the receptors located within the site (**BHR1 & BHR2**) including the potential repair, restoration and conversion of the assets at Ashgrove Farm to provide a sustainable future use. There would also be no potential impact on the significance of the identified receptors (BHR1 – BHR8) through changes within their settings.

10.5 ASSESSMENT OF LIKELY EFFECTS (preliminary)

10.5.1 This section sets out a preliminary assessment of likely effects based on the work undertaken to date and is intended to help inform the Stage 1 consultation process. As referred to below, archaeological and assessments and investigations are ongoing across the Application Site, as are other relevant assessments as part of the

ongoing preparation of the Environmental Statement. Therefore, the assessment of likely effects will be revisited and updated as that work is carried out.

Construction Phase

- 10.5.2 Sources of potential impacts on archaeological and built heritage resources during the demolition and construction phases are:
- Soil stripping and terracing;
 - Cutting of new roads, foundations and associated services
 - General hard and soft landscaping of the site; and
 - Indirect setting impacts.
- 10.5.3 There will also be permanent effects from the construction phases resulting from the loss of the undeveloped land within the site and the delivery of buildings and associated infrastructure.
- 10.5.4 All of the archaeological receptors identified to date in the Application Site (**AR1-AR10**) are located in areas that will be subject to groundworks, resulting in their removal. This is a High magnitude of effect as outlined in Table 10.2. However, receptors **AR1, AR2, AR4, AR5, AR7 and AR9** are of no more than local significance and considered to be Low sensitivity assets. Therefore, the resulting significance of effect on these receptors would be **Minor Adverse**. Receptors **AR3, 6 and 8** are considered to be of regional significance due to their state of preservation and the nature of their remains. Therefore, these receptors are considered to be Medium sensitivity assets. The significance of effect of the development on these assets is **Moderate Adverse**, and so would be significant in the absence of mitigation. The sensitivity of **AR10** is currently unknown, so the significance of effect is also unknown at this stage. Other parts of the Highways Works are yet to be surveyed and investigated, but work is being programmed and will continue over the course of 2022 ahead of the final assessment being prepared.
- 10.5.5 Archaeological Resource **SM1** is of High sensitivity. However, **SM1** is not located within the Application Site and will not be subject to any physical impact as a result of development. Consequently, and in line with Table 10.2, there will not be a high magnitude of effect on the receptor. However, the desk-based assessment determined that the development would cause in a slight change to the wider setting of the overall monument, resulting in a **Negligible Adverse** significance of effect.
- 10.5.6 The magnitude of impact of the construction phase on built heritage receptors will need to be updated following the finalisation of the scheme and from a review of the visualisations prepared as part of the Landscape and Visual Impact Assessment (ES Chapter 7). The scale, layout and positioning of the proposed built form as well as the landscaping strategy will all affect the magnitude of impact and therefore the significance of effect on each receptor. This section provides a high-level assessment based on the emerging scheme and

plans available at the time of writing. Table 10.5 summarises the significance of effect on each built heritage receptor from the construction phase.

- 10.5.7 The temporary effects of the construction phase relate to the construction activity itself; this will result in an increase of noise and vibration, odour, dust and light levels. There will also be visual effects associated with the introduction of spoil heaps and machinery as well as construction traffic. The temporary effects of the construction phase will cease at the end of the construction phase. There will also be permanent effects during this phase as a result of the introduction of built form within the settings of the receptors and in some cases, from the direct works proposed to the receptors. Mitigation has also been embedded within the Proposed Development (as discussed within the Operational Phase below) and temporary effects during the construction phase can be controlled through the implementation of a Construction Environmental Management Plan (CEMP).
- 10.5.8 The listed barn within the Application Site **BHR1** will be sensitively repaired and converted to provide a welcome building, delivering a sustainable use for the Listed Building. **BHR1** will continue to form part of the retained Ashgrove Farm complex **BHR2**, with the farmstead forming a central hub within the development providing facilities such as a gym, creche and cafes, in addition to offices and equipment stores within the existing buildings. This will result in both permanent and temporary direct effects to **BHR1** and **BHR2**, with the conversion of the building and associated repairs considered to deliver beneficial impacts with regarding to sustaining the heritage significance of the Listed Building.
- 10.5.9 **BHR1** will also be affected by changes within its setting from both the temporary and permanent effects of the construction phase. The retention of Ashgrove Farm will minimise changes within the immediate setting of **BHR1** and protect an element of its setting that makes a strong positive contribution to its significance, maintaining an understanding of the Listed Building within its agricultural setting. There will also be areas of open space within and around the farmstead complex which provides some separation between the Listed Building and the proposed built form to the north, south and west. This includes a large area of open space to the east.
- 10.5.10 However, the development of the Main Site would fundamentally alter the wider setting of **BHR1**; the character of the receptor's current rural and agricultural setting would be lost and the barn would be experienced within a developed context. Whilst the barn's wider setting has been identified to make a secondary positive contribution, the temporary and permanent effects from the construction phase will detract from the ability to appreciate the asset's heritage significance. **BHR1** is a receptor of medium sensitivity. The construction phase will have a moderate impact on **BHR1** and result in an overall **Moderate Adverse** significance of effect.
- 10.5.11 Ashgrove Farm (**BHR2**) will be largely retained within the scheme and will be subject to both direct and indirect temporary and permanent effects during the construction phase. The buildings that form **BHR2** will be converted to provide new uses associated with the operation of the Proposed Development. A number of modern detached farm buildings are

proposed for demolition; these are modern additions of no heritage interest and are not considered to form part of the receptor. Some small additions and extensions to the farmhouse and outbuildings that form part of **BHR2** will be demolished; however, these structures have been identified as being of no heritage interest and their loss will not cause harm to the receptor.

- 10.5.12 Importantly, the built elements of **BHR2** where its significance is principally vested will be retained thereby minimising any adverse direct and indirect impacts. The group value comprising the visual and physical relationship between the farm buildings which also contributes to their significance and that of **BHR1** will also be protected. The uses of the buildings have been informed by their respective heritage significance in order to reduce any direct impacts.
- 10.5.13 The development of the Main Site will however cause indirect harm to **BHR2** through the introduction of built form and the loss of its wider agricultural setting. The proposed rail corridor will be located between the main area of the farmstead and the model cottages to the east, affecting the legibility and understanding of the cottages as well as the present layout of the farmstead. The presence of modern buildings to the north, south and west of **BHR2** will remove its wider agricultural setting, detracting from the ability to appreciate its local heritage significance. This impact can be mitigated to some degree by the landscaping strategy as well as the open space maintained adjacent to **BHR2**. However, the construction phase is considered likely to have a medium adverse impact, resulting in a **Moderate Adverse** significance of effect.
- 10.5.14 The Main Site has been established to provide no contribution to the significance of the Trow Pool Water Tower (**BHR3**). The present views of **BHR3** are only possible from the area of the Middleton Stoney Relief Road and these will not be affected by the Proposed Development. As such, there will be **No Impact** on **BHR3** from the construction phase.
- 10.5.15 The Proposed Development would introduce a significant amount of built form into the wider landscape to the south-east of Troy Farmhouse (**BHR4**). However, given the distance and intervening built form and vegetation between the Main Site and **BHR4** in addition to proposed landscaping measures, it is likely that the built form would be largely screened in views from the receptor. There are likely to be some permanent and temporary effects associated with the construction phase, mainly in relation to the provision of the intermodal rail terminal which is the closest element of the Proposed Development to **BHR4**. These are likely to relate to the construction activity as well as the presence of some built form. It is therefore considered that the construction phase will have a low adverse impact on **BHR4**, resulting in a **Minor Adverse** significance of effect.
- 10.5.16 It has been established that the Main Site does not form part of the setting of Lodge Farmhouse (**BHR5**). Indirect temporary and permanent effects from the construction phase will therefore be limited to those associated with the Middleton Stone Relief Road. This is likely to result in the erosion of the rural and agricultural character of the receptor's setting

which provides some contribution to its heritage significance, and therefore result in a moderate adverse impact. The significance of effect on **BHR5** would be **Moderate Adverse**.

- 10.5.17 The development of the Application Site would introduce a significant amount of built form to the wider landscape to the north of Middleton Park (**BHR6**). This would result in the erosion of the ability to appreciate **BHR6** as an isolated country seat; however, neither the development within the Main Site or the Middleton Stoney Relief Road would be visible from **BHR6** and there would remain a large area of agricultural land between **BHR6** and the Application Site. The implementation of an appropriate landscaping strategy – particularly along the southern boundary of the Main Site – will also reduce the temporary and permanent impacts on **BHR6** to low adverse. The construction phase would therefore result in a **Minor Adverse** significance of effect on **BHR6**.
- 10.5.18 In respect of the Ardley Conservation Area (**BHR7**), the development of the Main Site will introduce a substantial volume of built form in relatively close proximity to its southern edge, on land that has historically formed part of the settlement’s agricultural hinterland. The introduction of built form and the intermodal rail corridor will result in temporary and permanent effects that will affect the present agricultural character of **BHR7**’s setting and the contribution that this makes to its significance. The magnitude of impact from this phase will depend on the layout of the built form and the nature of the landscaping strategy, as well as the control of other elements such as lighting, noise and dust. At this stage, it is considered the impact on **BHR7** will be moderate adverse, resulting in a **Moderate Adverse** significance of effect.
- 10.5.19 The construction phase of the development of the Application Site will change an area of the predominately rural agricultural landscape that currently adjoins the eastern boundary of the RAF Upper Heyford Conservation Area (**BHR8**). However, it is considered that as the airbase was not intended to interact with nor integrate with its surroundings, the temporary and permanent effects of this phase will have little to no impact on the ability to appreciate the significance of **BHR8**. The magnitude of impact on **BHR8** from the construction phase will be dependent on the landscaping strategy and design of the built form within the western part of the Main Site; however, given its limited contribution it is likely to remain low adverse. This would result in a **Negligible Adverse** significance of effect on **BHR8**.

Table 10.5 Preliminary summary of Built Heritage Effects – Construction Phase

Receptor ID	Description	Sensitivity	Magnitude of Impact	Significance of Effect
BHR1	Barn approximately 30m north of Ashgrove Farmhouse (Grade II Listed Building)	Medium	Moderate Adverse	Moderate Adverse
BHR2	Ashgrove Farm (non-designated heritage asset)	Low	Moderate Adverse	Minor Adverse

BHR3	Trow Pool Water Tower (Grade II Listed Building)	Medium	None	No Impact
BHR4	Troy Farmhouse (Grade II Listed Building)	Medium	Low Adverse	Minor Adverse
BHR5	Lodge Farmhouse (Grade II Listed Building)	Medium	Moderate Adverse	Moderate Adverse
BHR6	Middleton Park (Grade II Registered Park & Garden)	Medium	Low Adverse	Minor Adverse
BHR7	Ardley Conservation Area	Medium	Moderate Adverse	Moderate Adverse
BHR8	RAF Upper Heyford Conservation Area	Medium	Low Adverse	Negligible Adverse

Operational Phase

- 10.5.19 The development is described in detail in draft Chapter 2 of the ES.
- 10.5.20 The Proposed Development will include a number of embedded mitigation measures relating both to the built form and transport infrastructure to reduce the impact on heritage receptors, including works proposed to retain and enhance buildings associated with Ashgrove Farm.
- 10.5.21 The effects of the completed development on the Main Site on archaeological receptors are considered to be the same as those identified for the construction phase.
- 10.5.22 Upon completion of the proposed development as a whole the archaeological resources would have already been subject to a programme of archaeological works and reporting, undertaken throughout the construction phase of the development (Main Site and Highways Works, where relevant). As such the mitigation measures would have already been implemented; however, the reporting, publication and dissemination of these investigations would continue after the commencement of construction works and potentially some early operation of the proposed development.
- 10.5.23 The direct effects of the operational phase on **BHR1** and **BHR2** will be the same as those identified for the construction phase, although the temporary affects associated with the construction activity will cease. The receptors at Ashgrove Farm will continue to function as part of the operation of the Proposed Development and the indirect effects from the presence of built form within their wider settings will remain. However, the planting and landscaping delivered during the construction phase will mature and become more established over time. The operational phase would therefore result in a **Moderate Adverse** and **Minor Adverse** to **BHR1** and **BHR2** respectively.
- 10.5.24 The effects of the operational phase on **BHR3 – BHR8** will maintain the permanent effects identified from the construction phase; the significance of effect from this phase on each

receptor is summarised in Table 10.6. It is possible that the cessation of the construction activity associated with the delivery of the Stoney Middleton Relief Road would reduce the magnitude of impact on **BHR5** to **Minor Adverse**. The establishment of the planting along the Application Site boundaries over time could also reduce the impact of the Proposed Development on **BHR6** – **BHR8**.

Table 10.6 Preliminary summary of Built Heritage Effects – Operational Phase

Receptor ID	Description	Sensitivity	Magnitude of Impact	Significance of Effect
BHR1	Barn approximately 30m north of Ashgrove Farmhouse (Grade II Listed Building)	Medium	Moderate Adverse	Moderate Adverse
BHR2	Ashgrove Farm (non-designated heritage asset)	Low	Moderate Adverse	Minor Adverse
BHR3	Trow Pool Water Tower (Grade II Listed Building)	Medium	None	No Impact
BHR4	Troy Farmhouse (Grade II Listed Building)	Medium	Low Adverse	Minor Adverse
BHR5	Lodge Farmhouse (Grade II Listed Building)	Medium	Low Adverse	Minor Adverse
BHR6	Middleton Park (Grade II Registered Park & Garden)	Medium	Low Adverse	Minor Adverse
BHR7	Ardley Conservation Area	Medium	Moderate Adverse	Moderate Adverse
BHR8	RAF Upper Heyford Conservation Area	Medium	Low Adverse	Negligible Adverse

Climate Change

- 10.5.25 The archaeological remains on the site will have been sufficiently excavated and recorded prior to their removal through the Application Site’s development. Once the archaeological remains have been removed and recorded, they will not be affected by climate change.
- 10.5.26 There will be no effects on the identified built heritage receptors from climate change.

Human Health

- 10.5.27 The archaeology and built heritage receptors recorded on the Application Site and within the study area are not considered to make any contribution to human health. Therefore, the removal of the archaeological receptors within the site, and the

associated recording of such, is not considered to have any effect on human health. There will also be no effect on human health from either the direct or indirect impacts to built heritage receptors.

10.6 MITIGATION AND RESIDUAL EFFECTS

Residual Effects

- 10.6.1 The mitigation by recording action for the loss of the identified archaeological resources within the Application Site that would be subject to physical effects would serve to realise much of the research potential and provide potential enhancements in understanding that is inherent in many archaeological remains. However, this would not completely mitigate the loss of these resources; no record, however complete, can replace the physical resource in every detail. It would nonetheless serve to reduce the significance of residual effect from **Moderate Adverse** to **Minor Adverse** for **AR3, AR6 and AR8**, and from **Minor Adverse** to **Negligible** for Archaeological Resources **AR1, AR2, AR4, AR5, AR7** and **AR9**. Therefore, while the excavation, recording and reporting would not completely mitigate the loss of the remains, it would ensure that the resulting residual effects would not be significant.
- 10.6.2 The Proposed Development incorporates a number of primary embedded mitigation measures. There are opportunities for the detailed design stage to include additional secondary design mitigation measures which will be explored as the scheme is progressed; however, as the mitigation measures most relevant to built heritage receptors have been embedded into the scheme, any secondary mitigation could be beneficial but would be unlikely to reduce the magnitude of residual impact to any receptor, The residual effects of the Proposed Development on **BHR1 – BHR8** are therefore unlikely to be changed from the operational phase; this is summarised in Table 10.7 below.

Table 10.7 Preliminary summary of Built Heritage Effects – Residual Effects

Receptor ID	Description	Sensitivity	Magnitude of Impact	Significance of Effect
BHR1	Barn approximately 30m north of Ashgrove Farmhouse (Grade II Listed Building)	Medium	Moderate Adverse	Moderate Adverse
BHR2	Ashgrove Farm (non-designated heritage asset)	Low	Moderate Adverse	Minor Adverse
BHR3	Trow Pool Water Tower (Grade II Listed Building)	Medium	None	No Impact

BHR4	Troy Farmhouse (Grade II Listed Building)	Medium	Low Adverse	Minor Adverse
BHR5	Lodge Farmhouse (Grade II Listed Building)	Medium	Low Adverse	Minor Adverse
BHR6	Middleton Park (Grade II Registered Park & Garden)	Medium	Low Adverse	Minor Adverse
BHR7	Ardley Conservation Area	Medium	Moderate Adverse	Moderate Adverse
BHR8	RAF Upper Heyford Conservation Area	Medium	Low Adverse	Negligible Adverse

10.6.3 As referred to above, the assessment of likely effects, including residual effects, will be updated once the ongoing investigations have completed, along with other relevant elements of the ES (such as the Landscape & Visual assessment). Updated assessments and judgements will be presented in an updated version of this Chapter in due course (Stage 2 consultation).

Climate Change

10.6.4 The archaeological remains on the site will have been sufficiently excavated and recorded prior to their removal through the Application Site’s development. Once the archaeological remains have been removed and recorded, they will not be affected by climate change.

10.6.5 There will be no residual effects on the identified built heritage receptors from climate change.

Human Health

10.6.6 The archaeology and built heritage receptors recorded on the Application Site and within the study area are not considered to make any contribution to human health. Therefore, the removal of the archaeological receptors within the site, and the associated recording of such, is not considered to have any effect on human health. There will also be no effect on human health from either the direct or indirect impacts to built heritage receptors.

10.7 CUMULATIVE EFFECTS

10.8 SUMMARY AND CONCLUSIONS

The remaining sections of this Chapter will be progressed as other elements of the ES progress. A full draft will be prepared and available as part of the Stage 2 consultation process.