

## 9 Cultural heritage

### Executive Summary

This chapter presents the results of an assessment of the likely significant effects of the proposed scheme on Cultural Heritage. The assessment was informed by documentary research; site inspection; aerial photograph interpretation; and archaeological fieldwork, comprising geophysical survey, field walking and archaeological trial trenching.

After mitigation comprising set-piece excavation, archaeological strip map and sample, earthwork survey, watching brief, photographic survey and landscape planting, effects of slight beneficial, neutral and slight adverse residual significance are predicted on known archaeological remains or on the historic landscape.

Effects of very large and moderate adverse significance are predicted for ten historic buildings during construction. Effects of slight adverse and neutral significance are also predicted.

Residual moderate adverse, very large beneficial, large beneficial and moderate beneficial effects are predicted for eight historic buildings during operation. Slight adverse, neutral and slight beneficial residual effects are also predicted during operation for historic buildings.

### 9.1 Introduction

9.1.1 The chapter presents the results of an assessment of the likely significant effects of the scheme on cultural heritage. It has been prepared in accordance with guidance provided by the *Design Manual for Roads and Bridges (DMRB), Volume 11, Section 3 Part 2 'Cultural Heritage' (HA 208/07)* (Highways Agency et al., 2007). Cultural heritage has been considered under the sub-topics of 'archaeological remains', 'historic buildings' and 'historic landscape.' *DMRB HA 208/07* defines these subtopics as follows:

*“Archaeological Remains are the materials created or modified by past human activities that contribute to the study and understanding of past human societies and behaviour - archaeology. Archaeology can include the study of a wide range of artefacts, field monuments, structures and landscape features, both visible and buried.”*

*“Historic Buildings are architectural or designed or other structures with a significant historical value. These may include structures that have no aesthetic appeal, and the sub-topic includes, in addition to great houses, churches, and vernacular buildings, some relatively modern structures, such as WWII and Cold War military structures, early motorway service stations, industrial buildings and, sometimes other structures not usually thought of as ‘buildings’, such as milestones or bridges.”*

*“Historic Landscapes are defined by perceptions that emphasise the evidence of the past and its significance in shaping the present landscape. The definition encompasses all landscapes, including the countryside, townscapes and industrial landscapes as well as designed landscapes, such as gardens and parks. As the whole of the UK’s (and most of the world’s) landscape has been modified by past human behaviour, it all has an historic character. However, just as all old materials are not necessarily archaeologically significant merely by virtue of their age, so not all landscapes are equally historically significant.” DMRB HA208/07 page 2/1 (Highways Agency et al., 2007).*

- 9.1.2 Individual archaeological sites, historic buildings and historic landscape types are known as heritage assets. Both designated and undesignated heritage assets have been examined as part of this assessment.
- 9.1.3 Impacts on cultural heritage can arise as a result of construction or operation of a road scheme. Potential impacts resulting from construction include:
- removal of archaeological remains, changes in ground water conditions leading to dewatering of archaeological remains, demolition of historic buildings, change to historic landscape integrity as a result of construction of the scheme, ground investigations or temporary works;
  - impacts on the setting of heritage assets due to temporary works or construction of the scheme;
  - impacts on the setting of heritage assets as a result of operation of the scheme, including noise and visual intrusion from movement of traffic, intrusion from lighting, vibration and dust; and
  - impacts on the amenity and viability of heritage assets and changes to historic land use as a result of the presence and operation of the scheme.
- 9.1.4 This Cultural Heritage assessment is supported by the following appendices and figures:
- *Appendix 9.1 A14 Cultural heritage gazetteer;*
  - *Appendix 9.2 Archaeology and built heritage baseline list;*
  - *Appendix 9.3 Heritage desk-based study;*
  - *Appendix 9.4 Archaeological fieldwork reports:*

- Annex A: Air Photo Services, 2014. *A14 Cambridge to Huntingdon Improvement Scheme, Cambridgeshire: Brampton TL 195 720 to Fen Drayton TL340 370; Assessment of Aerial Photographs for Archaeology (August 2014)*
  - Annex B: Anderson, K, Hall, D. & Standring, R. 2009, *A Fieldwalking Survey of the Proposed A14 Route between Ellington and Girton.*
  - Annex C: Bartlett, A. D. H. 2009, *A14 Improvement Ellington to Fen Ditton, Cambridgeshire. Report on Archaeogeophysical Surveys of Areas GP1 to GP7 (2008) and Proposed Reservoir Sites (2009).*
  - Annex D: Bartlett, A. D. H. 2009, *Brampton Lodge, Brampton, Cambridgeshire. Report on Archaeogeophysical Survey, 2009.*
  - Annex E: Bunn, D. 2008, *Gradiometer Survey: A14 Ellington to Fen Ditton Improvements.*
  - Annex F: Marsh, B, Biggs, M and Wright, A 2010 *Geophysical Survey Report Mill Common, Huntingdon.*
  - Annex G: Patten, R. Slater, A. & Standring, R. 2010, *A14 Ellington to Fen Ditton: An Archaeological Evaluation 2009.*
  - Annex H: Sabin, D. J. 2004. *Geophysical Survey Report A14 Improvements: Ellington to Fen Ditton, Cambridgeshire.*
  - Annex I: Wessex Archaeology, 2014. *A14 Cambridge to Huntingdon Improvements – Geophysical survey and Archaeological Trial Trenching.* Archaeological Evaluation Report (Volumes I, II and III).
  - Annex J: Wessex Archaeology, 2014. *A14 Cambridge to Huntingdon Improvements – Geophysical survey and Archaeological Trial Trenching.* Detailed Magnetometer and UAV Survey.
- *Figures 9.1, 9.2 and 9.3*
- 9.1.5 Other specialist chapters relevant to the preparation of this assessment comprise:
- *Chapter 10 – Landscape; and*
  - *Chapter 14 – Noise and vibration.*

## Legislative and policy background

### Legislation

- 9.1.6 Scheduled monuments are by definition of national importance and are protected by law under the *Ancient Monuments and Archaeological Areas Act 1979*. Consequently it is a criminal offence to damage a scheduled monument, and scheduled monument consent must be obtained before any works affecting a scheduled monument may take place.

- 9.1.7 Listed buildings are protected under the *Planning (Listed Buildings and Conservation Areas) Act 1990*, and are recognised to be of special architectural or historic interest. Under *Section 66(1)* of the Act, planning authorities are instructed to have special regard to the desirability of preserving a listed building, its setting, or any features of special architectural or historic interest that it possesses. Designation as a listed building confers additional controls over demolition and alteration through the requirement for listed building consent to be gained before undertaking alteration or demolition. The *Enterprise and Regulatory Reform Act 2013* allows for certain structures/objects/elements to be specifically excluded from the listing and for specific features of a building to be identified as lacking architectural merit. This then negates the requirement for listed building consent for works affecting these elements.
- 9.1.8 Under *Section 69* of the *Planning (Listed Buildings and Conservation Areas) Act 1990*, local planning authorities have the duty to designate “*areas of special architectural or historic interest the appearance or character of which it is desirable to preserve or enhance*” as conservation areas. Under *Section 72* of the Act, special attention is to be paid to the desirability of preserving or enhancing the character or appearance of a conservation area during the exercise of the provisions of the *Planning Act, Part 1* of the *Historic Buildings and Ancient Monuments Act 1953* or *sections 70* and *73* of the *Leasehold Reform, Housing and Urban Development Act 1993*. Under the *Enterprise and Regulatory Reform Act 2013*, the requirement for conservation area consent to demolish a non-listed building in a conservation area has been removed; such works now require planning permission from the local authority.
- 9.1.9 In *Annexe E* of *Planning Inspectorate Advice Note 11 (PINS 11)* (Planning Inspectorate 2012a) it notes that the grant of development consent under the *Planning Act* would obviate the need for scheduled monument consent, listed building consent and conservation area consent. However, consultation with English Heritage is to be undertaken as part of the development consent process; a list of meetings is provided in 9.2.6 below.
- National Planning Policy Framework*
- 9.1.10 Planning Policy Statement 5 (PPS5) has been superseded by National Planning Policy Framework (NPPF) (DCLG, 2012); however, the associated PPS5: Planning for the Historic Environment Practice Guide (English Heritage, 2010) is still valid until early 2015 (<http://www.english-heritage.org.uk/publications/guidelines-and-standards/consultations/>). Guidance provided in the practice guide has been applied where practicable; primarily sections HE9 and HE10 that provide information on the assessment of setting.
- 9.1.11 National planning policies concerning the conservation of the historic environment are set out in *Section 12* of the *NPPF* (DCLG, 2012). These policies form the basis for the policies set out in the *Historic Environment* section of the *Draft National Policy Statement (NPS) for National Networks, paras 5.108 - 5.130* (Department for Transport, 2013). The national road and rail networks *NPS* has been published in draft for consultation which

closed on 26 February 2014 (Planning Inspectorate, 2012b); the draft policy statement has been taken into account as part of the assessment.

- 9.1.12 The *NPPF* (DCLG, 2012) recognises that heritage assets are an irreplaceable resource which should be conserved in a manner appropriate to their significance. Significance is defined by the *Glossary* on page 56 of the *NPPF*, (DCLG, 2012) as '*the value of a heritage asset to this and future generations because of its heritage interest*'. This significance may be related to archaeological, architectural and artistic or historic elements, and may also derive from the setting of the asset.
- 9.1.13 Under *paragraph 128* of the *NPPF* (DCLG, 2012), applicants for planning permission are required to provide a description of the significance of any affected heritage assets and their settings in sufficient detail to understand the potential impact of the proposal on them.
- 9.1.14 Under *paragraph 131* (DCLG, 2012), when determining planning applications, local planning authorities are instructed to take into account:
- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
  - the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
  - the desirability of new development making a positive contribution to local character and distinctiveness.
- 9.1.15 In making planning decisions, great weight is to be given to the conservation of designated heritage assets; the more important the asset, the greater weight is given to its conservation.
- 9.1.16 Where development would lead to substantial harm or total loss of significance, local planning authorities are instructed to refuse consent, unless it can be demonstrated that it is necessary to achieve substantial public benefits that outweigh the harm or loss or that certain requirements are met (*NPPF, paragraph 132* (DCLG, 2012)).
- 9.1.17 Where development would lead to less than substantial harm to the significance of a designated asset, this harm should be weighed against the public benefits of the proposal.
- 9.1.18 Under *NPPF paragraph 135* (DCLG, 2012), the impact of a proposed development on the significance of undesignated heritage assets is to be taken into account in determining planning applications, with a balanced judgement to be made with regards to the scale of any harm/loss, and the significance of the asset.
- 9.1.19 Where a heritage asset would be wholly or partially lost, local planning authorities are instructed to require developers to record and advance understanding of the significance of the heritage assets in a manner proportionate to their importance and the impact. This evidence should then be made publicly accessible through deposition with the relevant Historic Environment Record (*NPPF paragraph 141* (DCLG, 2012)).

*Draft National Policy Statement for the National Road and Rail Networks (NPS)*

- 9.1.20 *Paragraph 5.124* of the *draft NPS* (DfT, 2013) states that where the loss of significance of a heritage asset is justified based on the merits of the new development and the significance of the asset in question, the Secretary of State may consider imposing a requirement for the applicant to prevent the loss until the relevant part of the development has commenced.
- 9.1.21 *Paragraph 5.127* of the *draft NPS* (DfT, 2013) highlights that a documentary record of the past is not as valuable as retaining the heritage asset, and therefore the ability to record the heritage asset should not be a factor in deciding whether consent should be granted.
- 9.1.22 Under *paragraph 5.128* (DfT, 2013), where the loss of all or part of a heritage asset's significance is justified, the Secretary of State should require the development applicant to record and advance understanding of the significance of a heritage asset before it is lost. Copies of the resulting reports are required to be disseminated through the Historic Environment Record, and the archive with a public depository.
- 9.1.23 Under *paragraph 5.130* (DfT, 2013), where there is a high probability that a development site may include undiscovered heritage assets which are of archaeological interest, the Secretary of State should consider requirements to ensure appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

*Regional policies*

- 9.1.24 The *Cambridgeshire and Peterborough Minerals and Waste Development Plan, Core Strategy Development Plan Document, July 2011* (Cambridgeshire County Council and Peterborough City Council, 2011) and the *Cambridgeshire and Peterborough Minerals and Waste Development Plan, Site Specific Proposals Development Plan Document February 2012* (Cambridgeshire County Council and Peterborough City Council, 2012) set out the County Council's policy for minerals and waste development, including those applicable to the proposed borrow pit areas. *Policy CS36 Archaeology and the Historic Environment* of Cambridgeshire County Council and Peterborough City Council (2011) sets out the Council's policy for protecting heritage assets. The alphanumeric codes below relate to parcels of land identified in the policy document:
- M2A and M2B Oxholme Farm – Site is archaeologically sensitive. M2A and M2B form part of borrow pit 3.
  - M2C South West Brampton – Site is archaeologically sensitive. M2C forms part of borrow pit 2.
  - M2D West of Brampton – Site is archaeologically sensitive. M2D forms part of borrow pit 1.
  - M2E Weybridge Farm, Alconbury – Archaeological assessment would be necessary. M2E forms part of borrow pit 7.

- M7E North Dry Drayton Junction, Slate Hall Farm - There is a high potential for prehistoric and Roman agriculture and settlement in the area. M7E forms part of borrow pit 6.

## 9.2 Method of assessment

### Approach

- 9.2.1 As a Highways Agency scheme, the cultural heritage assessment has been undertaken based on the guidance provided by *DMRB HA 208/07* (Highways Agency et al., 2007). Since the publication of this guidance in 2007, national planning policy has been revised and updated guidance has been published by English Heritage regarding the conservation and setting of heritage assets (English Heritage, 2011).
- 9.2.2 The *Glossary on page 56 of the NPPF* (DCLG, 2012) defines significance as '*the value of a heritage asset to this and future generations because of its heritage interest*'. This significance may be related to archaeological, architectural and artistic or historic elements, and may also derive from the setting of the site. *DMRB HA 208/07* (Highways Agency et al., 2007) provides a methodology for the assessment of the value of heritage assets, including historic buildings and conservation areas, and use of this methodology therefore aligns with the guidance provided by the *NPPF*. In addition, the term 'value' is used in this chapter in order to avoid confusion with the terminology used in Environmental Impact Assessment (EIA)'.
- 9.2.3 For the purpose of this assessment, adverse effects on heritage assets are understood to result in harm to the value of the heritage asset. Harm to a heritage asset may include but not be limited to effects such as total destruction, physical impacts to an asset through partial removal, changes in setting, or changes in amenity. Beneficial effects on heritage assets are understood to result in the improvement to the setting of a heritage asset, changes to amenity or the asset itself. The impact is assessed in two phases, construction and operation.
- 9.2.4 At this preliminary design stage of the scheme, the assessment of likely construction impacts has been based upon the construction information provided within *Appendix 3.2*. For the purposes of this assessment, the likely worst case scenario assessed assumes the same phased construction programme as presented in *Appendix 3.2* because the assessment is informed by data from both noise and traffic disciplines which assume a similar phasing. This is a reasonable worst case assessment as aside from consideration of noise and traffic levels the assessment of likely significant effects would not be affected by phasing of the works.
- 9.2.5 The baseline year of 2016 remains relevant across the construction programme, including section 6 which would not commence until the new route was operational, because the assessed conditions are not expected to change over the duration of the programme as presented in *Appendix 3.2*.
- 9.2.6 The assessment of operational impacts is assessed as the scheme working in its optimum design state; no distinction is made between opening year

and design year and no attempt has been made to predict a future year baseline other than when considering traffic effects as these would not affect the assessment of likely significant effects.

- 9.2.7 As stated in the *A14 Cambridge to Huntingdon Improvement Environmental Impact Assessment Scoping Report paras 63-64* (Highways Agency, 2014), simple assessments have been undertaken for the historic buildings and historic landscape subtopics. Due to the potential for impacts on archaeological remains present within the scheme footprint, a detailed assessment has been undertaken for the archaeological remains subtopic. Definitions of simple and detailed assessment are provided in *The Assessment Process Chapter, Chapter 3* of the *DMRB HA 208/07* (Highways Agency et al., 2007).

### Consultation

- 9.2.8 Consultation has been undertaken during the production of the *Environmental Statement (ES)* with the following stakeholders:
- English Heritage (EH);
  - Cambridgeshire County Council Historic Environment Team (CCC);
  - Huntingdon District Council's Conservation Officer (HDC); and
  - South Cambridgeshire District Council's Conservation Officer (SCDC).
- 9.2.9 A list of meetings specific to the cultural heritage topic is presented below and further information on the consultation process is provided in *Chapter 5*.
- Meeting held on Friday 4 April 2014 with EH and CCC;
  - Meeting held on 4 April 2014 with HDC;
  - Meeting held Tuesday 27 May 2014 with EH, CCC and HDC to discuss revised design for Huntingdon section; and
  - Twice weekly site inspections made by CCC to view trial trenching from week of 8 September to week of 20 October 2014.

### Data gathering

- 9.2.10 In line with the guidance provided by *DMRB HA 208/07* (Highways Agency et al., 2007), baseline data collection was made from a number of sources identified in *Chapter 5*. Following the above guidance the two study areas were defined as a 200m buffer zone around the footprint of the proposed mainline section of the scheme (mainline study area), and a 200m buffer zone around the footprint of the improvements in Huntingdon (Huntingdon study area). For the purpose of this assessment, the scheme footprint was considered to include the proposed road, borrow pits, culverts, attenuation ponds and swales, and temporary land take areas such as compounds and topsoil stores. These study areas were also adopted for the historic buildings and historic landscape subtopics. This approach was agreed with English Heritage on 27 May 2014.

- 9.2.11 In order to identify potential impacts on the setting of designated assets, data on designated assets was gathered for a wider area. Where the potential for impacts on designated assets outside the 200m study area was identified during the site inspection, these assets were included in the baseline. Assets potentially at risk of temporary impacts from haul routes outside the study area were also included in the baseline.
- 9.2.12 The assets listed in *Table 9.1* below were considered as part of the assessment, but a visual inspection and analysis of noise and traffic data for the scheme indicated there would be no likelihood of significant effects and further more detailed assessment was not required.

**Table 9.1: Assets excluded from further assessment based on traffic and noise data**

Asset name	National heritage list reference
Breabank Farmhouse	1265941
Rectory Cottage, Conington	1226276
Lych gate to Parish Church of St Mary	1226355
Parish Church of St Mary, Conington	1226274
The Gables	1330719
West End Farmhouse	1128519
Barn SW of Hall Green Farmhouse	1162887
Manor Farm Cottage	1128491
Barn to west south-west of Hall Green Farmhouse	1128490
Hall Green Farmhouse	1330741
Barn West of Hall Green Farmhouse	1309415
Hall Green Farm Cottage	1330742
Hilton Conservation Area	N/A

- 9.2.13 An assessment of hedgerows was undertaken to establish if there are any hedgerows that would be 'important' under the Hedgerow Regulations 1997 (amended 2002). No important hedgerows have been identified in the study area.
- 9.2.14 To inform the cultural heritage baseline for the two study areas, the following sources of information were consulted:
- The National Heritage List for information on national designated heritage assets (world heritage sites, scheduled monuments, listed buildings, registered parks and gardens, registered battlefields and protected wrecks);
  - The Cambridgeshire Historic Environment Record (CHER) to identify any additional heritage assets discovered since the previous stage of works;
  - English Heritage Archive for information on undesignated heritage assets;

- Huntingdonshire District Council, South Cambridgeshire District Council and Cambridgeshire City Council for information relating to conservation areas and locally listed buildings;
- Historic maps held by the Cambridgeshire Record Office and Huntingdon Record Office;
- Examination of modern mapping and scheme proposals;
- Published sources held in Reading University Library;
- Analysis of aerial photographs undertaken by Air Photo Services Ltd in 2014;
- fieldwork reports undertaken for the previous scheme design; and
- a visual inspection of the study area undertaken in April and May 2014.

9.2.15 Heritage assets have been numbered generally from east to west based on previous scheme designs. Changes to the study areas as a result of development of the scheme design have resulted in the addition and removal of heritage assets from the baseline. As a consequence of this, the numbering of heritage assets does not run continuously.

#### Assessment of value

9.2.16 For all three cultural heritage sub-topics, an assessment of the value of each asset was undertaken on a six-point scale of very high, high, medium, low, negligible and unknown. The assessment of value was based on professional judgement informed by the criteria for the assessment of value provided in *DRMB HA 208/07* (Highways Agency et al., 2007) set out in *Tables 9.2 - 9.4* below.

**Table 9.2: Criteria to assess the value of archaeological remains**

Value	Criteria
Very high	<ul style="list-style-type: none"> <li>• World heritage sites (including nominated sites).</li> <li>• Assets of acknowledged international importance.</li> <li>• Assets that can contribute significantly to acknowledged international research objectives.</li> </ul>
High	<ul style="list-style-type: none"> <li>• Scheduled monuments (including proposed sites).</li> <li>• Undesignated assets of schedulable quality and importance.</li> <li>• Assets that can contribute significantly to acknowledged national research objectives.</li> </ul>
Medium	<ul style="list-style-type: none"> <li>• Designated or undesignated assets that contribute to regional research objectives.</li> </ul>
Low	<ul style="list-style-type: none"> <li>• Designated and undesignated assets of local importance.</li> <li>• Assets compromised by poor preservation and/or poor survival of contextual associations.</li> <li>• Assets of limited value, but with potential to contribute to local research objectives.</li> </ul>

Value	Criteria
Negligible	<ul style="list-style-type: none"><li data-bbox="441 231 1182 262">• Assets with very little or no surviving archaeological interest.</li></ul>
Unknown	<ul style="list-style-type: none"><li data-bbox="441 279 1031 310">• The value of the site has not been ascertained.</li></ul>

**Table 9.3: Criteria to assess the value of historic buildings**

Value	Criteria
Very high	<ul style="list-style-type: none"> <li>Structures inscribed as of universal importance as world heritage sites.</li> <li>Other buildings of recognised international importance.</li> </ul>
High	<ul style="list-style-type: none"> <li>Scheduled monuments with standing remains.</li> <li>Grade I and grade II* listed buildings.</li> <li>Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade.</li> <li>Conservation areas containing very important buildings.</li> <li>Undesignated structures of clear national importance.</li> </ul>
Medium	<ul style="list-style-type: none"> <li>Grade II listed buildings.</li> <li>Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations.</li> <li>Conservation areas containing buildings which contribute significantly to their historic character.</li> <li>Historic townscape or built-up areas with important historic integrity in their buildings, or built settings (e.g. including street furniture and other structures).</li> </ul>
Low	<ul style="list-style-type: none"> <li>'Locally listed' buildings.</li> <li>Historic (unlisted) buildings of modest quality in their fabric or historical association.</li> <li>Historic townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures).</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>Buildings of no architectural or historical note; buildings of an intrusive character.</li> </ul>
Unknown	<ul style="list-style-type: none"> <li>Buildings with some hidden (i.e. inaccessible) potential for historic significance.</li> </ul>

9.2.17 As there is currently no publically available historic landscape characterisation data for Cambridgeshire, data on the historic landscape was gathered using a 'bottom up' approach as defined in *DMRB HA208/07 (Annex 7, section 7.7)* (Highways Agency et al., 2007), based on examination of historic and modern mapping, and the results of site inspection. The value of the historic landscape types identified using this approach were assessed using the professional judgement of suitably qualified specialists, guided by the criteria presented in *Table 9.4* below.

**Table 9.4: Criteria to assess the value of historic landscapes**

Value	Criteria
Very high	<ul style="list-style-type: none"> <li>World heritage sites inscribed for their historic landscape qualities.</li> <li>Historic landscapes of international value, whether designated or not.</li> <li>Extremely well preserved historic landscapes with exceptional coherence, time-depth, or other critical factor(s).</li> </ul>
High	<ul style="list-style-type: none"> <li>Designated historic landscapes of outstanding interest.</li> <li>Undesignated landscapes of outstanding interest.</li> <li>Undesignated landscapes of high quality and importance, and of demonstrable national value.</li> <li>Well preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factor(s).</li> </ul>
Medium	<ul style="list-style-type: none"> <li>Designated special historic landscapes.</li> <li>Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value.</li> <li>Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor(s).</li> </ul>
Low	<ul style="list-style-type: none"> <li>Robust undesignated historic landscapes.</li> <li>Historic landscapes with importance to local interest groups.</li> <li>Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>Landscapes with little or no significant historical interest.</li> </ul>

#### Assessment of magnitude and significance of effect

9.2.18 Magnitude of impact is the degree of change that would be experienced by an asset and its setting if the scheme was completed, as compared with a 'do minimum' situation. Magnitude of impact is assessed without reference to the assessment of value of the receptor, and may include physical impacts upon the asset, or impacts upon its setting or amenity value. The assessments were informed by the guidance documents *The Setting of Heritage Assets* (English Heritage, 2011).

9.2.19 Assessment of magnitude of impact and significance of effect was assessed using professional judgement guided by the methodology and criteria provided by *DMRB HA 208/07* (Highways Agency et al., 2007) for archaeological remains, historic buildings and the historic landscape, set out in *Tables 9.5 to 9.7* below. Impacts have been assessed to be temporary or permanent. Temporary impacts can be short-, medium- or long-term. Short-term impacts would normally not last beyond the construction period, medium term impacts would last beyond the construction period, but no more than 15 years, whilst long-term impacts would last over 15 years, but still be reversible. Permanent impacts are irreversible (*DMRB 208/07, paragraphs 4.7-4.10*) (Highways Agency et al., 2007).

**Table 9.5: Magnitude of impact: summary of factors for the archaeological remains sub-topic**

Magnitude	Factors in the assessment of magnitude of impact
Major	Change to most or all key archaeological materials, such that the resource is totally altered. Comprehensive changes to setting.
Moderate	Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset.
Minor	Changes to key archaeological materials, such that the asset is slightly altered. Slight changes to setting.
Negligible	Very minor changes to archaeological materials, or setting.
No Change	No change.

**Table 9.6: Magnitude of impact: summary of factors for the historic buildings sub-topic**

Magnitude	Factors in the assessment of magnitude of impact
Major	Change to key historic building elements, such that the resource is totally altered. Comprehensive changes to the setting.
Moderate	Change to many key historic building elements, such that the resource is significantly modified. Changes to the setting of an historic building, such that it is significantly modified.
Minor	Change to key historic building elements, such that the asset is slightly different. Change to the setting of an historic building, such that it is noticeably changed.
Negligible	Slight changes to historic building elements or setting that hardly affect it.
No Change	No change. No change to fabric or setting.

**Table 9.7: Magnitude of impact: summary of factors for the historic landscape**

Magnitude	Factors in the assessment of magnitude of impact
Major	Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit.
Moderate	Changes to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, considerable changes to use or access; resulting in moderate changes to historic landscape character.
Minor	Changes to few key historic landscape elements, parcels or components, slight visual changes to few key aspects of historic landscape, limited changes to noise levels or sound quality; slight changes to use or access: resulting in limited changes to historic landscape character.
Negligible	Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.

9.2.20 For all three sub-topics, the significance of effect is determined as a combination of the assessment of the value of the asset and the magnitude of the impact. This is achieved using professional judgment informed by the matrix illustrated below in *Table 9.8*. Five levels of significance of effect are defined which apply equally to adverse and beneficial effects.

**Table 9.8: Matrix to assess the significance of effects on cultural heritage assets**

Value		Magnitude of impact				
		No change	Negligible	Minor	Moderate	Major
Value	Very High	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Moderate or Large
	Low	Neutral	Neutral or slight	Neutral or Slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

9.2.21 For the purpose of this assessment, residual effects on designated assets of large and very large adverse significance are taken to be commensurate with substantial harm as defined under the *NPPF* (DCLG, 2012) and the *NPS* (DfT, 2013).

### Limitations

- 9.2.22 Due to the risks associated with working adjacent to a live dual carriageway, access within the existing highway boundary of the A14 and A1 was not possible during the site inspection. The survival of heritage assets within the highway boundary was therefore determined by identification during a 'drive-by' of the assets from the relevant road; and consultation of the *Cultural Heritage Asset Management Plan – Area 8* (Highways Agency, 2013).
- 9.2.23 During the site inspection, access was not gained at Friesland Farm (asset 523), the footbridge (asset 527), Vicarage Farm (asset 539), Offord Hill Farm (asset 555) and Weybridge Farm (asset 639) due to health and safety concerns or land owner restrictions.
- 9.2.24 The assessment is based on known heritage assets identified through information held in the Historic Environment Record, county archives, the Portable Antiquities Scheme and the results of archaeological field surveys undertaken as part of the A14 Ellington to Fen Ditton scheme and the A14 Cambridge to Huntingdon improvement scheme. There is the potential for unknown archaeological remains to be present within the scheme footprint; however, the potential for this is low.
- 9.2.25 There is an underlying assumption that publicly held archaeological data is reliable. The data itself may have limitations; for example, data held in an Historic Environment Record may be limited by an absence of fieldwork in the locality, or lack of certainty about the reporting of the data (inaccurate grid references) and of the date of sites (especially records of 18<sup>th</sup>, 19<sup>th</sup> and early 20<sup>th</sup> century discoveries). Where possible the original data sources, e.g. original reports, publications and air photographs, have been consulted as part of the study.
- 9.2.26 Due to some difficulties in gaining access, there were a small number of areas within the off-line section of the scheme which were not subject to physical archaeological evaluation. These areas are noted in the archaeological trial trenching report (*Appendix 9.4, Annex I*) and geophysical survey report (*Appendix 9.4, Annex J*).

### 9.3 Baseline

#### Archaeological remains

##### *Background*

- 9.3.1 The earliest known prehistoric activity in the study area dates to the Upper Palaeolithic (45,000-10,000 BP<sup>1</sup>), Mesolithic (10,000 BP – 4,000 BC) and Neolithic (4,000 - 2,200 BC) periods and comprises small quantities of worked flint tools. Later prehistoric activity is represented by enclosures and linear features, thought to be the remains of field systems, identified through analysis of aerial photographs. These are likely to date to the Bronze Age (2,500 - 700 BC) or Iron Age (800 BC – AD 43) periods. Enclosures are a common feature of the Iron Age and Roman period (AD 43 – 410) Cambridgeshire landscape; enclosures generally comprised a bank and ditch enclosing an area that contained roundhouses and pens for animals. The area is crossed by a number of Roman roads notably Ermine Street.
- 9.3.2 Spreads of worked flints and pottery from the later prehistoric periods have been identified at a number of locations throughout the study area and while these indicate activity, they do not appear to be directly associated with settlement.
- 9.3.3 Medieval activity (AD 410 - 1540) is largely focussed on Huntingdon with an Anglo-Saxon (AD 410 - 1066) settlement being developed as a Danish *burh* (asset 437), and after the Norman invasion construction of a motte and bailey castle in AD 1068 (asset 250). Some of the villages outside Huntingdon have their origins in the medieval period and two were deserted. Remains of fields dating to the medieval period have also been identified. Later medieval (AD 1066 - 1540) and post-medieval (1540 - 1901) activity is largely represented by the urban development of Huntingdon, surrounding villages, along with the development of agricultural landscape through enclosure and later large-scale arable farming. Activity dating to the modern period (1901 to present) is represented by military sites including the former RAF Brampton (asset 181) and other World War II civil defences.
- 9.3.4 In the study area, buried archaeological remains predominate, usually with no visible above-ground remains. The setting<sup>2</sup> of these assets is primarily open and rural characterised by large-scale farming, but there was also industrial development and housing during the 20<sup>th</sup> century. While function and inter-relationships can be inferred from their locations, the importance of these assets derives from the information that can be retrieved from their physical remains, rather than their setting.

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<sup>1</sup> BP is Before Present (Present is 1950)

<sup>2</sup> Setting is the surroundings in which an asset is appreciated (English Heritage, 2011).

## Baseline

### *Huntingdon study area*

- 9.3.5 A total of 77 archaeological sites have been identified in this study area. These are shown in *Figure 9.1* of the *ES*. Of these sites, two have been assessed to be of high value, 14 of medium value, 52 of low value and nine have been assessed to be of negligible value. A full list of archaeological assets and figure references is provided in the Heritage baseline *Appendix 9.2* of the *ES*. Further detailed information about these assets is provided in the *Heritage gazetteer* presented at *Appendix 9.1* and the *Heritage desk-based study* presented at *Appendix 9.3*.

### *Huntingdon study area - assets of high value*

- 9.3.6 Two assets of high value have been identified within the study area. Huntingdon Castle (asset 250) was built in 1068 for William the Conqueror, and has been used for a variety of purposes, including use as a gaol during the 15<sup>th</sup> and 16<sup>th</sup> centuries. The castle is included as an asset of high value as it is a scheduled monument. The earthwork on Mill Common (asset 442) is believed to be the remains of part of the English civil war defences of Huntingdon, but may have medieval origins. This asset is also a scheduled monument, and has therefore also been assessed to be of high value.

### *Huntingdon study area - assets of medium value*

- 9.3.7 A total of 14 assets within the study area have been assessed as being of medium value.
- 9.3.8 The earliest evidence dates to the Palaeolithic period and comprises two flint blades and a flint flake found amongst a collection of material recovered during excavations at the present site of Pathfinder House, Huntingdon (asset 289); Neolithic flint was also recovered from the same site. This has been assessed as of medium value because of the rarity of evidence for Palaeolithic activity.
- 9.3.9 Excavations at the site of Pathfinder House have also identified evidence of Iron Age and early Roman settlement (asset 290), including a number of pits containing domestic waste. Excavations at Watersmeet revealed a settlement with an associated field system (asset 304). Later Roman activity on Mill Common, to the south-west of Pathfinder House, comprises the remains of a 3<sup>rd</sup> to 4<sup>th</sup> century corridor type villa (asset 395). Both Roman inhumation and cremation burials have also been identified at two sites within the Huntingdon study area (assets 283 and 467). The continued use of field systems from the Iron Age to Roman periods, and the distribution, density and dynamics of Iron Age settlement types have been identified as areas requiring further research within the regional research agenda (*Brown and Glazebrook, 2011*). Due to the potential of these assets to contribute to this further research, these assets have been assessed to be of medium value.
- 9.3.10 Medieval activity within the study area can be divided into two main themes of settlement and burial. Anglo-Saxon settlement activity has been identified at Huntingdon (asset 291), and there is also documentary

evidence for a Danish *burh* (asset 437). Anglo-Saxon settlement and the development of Danish *burhs* have been particularly identified as areas for further study in the regional research agenda, as currently most Anglo-Saxon activity is generally indistinguishable from Roman or earlier features (*Brown and Glazebrook, 2011*). Later settlement evidence includes medieval activity in the existing town of Huntingdon (asset 392). These sites have been assessed as being of medium value, based on their potential to further the understanding of topics raised in the regional research agenda, such as how the medieval layout and occupation of plots changed prior to becoming the high medieval layout that more commonly survives today (*page 70 in Brown and Glazebrook (2011)*).

- 9.3.11 An early Christian inhumation cemetery has also been found at Mill Common (asset 396) in Huntingdon. The need for further research into the introduction of Christianity at a popular level during this period, and how it can be identified through burials has been raised as a topic in the regional research agenda (*Brown and Glazebrook, 2011*). Burials from this period include those thought to relate to the siege of Huntingdon Castle in 1174 (asset 398), as well as more common inhumation cemeteries (asset 368 and 396). Due to their potential to contribute to this research objective these sites have been assessed to be of medium value.

*Huntingdon study area - assets of low value*

- 9.3.12 A total of 51 assets have been identified within the study area as being of low value.
- 9.3.13 Four prehistoric assets of low value have been identified in the study area (assets 289, 292, 436 and 468).
- 9.3.14 The main types of Roman assets are characterised by settlement activity, findspots and occupation in Huntingdon. Five of the assets identified as Roman settlement are located in Huntingdon, including the Mill Common area (assets 364 and 375). Four assets are findspots of individual coins or small groups of coins that are now held in museum collections. Fragments of undated human bone (asset 462) were recorded during the excavation of building foundations on Scholar Avenue to the west of Huntingdon railway station. The bone may be indicative of further remains in the area, however, the finds have been removed from their context and offer limited archaeological information. These have been assessed as of low value because they provide limited information on settlement activity in Huntingdon.
- 9.3.15 Fifteen assets dating to the medieval period have been identified in Huntingdon and comprise elements of surfaces and pits containing domestic waste, as well as evidence for activity on Mill Common. The sites of a number of medieval buildings, now demolished, include seven churches and two hospitals; the Hospital of St Margaret closed in the 15<sup>th</sup> century (asset 435). These assets have been assessed to be of low value because they provide information on the medieval development of Huntingdon, but of limited value due to not having been the subject of archaeological investigations.

- 9.3.16 A further four assets date to the post-medieval and modern period. The sites include the former site of Huntingdon railway station (asset 451) and a possible crude World War I runway crossing the eastern area of Mill Common (asset 344). The actual location and extent of the runway is speculative and as a result, the asset has been assessed as low value.

*Huntingdon study area - assets of negligible value*

- 9.3.17 Nine assets of negligible value have been identified in the Huntingdon study area. These consist of the sites of assets that have been destroyed or discoveries made in the 19<sup>th</sup> century whose exact location is uncertain, such as the stone coffin and inhumations in Huntingdon (asset 463). Other assets include evidence for medieval quarrying on Mill Common (asset 401) and the sites of two windmills (assets 406 and 415) the locations of which have since been developed by housing. The potential for the survival of archaeological remains associated with these assets is considered to be very low because they have been demolished and as such their value has been assessed to be negligible.
- 9.3.18 Excavations at Castle Hill House in Huntingdon (asset 280) recorded a post-medieval rubbish pit, probably associated with earlier properties along the High Street that were demolished for redevelopment.

**Mainline study area**

- 9.3.19 A total of 240 archaeological sites have been identified in the study area, of these 44 have been assessed to be of medium value, 147 have been assessed to be of low value and 49 have been assessed to be of negligible value. These assets are shown on *Figure 9.1*. A full list of known archaeological assets and figure references is provided in *Appendix 9.2*. Further detailed information about these assets is provided in *Appendices 9.1 and 9.3*.

*Mainline study area - assets of high value*

- 9.3.20 No assets assessed to be of high value have been identified in the mainline study area.

*Mainline study area - assets of medium value*

- 9.3.21 The earliest remains are finds of Palaeolithic flint flakes and tools (Asset 164). Worked flints of Neolithic date were recovered from a deposit of peat and peat deposits of Bronze Age date have also been discovered (asset 159). A barrow dating to the Bronze Age has also been identified (asset 162). Other flint scatters and pottery sherds have been identified as belonging to the prehistoric period (assets 28, 44, 74 and 166). The peat deposit associated with asset 159, has the potential to include pollen and other environmental evidence which provides information on the physical environment during this period. These assets are of medium value because they provide further evidence of settlement activity and burial practice in the prehistoric period, which are key research themes identified in the regional archaeological framework (*Brown and Glazebrook, 2011*).
- 9.3.22 Iron Age remains within the study area are characterised by settlement, including one banjo enclosure identified by geophysical survey (asset 85). This asset has been assessed as of medium value because this settlement

type is not often found in the east of England (*page 2 of McOmish (2011)*) which offers further information on the development of settlement in the Iron Age period.

- 9.3.23 Of these, at least one settlement had an associated field system (asset 176), two show continuity into the Roman period (assets 174 and 185,) and at one site there is evidence of occupation in the Anglo Saxon period (assets 161); however, it is unclear if this represents continuous occupation of the site. Two possible ploughed out round barrows (asset 215), located to the south of Alconbury, represent the only evidence for burial activity in the study areas for this period. Arbury Camp ringwork (asset 24) has been ploughed flat and infilled from the medieval period onwards; however, previous investigations indicate it was circular in plan and measured 260m in diameter. Although the site originated in the Iron Age its use continued into the Roman period. Trial trenching in 2014 identified a multi-period possible settlement with evidence for activity from the Iron Age through to the early medieval period (asset 616).
- 9.3.24 The continued use of field systems from the Iron Age to Roman periods, and the distribution, density and dynamics of Iron Age settlement types have been identified as areas requiring further research within the regional research agenda (*Brown and Glazebrook, 2011*). Due to the potential of these assets to contribute to this further research, these assets have been assessed to be of medium value.
- 9.3.25 Roman remains include the routes of two major Roman roads (asset 14: Akeman Street and asset 487: Ermine Street), two area of settlement (asset 67, 129) and field systems (asset 168). The impact of large scale roads on agriculture and local communities has been raised as a topic of importance by the regional research agenda (*page 46 of Brown and Glazebrook (2011)*); this will be particularly the case with Ermine Street, which acted as a *cursus publicus* (an administrative highway). Due to the potential of these assets to contribute to this further research, these assets have been assessed to be of medium value.
- 9.3.26 Anglo-Saxon activity within the study area is mainly characterised into two themes: settlement and burial. Settlement activity has been identified at Brampton (asset 182), and burial sites include cremation cemeteries at Girton (assets 42 and 43) and an early Saxon burial identified during trial trenching in 2014 (asset 616). The need for further research into the introduction of Christianity at a popular level during this period, and how it can be identified through burials, has been raised as a topic in the regional research agenda (*page 46 of Brown and Glazebrook (2011)*).
- 9.3.27 Evidence for medieval activity within the study area is also represented by burial and settlement activity. In the case of settlement within the mainline study area, this includes two deserted medieval villages (DMV) (assets 92 and 195). These sites have been assessed as being of medium value, based on their potential to further topics raised in the regional research agenda, such as gaining a better understanding of the way settlements appear, grow, shift and disappear (*page 70 of Brown and Glazebrook (2011)*).

- 9.3.28 The identification of the site of a chapel close to Girton College (asset 46) that was extant until at least the 16<sup>th</sup> century could provide the opportunity to further research the impact of social changes, such as the dissolution of the monasteries, on the post-medieval landscape (*page 79 of Brown and Glazebrook (2011)*). Due to the potential of these assets to contribute to this research objective these assets have been assessed to be of medium value.
- 9.3.29 Nine assets within the study area are undated. These assets comprise cropmarks identified through aerial photography that have been further targeted by geophysical survey. The majority of these are likely to be later prehistoric in date, and include ring ditches and a possible square barrow (assets 155, 177, 184), as well as possible settlements (assets 29, 32, 127). These assets have been assessed to be of medium value, given their potential to contribute to regional research objectives such as the understanding of the relationship between settlements and monuments, and the agrarian economy during the wider Prehistoric period (*Brown and Glazebrook, 2011*).

*Mainline study area – assets of low value*

- 9.3.30 Mesolithic, Neolithic, Bronze Age and Iron Age periods are predominantly represented by material recovered by surface artefact collection and trial trenching for the previously proposed but not implemented A14 Ellington to Fen Ditton scheme. Surface artefact collection is used to identify potential archaeological sites and provide an approximate date for the activity. Trial trenching along the route identified two pits that contained Neolithic worked flint (assets 178, 183); Bronze Age activity was identified at Boxworth wind farm (asset 517).
- 9.3.31 Much of the Roman activity has been identified through developer funded archaeological investigations, such as surface artefact collection, trial trenching and excavations. Six of the assets are identified as Roman settlement, and are predominantly represented by groups of pits and sections of ditches that contain domestic material. A clay figurine and bronze statuette are recorded as having been found in Fenstanton in the 19<sup>th</sup> century (asset 125). A collection of Roman milestones found along the road between Huntingdon and Cambridge (asset 57) are held in Fitzwilliam Museum in Cambridge. These are of low value because they provide very limited information on Roman activity; for example the results of trial trenching have identified potential settlement sites, but have not established their full extent, date range or the types of activities undertaken there.
- 9.3.32 A total of 19 low value archaeological assets date to the medieval period, of which three are areas of ridge and furrow which exists as either extant earthworks or cropmarks (assets 53, 520, and 620). Ridge and furrow is assessed as of low value as it provides evidence of agricultural practices in the medieval period, but is a common feature type in England. The remaining 16 assets include a number of findspots as a result of metal detector surveys and fieldwalking, and the site of building no longer extant.

- 9.3.33 Post-medieval activity comprises evidence of agriculture and transport. Agriculture comprises field systems identified as cropmarks (assets 133 and 135), and transport is represented by the site of seven milestones and mileposts (assets 48, 60, 65, 73, 82, 510, 524 and 532) and three former railway lines (assets 485, 491 and 493) including the former site of the Huntingdon to Thrapston railway (asset 491). These are common feature types in the post-medieval period and are assessed to be of low value.
- 9.3.34 Modern military activity includes the site of WWII civil defences such as a former anti-aircraft gun placement (asset 62). The assets were catalogued as part of the Defence of Britain project (Council for British Archaeology, 2014). They have been assessed of low value because the information they contribute to further studies is minimal by virtue of the fact they have been demolished.

*Mainline study area - assets of negligible Value*

- 9.3.35 Activity dating to the medieval period is characterised by areas of ploughed out ridge and furrow, with 26 out of 27 assets dated to this period comprising sites of this type (assets 11, 34, 50, 55, 61, 71, 82, 94, 97, 100, 102, 121, 123, 124, 126, 149, 151, 191, 196, 197, 202, 208, 219, 220, 221, 224 and 519).
- 9.3.36 The post-medieval period is largely represented by a number of farms and public houses shown on 19<sup>th</sup> century mapping that have been subsequently demolished. Modern activity includes the site of a demolished pillbox (asset 205). The assets have been assessed as of negligible value because survival of any archaeological features is likely to be fragmentary and will offer little information to contribute to the understanding of the period.

**Historic buildings**

*Background*

- 9.3.37 The town of Huntingdon and villages within the study area are characterised by post-medieval buildings, including yeoman farmers' houses, townhouses, inns, and civic buildings.
- 9.3.38 Within the scheme mainline study area, historic buildings typically comprise worker's cottages and farms of varying status, constructed during the 18<sup>th</sup> and 19<sup>th</sup> centuries at a time of agricultural improvement. The 20<sup>th</sup> century built heritage includes military assets such as pillboxes and a RAF base, and commemorative sites of a cemetery and military graveyard. Further detail on the heritage assets is provided in *Appendices 9.1 and 9.3 of the ES*.

**Huntingdon study area**

- 9.3.39 Within the Huntingdon study area, 51 historic building assets have been identified, including four conservation areas. These are shown on *Figure 9.1*. A full list of historic buildings and figure references is provided in *Appendix 9.2*. Further detailed information about these assets is provided in *Appendices 9.1 and 9.3*.

- 9.3.40 The historic town of Huntingdon is designated as a conservation area (asset 235). The medieval layout of the town remains legible with the gently undulating High Street, which follows the line of Ermine Street Roman road (asset 487), lined by continuous rows of buildings set within long narrow plots laid out perpendicular to the street front. The legibility of the medieval layout has been reduced by modern redevelopment which is particularly apparent to the east of High Street. With the exception of two medieval parish churches (National Heritage List (NHL) references 1128592 and 1161910) and a former medieval hospital (NHL 1161870), the built heritage of the conservation area is characterised by buildings of post-medieval date, comprising a mixture of vernacular cottages, townhouses, substantial gentry houses, coaching inns, and civic and public buildings.
- 9.3.41 Located to the south and west of the town are Mill Common and Views Common. Established in the medieval period, these areas remain an important feature within the conservation area, evidencing the history and development of the settlement, and continuing to shape the character of the town today. Mill Common is flanked by a varied collection of historic buildings, including classically-proportioned Georgian houses on the Walks (assets 353, 359, 362), and the mid-19<sup>th</sup> century Huntingdon County Hospital (asset 445), the setting of which is characterised by views across the open, undeveloped green space of Mill Common on the periphery of the historic town; see *Chapter 10* for further detail. These buildings have been assessed to be of medium value due to their architectural quality, historic interest and designation as grade II listed buildings.
- 9.3.42 Huntingdon Conservation Area is currently adversely affected by the presence of the A14 dual carriageway which runs across Views Common and Mill Common, resulting in noise intrusion from high vehicle numbers, and visual intrusion from the presence of the viaduct which carries the road across Brampton Road. The viaduct also adversely affects the setting of surrounding historic buildings including Huntingdon County Hospital (asset 445) and Huntingdon railway station (asset 458); further detail on the landscape character of this area is provided in the baseline section of *Chapter 10*.
- 9.3.43 Hinchingsbrooke House (asset 471), a grade I listed building, is located to the west of Huntingdon and forms an integral part of the conservation area. Originally a Benedictine Nunnery, after the dissolution of the monasteries the building was developed as a noble residence by the Cromwell and Montague families (Williamson and Harrison, 2006). Hinchingsbrooke House survives today as a fine example of a high status post-medieval house, which is associated with a number of listed buildings including a medieval gate lodge, re-sited from Ramsey Abbey (asset 469). The setting of Hinchingsbrooke House is formed by a designed landscape of post-medieval date (HLT18). Of particular note within this landscape is the 17<sup>th</sup> century terrace walk on the Park Wall (asset 472) to the south-east of the house which provides picturesque views to the south-east towards Alconbury Brook. In consideration of their architectural and historic interest, assets 469, 471 and 472 have been assessed to be of high value. A description of the wider landscape is provided in the baseline section of *Chapter 10*.

- 9.3.44 The value of Huntingdon Conservation Area is enhanced by its setting close to Portholme and Westside Common, located to the south and east of the conservation area respectively, both of which are flanked by the river Great Ouse. Formed by wide open, flat areas of privately owned green space, they provide long views out from the conservation area, and maintain our understanding of the town's historic rural setting. To the north and west the conservation area is flanked by modern development which does not contribute to its value.
- 9.3.45 In consideration of the historic and architectural interest of buildings within the conservation area, and the presence of nine grade II\* listed buildings and four grade I listed buildings within its boundaries, Huntingdon Conservation Area has been assessed to be of high value.
- 9.3.46 The village of Godmanchester is located to the south-east of Huntingdon and is designated as two separate conservation areas: Godmanchester Post Street conservation area (asset 236) and Godmanchester Earning Street conservation area (asset 565). With its origins in the Roman period, the settlement rose to prominence in the post-medieval period and is today characterised by high status post-medieval merchants and yeoman farmers' houses. The conservation areas contain one grade I listed building and six grade II\* listed buildings, whilst the historic buildings within the designated areas hold considerable group value as evidence of a post-medieval domestic architecture. The presence of Portholme to the northwest of the Post Street conservation area (asset 236) contributes to the value of the conservation area, providing an open green setting to the town, and long distance views to and from the conservation area. In consideration of their architectural and historic interest, these conservation areas have been assessed to be of high value. Further detail on the character of Godmanchester is provided in the baseline section of *Chapter 10*.

#### **Scheme mainline study area**

- 9.3.47 Within the study area centred on the scheme mainline, a total of 57 historic buildings have been identified. These are shown on *Figure 9.1*. Further detailed information about these assets is provided in *Appendices 9.1 and 9.3*.
- 9.3.48 The scheme mainline study area is characterised by rural buildings comprising farmsteads and cottages, with a total of 14 and five assets respectively. Farmsteads are typically set in isolated locations and laid out with buildings partially or wholly enclosing a farmyard with a detached farmhouse located close by. This plan form is demonstrated by Rectory Farm (asset 543), and Offord Hill Farm (asset 536) which have been assessed to be of low value due to their interest as evidence of agricultural improvement and farmstead design in the 18<sup>th</sup> and 19<sup>th</sup> centuries. A number of farmsteads have been subject to considerable alteration and demolition, as demonstrated by Wyboston Farm (asset 535) and Debden Farm (asset 534). These assets have been assessed to be of negligible value due to the loss of architectural information resulting from demolition.

- 9.3.49 Workers' cottages comprise two-storey brick structures, such as Grafham Road Cottages (asset 540), and Grapevine Cottages (asset 515). These structures retain much of their historic and architectural character as modest, polite, rural domestic buildings, and have been assessed to be of low value. Where cottages have been subject to greater levels of alteration, such as amalgamation to form larger houses, this has often degraded the architectural interest of the asset, as demonstrated by New Barns Farm (asset 525), and Brampton Lodge (asset 541). These assets have been assessed to be of negligible value.
- 9.3.50 The farms and workers' cottages are set within a rural landscape characterised by large arable fields created by the amalgamation of 18<sup>th</sup> and 19<sup>th</sup> century enclosures in the 20<sup>th</sup> century (HLC1). Although of limited time depth, this landscape provides a rural setting for these agricultural buildings which contributes to their value.
- 9.3.51 Nucleated rural villages form a characteristic feature of the local area, and are represented by three assets within the mainline baseline: Offord Cluny, Fen Drayton and Fenstanton (assets 537, 560 and 561), all of which are designated as conservation areas. These villages are characterised by a mixture of early post-medieval vernacular buildings and domestic brick buildings of 18th-19th century date, and, with the exception of Fenstanton, retain rural settings characterised by the presence of large arable fields. The setting of Fenstanton conservation area is dominated to the south by the presence of the A14 dual carriageway, resulting in noise intrusion on the designated area. In consideration of their historic and architectural interest, as evidence of the development of rural settlement in the post-medieval period, these assets have been assessed to be of medium value.
- 9.3.52 The 14<sup>th</sup> century Church of All Saints in Lolworth (asset 96) is located on a hillside above the current A14 with the church tower forming a notable local landmark. In consideration of its importance as evidence of the development of medieval church architecture and its designation as a grade II\* listed building, the Church of All Saints has been assessed to be of high value.
- 9.3.53 A total of nine mileposts are recorded within the mainline study area; of these only seven are *in situ*, two of the mileposts could not be located during field survey. Constructed of inscribed stones or moulded cast iron, the presence of the milestones evidences the importance of the routes of what are now the A14 and A1 during the post-medieval period. Of these nine assets, six are designated as grade II listed structures and as a result have been assessed to be of medium value (assets 79, 104, 110, 175, 213 and 218). The remaining three mileposts are undesignated and have been assessed to be of low value.
- 9.3.54 The American Military Cemetery (asset 501) was established during WWII and laid out in its current form in the mid-1950s to provide the final resting place for American servicemen and women who lost their lives during WWII. The cemetery is designated as a grade I registered park and garden; however in consideration of the strong architectural character of this asset, it has been included under the historic buildings subtopic. Located on an elevated site to the west of Cambridge, the cemetery

comprises a memorial chapel and museum, a Court of Honour, and plots of simple headstones, laid out in an arc splaying outwards from an elevated flagpole, with extensive long distance views across the landscape to the north; further information on the views from the cemetery is provided in *Appendix 10.5*. The cemetery includes a number of listed buildings. In recognition of its importance as a unique site of the highest design quality and social importance, asset 501 has been assessed to be of high value.

- 9.3.55 Conington Hall (asset 122) was built in the early 18th century and survives today as a charming example of a modest country house. Designated as a grade II\* listed building, Conington Hall has been assessed to be of high value. The value of the Hall is enhanced by its setting within a small, well-maintained parkland (asset 115) which includes fish ponds, walled gardens, pleasure grounds, a wilderness, and generous well-timbered pasture fields in front of the Hall. The parkland has been assessed to be of medium value.
- 9.3.56 There are four military assets of 20th century date within the study area. They are a Royal Observer Corps Post (asset 169), two World War II pillboxes (assets 54 and 109) and RAF Brampton (asset 181) which currently remains in military use. These assets evidence the strategic military importance of the study area and have been assessed to be of low value.

#### Historic landscape

- 9.3.57 A total of 19 historic landscape types have been identified within the two study areas. These are shown on *Figure 9.2*. Further information about these assets is provided in *Appendices 9.1 and 9.3*.
- 9.3.58 The historic landscape of the Huntingdon study area is characterised by the juxtaposition of urban development and the privately owned open spaces of the town's surviving areas of common land, now used for pasture and regularly grazed by cattle and sheep. Seemingly established as a small market town in the Anglo-Saxon period, with a high street which followed the line of the Roman road known as Ermine Street, the town has remained focussed on this historic core; it was only towards the latter part of the 20<sup>th</sup> century that the town began to expand north eastwards, particularly following the construction of the A14 Huntingdon bypass. The earlier medieval and post-medieval townscape of Huntingdon is still legible in the shapes of property boundaries along the High Street, but this historic core is surrounded by a townscape dating from the Georgian period onwards.
- 9.3.59 The historic landscape of the mainline study area is characterised by large fields created in the 20<sup>th</sup> and 21<sup>st</sup> centuries through the amalgamation of smaller fields which were themselves created from the mid-18<sup>th</sup> century onwards as part of planned parliamentary enclosure. There has also been development of large-scale industrial complexes, such as the Huntingdon Life Sciences complex to the south of Alconbury, within the framework of roads and field boundaries established during and after the agricultural revolution.

## Huntingdon study area

### *Assets of high value*

- 9.3.60 HLC10 is a parcel of land which includes the scheduled monument of Huntingdon Castle (see *Appendix 9.3*). The well preserved motte and bailey are still visible in the eastern and western parts of the site respectively. The site is currently within an area of open grassland within a public park belonging to the Town Council. Huntingdon Castle historic landscape type has been assessed to be of high value due its level of preservation, community value as an area of open space and its historical significance within the context of the development of the medieval market town of Huntingdon.

### *Assets of medium value*

- 9.3.61 HLC11 comprises privately owned green space used for private grazing, and are areas of land under the control of a communal body, such as the Freeman of Huntingdon; they are often referred to as a 'common' by name e.g. Mill Common. Three areas of privately owned green space have been identified within this study area (Portholme Meadow, Mill Common, and Views Common) all within the town of Huntingdon. The oldest of these appears to be Portholme Meadow, which is first mentioned in a 1212 charter of common rights granted by King John (Doody, 2008). Mill Common and Views Common historically formed Huntingdon Great Common, and were split into two for management purposes in 1850 (Williamson and Harrison, 2006). The Great Common appears to have originated from a lease of two ploughlands, 40 acres of land and 10 acres of meadow from the King and the earl to the burgesses of Huntingdon recorded in the Domesday Survey (Cambridgeshire County Council, undated).
- 9.3.62 All three areas of character type HLC11 are currently used as unimproved pasture and are still used by the Freeman of Huntingdon to graze cattle and sheep. The influence they have had on the development of Huntingdon can clearly be seen through the shape of the modern town, which has expanded widely to the north-east, but not to the west and south. In consideration of the historical integrity of this historic landscape type it has been assessed to be of medium value.
- 9.3.63 HLC18 comprises Hinchbrooke House ornamental landscape. Hinchbrooke House itself was built in the 16<sup>th</sup> century on the site of an earlier nunnery (Williamson and Harrison, 2006), and has housed Hinchbrooke School since 1970 (Hinchbrooke School, 2014) While it retains some important historic elements, such as the Terrace Walk (asset 472) and the Pleasure Grounds, described by Williamson and Harrison (2006), as one of the most important survivals of 17<sup>th</sup> century formal landscaping in England the context of these elements has subsequently been eroded by the removal or degradation of the overall form of the garden with the addition, expansion and removal of elements. These elements include The Wilderness, the Japanese Garden and the Kitchen Garden, the intrusion of modern features and, in the case of the gate house

and main approach, relocation during the 19<sup>th</sup> century. In light of this, HLC18 has been assessed to be of medium value.

- 9.3.64 HLC19 is the historic core of Huntingdon, (Huntingdonshire DC, 2007). Although now much altered by modern features such as car parks and shop fronts, its Anglo-Saxon and medieval origins still remain legible in the winding line of the High Street (which follows the line of Ermine Street Roman road) and the long narrow plots laid out perpendicular to it. HLC19 is integral to the understanding of the development of the market town of Huntingdon, and as such has been assessed to be of medium value.

*Assets of low value*

- 9.3.65 Three historic landscape types: Woodland (HLC3), Ornamental enclosure (HLC15) and Communications railway (HLC16) assessed to be low value have been identified within the Huntingdon study area. As these are also present in the scheme mainline study area they are described below.

*Assets of negligible value*

- 9.3.66 Three historic landscape types assessed to be of negligible value Industry (HLC6); Recreation (HLC8); and Highway (HLC13) have been identified within the Huntingdon study area. As these are also present in the scheme mainline study area they are described in paragraphs 9.3.76 to 9.3.78 below.

**Scheme mainline study area**

*Assets of high value*

- 9.3.67 There are no historic landscape assets of high value within the mainline scheme study area.

*Assets of medium value*

- 9.3.68 There are no historic landscape assets of medium value within the mainline scheme study area.

*Assets of low value*

- 9.3.69 A total of eight historic landscape types within both study areas have been assessed to be of low value
- 9.3.70 HLC1 (20<sup>th</sup> century agriculture with relict 18<sup>th</sup>-19<sup>th</sup> century boundaries) comprises mostly large modern agricultural fields that have been formed by the amalgamation of several smaller, 18<sup>th</sup> or 19<sup>th</sup> century parliamentary enclosure fields which retain one or more of earlier field boundaries. HLC2, 18<sup>th</sup> – 19<sup>th</sup> century enclosures, comprises areas of farmland where all the existing field boundaries can be traced back to their enclosure in the late 18<sup>th</sup> to mid-19<sup>th</sup> centuries. In the case of both these historic landscape types, the field morphology comprises largely flat arable fields, bounded by hedges in the vast majority of cases, but with some boundaries defined by footpaths and fence lines. In consideration of the historic interest of HLC1 and HLC2 as evidence of the development of the landscape in the post-medieval period and the intensification of agriculture, these character units have been assessed to be of low value.

- 9.3.71 HLC3 comprises areas of woodland. Several of these wooded areas have been in existence since the early 19<sup>th</sup> century, and include small pockets of woodland left to provide cover for foxes and game birds within an otherwise arable landscape. In consideration of its value as evidence of the development of the post-medieval and earlier landscape, HLC3 is considered to be of low value.
- 9.3.72 HLC12 is formed by small-scale settlement. This type is characterised by farmsteads of post-medieval date, and particularly the 19<sup>th</sup> century, set in the midst of arable fields. In consideration of its value as evidence of development of the rural landscape in the post-medieval period, this type has been assessed to be of low value. HLC14 comprises the Cambridge City Crematorium. First built in 1938, it has been managed since 1950 by Cambridge City Council (Cambridge City Council, 2014). This asset comprises areas of landscaped gardens with two chapels and associated crematorium infrastructure. While this type is unique within the study area, and will be of importance to the local community, it is of little historic interest and is therefore assessed to be of low value.
- 9.3.73 HLC15 comprises ornamental enclosure. This type has been identified in two parts of the study area, covering part of the former wider grounds of Hinchingsbrooke House in Huntingdon (see HLC18), and a small part of the wider grounds of Conington Hall. Built at the turn of the 18<sup>th</sup> century by a member of the locally important Cotton family (Parks and Gardens UK, 2008) the north-west corner of the enclosure surrounding Conington Hall currently comprises an area of grassland with earthworks of later medieval ridge and furrow ploughing. HLC15 is considered to be of low value.
- 9.3.74 HLC16 comprises the East Coast mainline railway, which passes through the study area to the north of Offord Cluny, and again within Huntingdon. Opened in the mid-19<sup>th</sup> century, the line ultimately provides a service between London King's Cross and Edinburgh Waverley stations. The advent of the railway would have allowed industrial expansion within Huntingdon and the surrounding area, resulting in a historical connection between the town and this landscape feature. However the railway itself is not considered a special example of its type, and is a common type within the wider landscape of the country. Therefore it is considered to be of low value.
- 9.3.75 HLC17 comprises the military base of RAF Brampton. The site has been a military base since 1942, when it was taken over by the United States Army Air Corps. Later that year it was officially activated as the First Bomb Wing Headquarters, and then subsequently became a permanent RAF base in 1955 following the repatriation of American troops. Today, RAF Brampton provides accommodation and support facilities for a range of lodger units (Royal Air Force, 2014). The layout of the site reflects the typical, regular layout of a military base, and has been assessed as low value, in consideration of its local historical significance.

### *Assets of negligible value*

- 9.3.76 A total of seven historic landscape character types within both study areas have been assessed to be of negligible value. These comprise:
- HLC4 (20<sup>th</sup> century agriculture);
  - HLC5 (Water bodies, features and associated landscaping);
  - HLC6 (Industry);
  - HLC7 (Landfill);
  - HLC8 (Recreation);
  - HLC9 (Urban); and
  - HLC13 (Highway).
- 9.3.77 With the exception of HLC5, these six character types were all established in the 20th century and based on their limited time depth and historical interest, these character units have been assessed to be of negligible value.
- 9.3.78 HLC5 water bodies, features and associated landscaping comprise both natural and man-made bodies of water, some of which are the result of the cessation of 20<sup>th</sup> century quarrying. In consideration of their limited historical interest this character type has been assessed to be of negligible value.

## **9.4 Potential impacts – construction phase**

### **Archaeological remains**

- 9.4.1 The construction of the scheme would adversely impact on one asset of high value, 24 known archaeological assets of medium value, 46 low value assets and 19 known archaeological assets of negligible value. Impacts resulting from construction would result in the loss of archaeological remains and the subsequent loss of information that they contain. There is also the potential for the setting of heritage assets to be impacted during the construction phase as a result of noise and visual intrusion. Unless otherwise stated, all impacts on archaeological remains are permanent and irreversible.

### *Huntingdon study area*

- 9.4.2 Construction of the scheme across land adjacent to Cambridgeshire Constabulary headquarters would partially remove Iron Age features found during trial trenching (asset 468). As a result, the magnitude of the impact of the scheme on these assets is assessed as moderate adverse and the significance of effect as slight adverse
- 9.4.3 Construction of the Pathfinder Link and associated earthworks to the west of Mill Common road would impact on the possible crude WWI runway (asset 344); the actual extent of the runway is speculative and it is possible that some of the asset has been removed by quarrying activity. Based on available information, the magnitude of this impact has been assessed to be moderate adverse and the significance of effect as slight adverse.

- 9.4.4 Construction of the scheme would result in construction across the southern part of the Earthwork on Mill Common (asset 442). The extent of this asset has been identified from historic Ordnance Survey mapping and has previously been impacted by the construction of the existing A14 which is likely to have removed or truncated archaeological remains of the earthwork within this area. Construction of the scheme would be located principally within the existing road embankment; however there is some potential for physical impacts on any surviving archaeological remains of the monument which survive below the embankment. The magnitude of this impact has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.4.5 The modifications to the access at Huntingdon East Station (asset 451) could potentially impact on the remains of the earlier station, if these survive. The magnitude of the impact of the scheme on this asset is assessed as minor adverse and the significance of effect as slight adverse.
- 9.4.6 Construction of the Views Common Link would remove any surviving ridge and furrow (asset 460) within the footprint of this part of the scheme. In consideration of the small area affected, the magnitude of impact on asset 460 has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.4.7 Construction of the Pathfinder Link may result in the removal of medieval features identified on Mill Common suggested to result from quarrying (asset 401). The magnitude of this impact has been assessed to be negligible adverse and the significance of effect as slight adverse.
- 9.4.8 Although mapped within the scheme footprint, assets 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, and 440 have been allocated a generic grid reference by the CHER which does not accurately reflect their geographical location. The route of the Ely and Huntingdon Railway also runs within the scheme footprint; however construction of the existing road is likely to have removed any significant archaeological remains of the railway within its footprint. No impact is therefore predicted on these assets.
- 9.4.9 Mill Common is an area of considerable archaeological potential, and has the potential to preserve archaeological evidence of occupation and activity from the Roman to medieval periods. Construction works within Mill Common area and particularly for the Pathfinder Link has the potential to adversely impact on unknown archaeological remains which may be present within the scheme footprint. The value of any such archaeological remains is unknown, as is the magnitude of impact and significance of effect.
- Mainline study area*
- 9.4.10 The impact on assets located wholly or substantially within the scheme footprint has been assessed as major, as the construction of the scheme would result in the total or substantial removal of these remains, which would alter the understanding of the resource. Lesser impacts have been assessed where construction of the scheme would result in only partial

removal of the asset. Potential impacts on archaeological assets within the mainline study area are summarised in *Table 9.9* below.

- 9.4.11 Asset 57 comprises Roman milestones found in the vicinity of the A14 documented by the CHER at a generic grid reference. Assets 82 and 532 are the sites of milestones identified from historic mapping which are no longer extant. Although located within the scheme footprint, no impact is predicted on these assets as they are no longer extant.
- 9.4.12 As noted at paragraph 9.3.4 above, the setting of the archaeological assets in the study area cannot be readily appreciated by the observer and the value of these assets is derived from information contained within associated archaeological remains rather than their setting. As a result the construction of the scheme is not predicted to impact on the setting of the majority of the archaeological resource of the area.

**Table 9.9: Mainline study area - impacts of major to negligible magnitude on known archaeological remains during construction phase.**

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
58	Undated features, A14 Improvement Scheme	Low	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Slight adverse
61	Ridge and furrow, Oakington and Westwick	Negligible	Removal of majority of the asset as a result of the construction of flood plain compensation areas.	Major adverse	Slight adverse
62	Heavy Anti-Aircraft Battery, Cambridge H4	Low	Removal of the asset as a result of the construction of borrow pit 6.	Major adverse	Moderate adverse
66	Ditches of possible Romano-British date, Oakington	Low	Removal of the asset as a result of the construction of borrow pit 6.	Major adverse	Moderate adverse
71	Ridge and furrow, Oakington	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
77	Roman coin, Oakington	Low	Removal of the asset as a result of the construction of the scheme.	Moderate adverse	Slight adverse
80	Cropmarks near New Close Farm, Longstanton	Medium	Partial removal of asset by establishment of soil storage area.	Moderate adverse	Moderate adverse
94	Ridge and furrow, east of College Farm, Lolworth	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
100	Ridge and furrow, Girton	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
102	Ridge and furrow, Swavesey	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Negligible adverse	Slight adverse
103	Undated features, A14 Improvement Scheme	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
108	Enclosures, Conington	Medium	Substantial removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
111	Undated features, A14 Improvement Scheme	Low	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Slight adverse
112	Settlement cropmarks of probable Iron Age and/or Roman date	Medium	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Moderate adverse
114	Cropmarks of pits and ditches, Conington	Low	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
119	Undated features, A14 Improvement Scheme	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
121	Ridge and furrow, Fenstanton	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
123	Ridge and furrow, Fenstanton	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
126	Ridge and furrow anomalies, Fenstanton	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
127	Enclosures, Fenstanton	Medium	Removal of the asset as a result of the construction of borrow pit 3.	Major adverse	Moderate adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
129	Cropmarks, Fenstanton	Medium	Partial removal of the asset as a result of the construction of the scheme and borrow pit 3.	Moderate adverse	Moderate adverse
133	Post-medieval field system, Fenstanton	Low	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Slight adverse
135	Post-medieval remains, Hemingford Grey	Low	Partial removal of the asset as a result of the construction of the flood plain compensation area.	Moderate adverse	Slight adverse
136	Undated ditch, Hemingford Abbots	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
138	Linear and pit-like features, Hemingford Abbots	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
139	Worked and burnt flint, Godmanchester	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
140	Scatter of burnt stone and slag, Godmanchester	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
141	Undated features, A14 Improvement Scheme	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
147	Linear and pit-like features, Godmanchester	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Moderate adverse
151	Ridge and furrow, Godmanchester	Low	Partial removal of the asset as a result of the construction of the scheme.	Negligible adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
153	Cropmark field boundaries and enclosure, Offord Cluny	Medium	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Moderate adverse
154	Artefact scatter, Offord Cluny	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
157	Artefact scatter, Offord Cluny	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
158	Linear features and pits, Offord Cluny	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
159	Neolithic/Early Bronze Age peat deposits	Medium	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
162	Early Bronze Age barrow and associated features, Buckden	Medium	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
165	Romano-British field systems, A14 Improvements, Buckden	Low	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
167	Artefact scatter, Buckden	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
168	Romano-British field systems, Brampton Road, Buckden	Medium	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Moderate adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
174	Middle Iron Age to Romano-British activity, Brampton	Medium	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
176	Middle to late Iron Age activity, Brampton	Medium	Partial removal of asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
177	Square barrow, Brampton	Medium	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
178	Neolithic pit, Brampton	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
179	Artefact scatter, Brampton	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
180	Cropmarks, Brampton	Low	Substantial removal of the asset as a result of the construction of borrow pit 2, soil storage area and landscaping works.	Major adverse	Moderate adverse
182	Saxon settlement activity, Brampton	Medium	Partial removal of asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
184	Cropmarks, Brampton	Medium	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Moderate adverse
185	Late Iron Age to Romano-British settlement activity, Brampton	Medium	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Moderate adverse
190	Late Iron Age ditches, Brampton	Low	Partial removal of the asset as a result of the construction of the borrow pit.	Minor adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
191	Ridge and furrow, Brampton	Negligible	Partial removal of the asset as a result of the construction of the borrow pit.	Moderate adverse	Slight adverse
192	Cropmark remains of irregular enclosure of uncertain date	Medium	Partial removal of the asset as a result of the construction of the borrow pit.	Negligible adverse	Slight adverse
193	Cropmark ditch system, Grove Farm, Brampton	Medium	Substantial removal of the asset as a result of the construction of the borrow pit1.	Major adverse	Moderate adverse
195	Houghton deserted medieval village	Medium	Removal of the asset as a result of the construction of borrow pit 1.	Major adverse	Moderate adverse
197	Ridge and furrow, Brampton	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Slight adverse
199	Cropmark remains of a probable Later Prehistoric settlement	Medium	Removal of the asset as a result of the construction of borrow pit 1.	Major adverse	Moderate adverse
200	Enclosures and stockade cropmarks, Brampton	Medium	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
201	Palaeochannel and Middle Iron Age ditch, Brampton	Low Low	Removal of the asset as a result of the construction of borrow pit 1.	Major adverse	Moderate adverse
209	Weybridge Forest / Weybridge Park	Low	Partial removal of the asset as a result of the construction of the scheme.	Negligible adverse	Slight adverse
211	Undated cropmarks, near Brampton	Low	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
212	Iron Age features, Alconbury	Low	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
221	Ridge and furrow south of Alconbury House	Negligible	Partial removal of the asset as a result of the construction of flood compensation area.	Minor adverse	Slight adverse
484	Cambridge to Denver Roman Road	Low	Partial removal of the asset as a result of the construction of the scheme. Previously impacted by construction of the A14.	Negligible adverse	Slight adverse
485	Dismantled Railway: Cambridge and St Ives Branch	Low	Partial removal of the asset as a result of the construction of the scheme. Previously impacted by construction of the A14.	Negligible adverse	Slight adverse
486	Godmanchester to Colchester Roman road	Low	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
487	Ermine Street	Medium	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
488	Sandy to Godmanchester Roman Road	Low	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
491	Thrapston to Huntingdon Railway	Low	Partial removal of the asset as a result of the construction of the scheme. Previously impacted by construction of the B1514.	Negligible adverse	Slight adverse
494	King's Hedges site of camp	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
500	New Cottages (site of)	Negligible	Removal of the asset as a result of the construction of the scheme. Previously impacted by road construction.	Major adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
504	Catch Hall	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Negligible adverse	Slight adverse
505	Building (site of)	Negligible	Removal of the asset as a result of the construction of the scheme.	Major adverse	Slight adverse
509	King William IV Pub (site of)	Negligible	Removal of the asset as a result of the construction of the scheme.	Major adverse	Slight adverse
511	Lodge Cottages (site of)	Low	Removal of the asset as a result of the construction of the scheme.	Major adverse	Moderate adverse
518	New Barn (site of)	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Moderate adverse	Slight adverse
530	Linton's Farm (site of)	Negligible	Partial removal of the asset as a result of the construction of the scheme.	Minor adverse	Slight adverse
542	Grove Farm (site of)	Low	Removal of the asset as a result of the construction of the borrow pit.	Major adverse	Moderate adverse
581	Early medieval ingot	Low	Removal of the asset as a result of the construction of the borrow pit.	Major adverse	Slight adverse
617	Settlement (cropmarks)	Medium	Partial removal of the asset as a result of construction of flood plain compensation area.	Moderate adverse	Moderate adverse
618	Enclosed Settlement (cropmarks)	Low	Partial removal of the asset as a result of construction of the scheme.	Minor adverse	Slight adverse
620	Ridge and furrow (cropmarks)	Low	Partial removal of the asset as a result of construction of the scheme.	Negligible adverse	Slight adverse

<b>Asset number</b>	<b>Asset name</b>	<b>Value</b>	<b>Description of impact</b>	<b>Magnitude of impact</b>	<b>Significance of effect</b>
621	Roman Pottery (findspot)	Low	Removal of the asset as a result of construction of the scheme.	Major adverse	Slight adverse
623	Bell (findspot)	Low	Removal of the asset as a result of construction of the scheme.	Major adverse	Slight adverse
630	Ridge and Furrow Cropmarks North of Rectory Farm	Low	Substantial removal of the asset as a result of construction of the scheme.	Major adverse	Slight adverse

## Historic buildings

### *Huntingdon study area*

- 9.4.13 Construction of the scheme would result in impacts on 14 historic buildings within the Huntingdon study area.
- 9.4.14 Major adverse impacts on Huntingdon Conservation Area (asset 235) would result from permanent land take from Mill Common and, to a lesser extent, Views Common for the construction of new roads. The construction site would form an intrusive element within Mill Common and Views Common, and would reduce the size of these historically important privately owned green spaces. The presence of the construction site on Views Common would form an intrusive element within the green space adjacent to the Cambridge Constabulary HQ which historically formed part of the designed landscape associated with Hinchingsbrooke House. The significance of effect is assessed as large adverse.
- 9.4.15 Temporary visual intrusion on the conservation area would also result from construction works, particularly in the areas of Mill and Views Commons, and during the removal of the A14 viaduct. The magnitude of this short-term impact has been assessed to be major adverse and the significance of effect as large adverse.
- 9.4.16 Construction of the Pathfinder Link would also result in temporary visual intrusion from the presence of the construction site and construction works on numbers 2, 3-4, and 5-6, the Walks (assets 353, 359 and 362) and St Mary's Parish Hall (asset 548), and their setting on Mill Common. In consideration of the assets' close relationship with Mill Common and its contribution to their value, the magnitude of this short-term impact has been assessed to be major adverse for all four assets and the significance of effect as moderate adverse.
- 9.4.17 Adverse impacts on the setting of Huntingdon County Hospital (asset 445) and Huntingdon Station (asset 458) would result from temporary intrusion from construction works including removal of the A14 viaduct, excavation associated with the new Mill Common Link, and works within the existing A14 carriageway. In consideration of the temporary, short-term nature of this intrusion, the magnitude of this impact has been assessed to be moderate adverse for both assets and the significance of effect as moderate adverse.
- 9.4.18 Short-term adverse impacts on the setting of Hinchingsbrooke House (asset 471) would result from the presence of the construction site and construction activities within part of the former parkland to the north of Hinchingsbrooke Park Road. Due to the previous severance of this area by the existing road, this area now makes little contribution to the designed landscape associated with Hinchingsbrooke House or its setting. The significance of effect is assessed as slight adverse
- 9.4.19 Temporary intrusion on the setting of the house would also result from construction works on Hinchingsbrooke Park Road and Brampton Road, resulting in intrusion on views from the terrace walk over the Park Wall (asset 472) and on the approach to the gatehouse (asset 469). The

magnitude of this short-term impact on Hinchingsbrooke House (asset 471), the Gatehouse (asset 469) and Park Wall fronting Brampton Road (asset 472) has been assessed to be minor adverse and the significance of effect as slight adverse.

- 9.4.20 Removal of the Huntingdon A14 Viaduct, construction and landscaping works associated with the scheme would result in short-term, temporary intrusion on the setting of the Water Tower, Hinchingsbrooke Cottage, Numbers 1-8 George Street and Red Lodge (assets 549, 550, 563 and 564). In consideration of their proximity to the scheme, the magnitude of impact on assets 549, 550 and 564 has been assessed to be minor adverse and the significance of effect as slight adverse. Due to its greater distance from the scheme, the magnitude of impact on asset 563 has been assessed to be negligible adverse and the significance of effect as neutral.
- 9.4.21 No impact is predicted on the remaining 37 assets within the Huntingdon study area.

*Scheme mainline*

- 9.4.22 Construction of the scheme mainline would result in impacts on a total of 34 historic buildings.
- 9.4.23 Construction of the scheme mainline would result in impacts on the setting of 28 assets. These have been assessed as follows:
- potential impacts on seven assets are predicted to be of moderate magnitude;
  - potential impacts on 11 assets are predicted to be of minor magnitude; and
  - potential impacts on ten assets are predicted to be of negligible magnitude.
- 9.4.24 Discussion of impacts of moderate magnitude and above is provided below. Impacts of less than moderate magnitude are presented in *Table 9.10*.
- 9.4.25 Construction of the scheme would result in the removal of three milestones designated as grade II listed buildings (assets 79, 104 and 213) and the undesignated buildings of the World War II Pillbox in Girton, New Inn and Grafham Road Cottages (assets 54, 514 and 540). The magnitude of this permanent impact on five assets has been assessed to be major adverse and the significance of effect as moderate adverse; the significance of effect on New Inn (asset 514) has been assessed as slight adverse.
- 9.4.26 During the construction phase, impacts on the setting of Brampton Lodge (asset 541) would result from the working of borrow pits c.143m to the north and c.126m to the east of the buildings and a soil storage area c.200m to the east. Short-term visual impacts would also occur during working of the borrow pits, increasing intrusion from the road development on the buildings' setting. Impacts on the setting of Rectory Farm (asset 543) would result from the presence of the construction site c.43m to the north-east of the asset, and the presence of a soil storage area directly to the west of the farm, resulting in temporary noise and visual intrusion. The

magnitude of impact has been assessed to be moderate adverse for both assets and the significance of effect as slight adverse.

- 9.4.27 Impacts on the setting of Depden Farm (asset 534) would result from short-term temporary visual intrusion from construction activities and the presence of soil storage areas surrounding the building, detracting from its rural character. The magnitude of this temporary impact has been assessed to be moderate adverse and the significance of effect as slight adverse.
- 9.4.28 Temporary visual intrusion on the setting of Offord Cluny Conservation Area (asset 537) would result from the presence of the construction site for the scheme c.720m to the north. Construction works such as bulk earthworks and works associated with the erection of the bridges over the East Coast mainline and the B1403 would be intrusive to the setting of the conservation area and detract from its tranquil rural character. These construction works would also result in temporary impacts on the setting of Porch House, Number 208 High Street and Offord Hill House (assets 553, 554 and 555). The magnitude of these temporary impacts has been assessed to be moderate adverse and the significance of effect as slight adverse for all four assets.
- 9.4.29 Although located close to or within the scheme footprint, site inspection and consultation of available data from the Highways Agency and the Milestone Society has not identified any evidence that the grade II listed mileposts represented by assets 110 and 218 remain *in situ*, suggesting that these assets have been lost. No impact is therefore predicted on these assets. No impact is predicted on the remaining 26 assets.

**Table 9.10: Mainline study area - impacts of minor and negligible magnitude on historic buildings during the construction phase**

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
63	Cambridge Crematorium	Low	Temporary disruption from construction works along the existing A14 and for a new access road resulting in increased visual intrusion on the setting of the Crematorium.	Negligible adverse	Slight adverse
84	Gardens, Lolworth Grange	Medium	Temporary intrusion from construction works along the existing A14 and land take from woodland along north edge of asset reaching a maximum width of c. 22m, from a total width of 55m. The form of the former garden would remain legible. No impact on surviving gardens around the main house.	Negligible adverse	Slight adverse
96	All Saints' Church, Lolworth	High	Temporary intrusion on setting as a result of construction works such as the presence and operation of cranes and bulk earthwork operations, resulting in intrusion in views towards the church from the north, detracting from its landmark role.	Minor adverse	Slight adverse
489	Great Northern Railway	Low	Temporary disruption from construction works affecting a small extent of the total railway line.	Negligible adverse	Slight adverse
490	River Great Ouse Navigation	Low	Temporary disruption from construction works affecting a small part of the river.	Negligible adverse	Slight adverse
496	Impington Farm	Low	Temporary noise intrusion from construction works.	Negligible adverse	Slight adverse
497	Woodhouse Farm	Low	Temporary noise intrusion from construction works.	Minor adverse	Slight adverse
501	American Military Cemetery	High	Temporary intrusion from construction works on long distance views northwards. The construction site would be located c.1km from the Cemetery at its closest point.	Negligible adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
503	Grange Farm	Low	Construction of new access track c.44m from the building. Temporary visual impacts from construction increasing intrusion on the building's rural setting.	Minor adverse	Slight adverse
507	Hazlewell Court	Negligible	Temporary intrusion on setting from construction works and soil storage.	Minor adverse	Slight adverse
512	Hill Farm Cottages	Negligible	Temporary visual intrusion from construction.	Minor adverse	Slight adverse
515	Grapevine Cottages	Low	Temporary intrusion on setting due to soil storage for borrow pit 5, detracting from rural character.	Minor adverse	Slight adverse
516	Gardens of Boxworth House, formerly the Rectory, Boxworth	Low	Temporary intrusion on setting due to soil storage for borrow pit 5, detracting from rural character.	Minor adverse	Slight adverse
523	Friesland Farm	Negligible	Temporary visual intrusion from construction works located c.130m from the asset.	Minor adverse	Slight adverse
525	New Barns Farm	Negligible	Temporary noise and visual intrusion from construction works including presence of soil storage area c.50m to the north, detracting from rural character of setting.	Negligible adverse	Slight adverse
528	Milestone / Parish boundary marker north of Hilton	Low	Temporary visual intrusion from construction works.	Negligible adverse	Slight adverse
535	Wyboston Farm	Negligible	Temporary visual intrusion on setting from construction of an access track c.80m to the south-east, detracting from quiet rural setting.	Negligible adverse	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
536	Offord Hill Farm	Low	Temporary visual intrusion from construction of the scheme mainline across the rural landscape c.170m to the south of the asset detracting from its rural character.	Minor adverse	Slight adverse
538	Lodge Farm	Negligible	Temporary noise and visual intrusion on setting due to presence of construction site c.170m from the building, detracting from rural character of setting.	Minor adverse	Slight adverse
539	Vicarage Farm	Low	Temporary visual intrusion on setting due to presence of construction site, detracting from rural character of setting.	Minor adverse	Slight adverse
638	Weybridge Farm	Low	Temporary intrusion on setting from construction vehicles using adjacent haul route.	Negligible adverse	Slight adverse

### Historic landscape

- 9.4.30 During construction the scheme is predicted to have potential impacts on eight historic landscape types. Impacts on historic landscape types located within both study areas are discussed in the mainline study area section.

#### *Huntingdon study area*

- 9.4.31 The construction of the scheme would result in permanent land-take from character type HLC11 at Mill Common. In addition, temporary impacts would arise from movement of construction traffic and from construction noise. The magnitude of impact on HLC11 has been assessed to be moderate adverse and the significance of effect as moderate adverse.

#### *Mainline scheme study area*

- 9.4.32 The new slip road between the A14 and the A1 to the north-west of Brampton would permanently remove part of 18<sup>th</sup>-19<sup>th</sup> century enclosures type (HLC2), and cause severance of the areas of this type that remain. The magnitude of this impact has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.4.33 Construction of the scheme and the excavation of the borrow pits and flood plain compensation areas would result in the permanent removal of parts of 20<sup>th</sup> century agriculture with relict 18<sup>th</sup>-19<sup>th</sup> century boundaries (HLC1) and 20<sup>th</sup> century agriculture (HLC4). In addition to this, areas of soil storage and construction fencing would temporarily change the physical appearance of the historic landscape types. As a result the magnitude of impact on both of these historic landscape types during construction has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.4.34 In the case of water bodies, features and associated landscaping (HLC5), the construction of a bridge with associated piers across one area would disrupt part of this character type, while in the case of Woodland (HLC3), one area of 20<sup>th</sup> century plantation woodland would be removed completely by the construction of the scheme. Overall the magnitude of this permanent impact on these historic landscape types during construction has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.4.35 The construction of Views Common Link would result in noise and visual intrusion on the recreation type (HLC8) with the construction of the scheme across an area which historically formed part of the agricultural land associated with Hinchbrooke Park. There would also be an impact on the area's continued use as a sports ground during the construction phase of works as public access may be restricted during this time for safety reasons. Overall the magnitude of impact on these two historic landscape types during construction has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.4.36 The excavation of borrow pit 5 would result in the permanent removal of modern agricultural buildings in two small areas of the small scale settlement historic landscape type (HLC12). The magnitude of this impact

has been assessed to be minor adverse and the significance of effect as slight adverse.

- 9.4.37 No impact is predicted on the remaining ten historic landscape character units (HLC6; HLC7; HLC9; HLC10; HLC14; HLC15; HLC16; HLC17; HLC18; and HLC19).

## 9.5 Potential impacts: Operation phase

### Archaeological remains

#### *Huntingdon study area*

- 9.5.1 Work carried out for the landscape and visual assessment has identified that new lighting for the Pathfinder Link would be visible from the higher points of Huntingdon Castle (asset 250) (*Appendix 10.5*). This would result in increased light pollution that would adversely affect the setting of the scheduled monument. As a result, the magnitude of the impact of the scheme on this asset has been assessed as minor adverse and the significance of effect as slight adverse.

- 9.5.2 The operation of the scheme is unlikely to have any impact on the archaeological assets identified within the area. The setting of the archaeological assets in the study area cannot be readily appreciated by the observer and the value of these assets is derived from information contained within the associated archaeological remains rather than their setting. As a result, factors such as changes in traffic and noise levels, and the implementation of associated infrastructure such as lighting would not have any impact on the undesignated archaeological assets.

#### *Scheme mainline study area*

- 9.5.3 The operation of the scheme is unlikely to have any impact on the archaeological assets identified within the area for the reasons noted above.

### Historic buildings

#### *Huntingdon improvements*

- 9.5.4 Operation of the scheme would result in the following changes within the Huntingdon study area:
- Removal of the A14 viaduct over Brampton Road.
  - Removal of the highways embankment within Views Common to the north of Brampton Road.
  - Presence of the Pathfinder Link on embankment to the east of Mill Common, and introduction of 8,600 vehicles (AADT (Annual Average Daily Traffic)) along this stretch of road.
  - Presence of the Mill Common Link to the north-east of Huntingdon Station and introduction of 24,000 vehicles (AADT) along this stretch of the scheme. Pedestrian links across the route would be maintained by the inclusion of ramps to either side of the cutting.

- Detrunking of the existing A14 carriageway around Huntingdon and reduction of traffic levels using the existing A14 carriageway by over 64,000 vehicles or 81.5% on an average annual weekday.
- Screening of traffic using the detrunked A14 carriageway to the south of Mill Common by the existing highways embankment and existing mature planting.
- Presence of the Views Common Link running from the existing A14 carriageway to Hinchingsbrooke Park Road, and movement of vehicles along it.
- Operation of the revised junction arrangement at Hinchingsbrooke Park Road / Brampton Road.
- Changes to traffic levels along Brampton Road, in Godmanchester Post Street Conservation Area, Godmanchester Earning Street Conservation Area and Brampton Conservation Area (assets 236, 565 and 562).

9.5.5 The Pathfinder Link would form an intrusive element within the key historic space of Mill Common within Huntingdon Conservation Area (asset 235), shortening key views north-west from Mill Common road and intruding on views southwest across Mill Common from the Walks East (Huntingdonshire DC 2007). Traffic using the Pathfinder Link and the Mill Common Link, and lighting of these roads would result in visual intrusion on Mill Common. This would contribute to the urbanisation of this important privately owned green space. The intrusiveness of Pathfinder Link will be reduced by feathering out the embankment earthworks into Mill Common. The presence of the Views Common Link would adversely affect Views Common due to the presence of the new road running north-east/north-east-south-west from the new roundabout junction, introducing a new source of severance into Views Common. Mill Common and Views Common form an integral element of the Huntingdon Conservation Area and would be urbanised by the presence and operation of the scheme. This would diminish the historic character of Mill Common and Views Common, and detract from their contribution to the value of the conservation area and our understanding of its historic development.

9.5.6 Noise and visual intrusion on Mill Common from traffic using the existing A14 carriageway would be reduced due to the reduction of average annual weekday traffic using the detrunked road by 81.5%, and the creation of a false cutting along the carriageway, providing greater screening of vehicles moving along the scheme. A moderate beneficial noise impact has been identified for Mill Common (*Appendix 14.6*; assessment location ID 945). The inclusion of pedestrian crossings over the Pathfinder Link and Mill Common Link would maintain links across Mill Common, with changes in level between the scheme and surrounding townscape overcome by the siting of the Non-Motorised Users crossing over the Pathfinder Link close to Huntingdon Ring Road. Incorporation of a short pedestrian ramp within the scheme earthworks for Mill Common Link would maintain the connection provided by the existing footpath and avoid an overly engineered appearance for this design feature. Removal of the highway embankment

to the north of Brampton Road would enable land within Views Common to the east and west of the existing dual carriageway to be reconnected and reductions in traffic levels along the remaining detrunked section of the A14 would reduce noise levels within Views Common, resulting in a moderate beneficial noise impact in this area (*Appendix 14.6*; assessment location ID 10095).

- 9.5.7 The unmitigated operation of the scheme would result in improvement of the historic townscape of Huntingdon Conservation Area (asset 235) due to the removal of the intrusive structure of the A14 viaduct, improving the entrance to the town from the west, and providing the opportunity for redevelopment and improvement of this area. The magnitude of impact on Huntingdon Conservation Area has been assessed to be major adverse and moderate beneficial and the significance of effect as large adverse and moderate beneficial
- 9.5.8 The presence of the scheme and the movement of vehicles along it would adversely impact the setting of historic buildings located to the west of Mill Common due to increased intrusion from highways infrastructure. Minor beneficial noise impacts have been assessed for these assets resulting from the reduction of traffic levels along the detrunked A14 (*Appendix 14.6*; assessment location IDs 5231, 944 and 5125). The magnitude of this impact has been assessed to be major adverse and negligible beneficial for numbers 2, 3-4 and 5-6 the Walks (assets 353, 359, and 362); the significance of effect is assessed moderate adverse and slight beneficial. St Mary's Parish Hall (asset 548) is assessed as a moderate adverse and negligible beneficial magnitude of impact and slight adverse and neutral significance of effect.
- 9.5.9 Operation of Hinchingsbrooke Junction would slightly increase urbanisation of the setting of Hinchingsbrooke House (asset 471) and Gatehouse (asset 469) due to the presence of signage and street furniture associated with the signalised junction, and a 5% increase in traffic levels in this area, increasing intrusion on the historic entrance to the house. The presence of the Views Common Link to the west of the Cambridgeshire Constabulary HQ and the movement of vehicles along the Link would detract from the understanding of this area as a former part of the park associated with Hinchingsbrooke House. The magnitude of impact on both these assets has been assessed to be minor adverse and the significance of effect as slight adverse.
- 9.5.10 Operation of the scheme would slightly increase intrusion from highways signage and layout on views from the Park Wall at Hinchingsbrooke House (asset 472). The magnitude of this impact has been assessed to be negligible adverse and the significance of effect as slight adverse.
- 9.5.11 Removal of the A14 viaduct would enhance the setting of surrounding historic buildings. In consideration of the extent to which the viaduct currently dominates the setting of Huntingdon railway station (asset 458), the magnitude of this impact has been assessed to be major beneficial and the significance of effect as large beneficial. The magnitude of impact on the water tower and Hinchingsbrooke Cottage (assets 549 and 550) has

been assessed to be moderate beneficial and the significance of effect as slight beneficial.

- 9.5.12 The presence of the Mill Common Link at its junction with Brampton Road would introduce a new element into the setting of Huntingdon County Hospital (asset 445), increasing intrusion from roads infrastructure within the building's setting. However, the setting of the hospital would also be enhanced by the removal of the A14 viaduct, which currently forms a prominent and intrusive element within the building's setting. The magnitude of impact on Huntingdon County Hospital has been assessed to be minor adverse and minor beneficial and the significance of effect as slight adverse and slight beneficial.
- 9.5.13 Reductions in traffic levels resulting from operation of the scheme would enhance the setting and amenity of Godmanchester Post Street, Godmanchester Earning Street and Brampton conservation areas (assets 236, 565 and 562) and Huntingdon Bridge (asset 241). The magnitude of impact on assets 236, 565 and 241 has been assessed to be moderate beneficial and the significance of effect as moderate beneficial. In consideration of the small area affected, the magnitude of impact on asset 562 has been assessed to be minor beneficial and the significance of effect as slight beneficial.
- 9.5.14 Operation of the scheme would result in impacts of negligible beneficial magnitude for four assets (assets 563, 564, 566 and 567) and a neutral significance of effect
- 9.5.15 No impact is predicted on the remaining 42 assets.

*Scheme mainline*

- 9.5.16 Operation of the scheme would result in impacts on the setting of 31 assets within the scheme mainline study area, comprising:
- impacts of moderate adverse magnitude on nine assets;
  - impacts of minor adverse magnitude on four assets;
  - impacts of negligible adverse magnitude on 11 assets;
  - impacts of negligible beneficial magnitude on three assets;
  - impacts of minor beneficial magnitude on three assets; and
  - an impact of minor and minor beneficial magnitude on one asset.
- 9.5.17 Discussion of impacts of moderate and high magnitude is provided below, whilst impacts of minor and negligible magnitude are presented in *Table 9.11*.
- 9.5.18 The presence of Robin's Lane Bridge c.0.5km to the north of the Church of All Saints in Lolworth (asset 96) would intrude on views towards the church tower from the north and the A14 corridor. This would detract from the landmark role of the church tower which contributes to the asset's value. The magnitude of this impact has therefore been assessed to be moderate adverse and the significance of effect as moderate adverse.

- 9.5.19 The presence of the scheme in cutting c.95m to the south of Depden Farm (asset 534) would form an intrusive element within the asset's rural setting. A moderate adverse noise impact has been identified on this asset (*Appendix 14.6*; assessment location ID 547), and increased visual intrusion would result from the movement of vehicles detracting from the rural character of the asset's setting. The magnitude of this impact has been assessed to be moderate adverse and the significance of effect as slight adverse.
- 9.5.20 The scheme would be located c.160m from Lodge Farm (asset 538). Movement of vehicles along the scheme has been assessed to be result in a Major adverse noise impact on the farm, and would also result in visual intrusion, detracting from the rural character of the asset's setting (*Appendix 14.6*; assessment location ID 533). The magnitude of this impact has been assessed to be moderate adverse and the significance of effect as slight adverse.
- 9.5.21 The presence of the scheme, and particularly the East Coast Main Line railway bridge would form an intrusive feature within the rural setting of Offord Cluny conservation area (asset 537), the listed buildings of Porch House (asset 553), 208 High Street (asset 554), and the undesignated building of Offord Hill House (asset 555). The scheme would interrupt and foreshorten key views northwards from the Conservation Area, and introduce movement as a result of vehicles moving along the scheme, detracting from the rural setting of the assets. A minor adverse noise impact has also been identified for Porch House (asset 553; *Appendix 14.6*; assessment location ID 927). The magnitude of this impact has been assessed to be moderate adverse and the significance of effect as moderate adverse for all four assets.
- 9.5.22 Impacts on the setting of Brampton Lodge (asset 541) would result from the presence of the excavated borrow pit to the north and east of the asset and the introduction of lighting along the A1, altering the rural character of the building's setting. A minor adverse noise impact has also been identified on this asset (*Appendix 14.6*; assessment location ID 520). Impacts on the setting of Rectory Farm (asset 543) would result from the location of the scheme on embankment c. 44m from the asset and noise and visual intrusion from moving vehicles along it. A moderate adverse noise impact has also been identified on this asset (*Appendix 14.6*; assessment location ID 257). The magnitude of impact has been assessed to be moderate adverse and the significance of effect as slight adverse for both assets.
- 9.5.23 No impact is predicted on the remaining 25 assets.

**Table 9.11: Mainline scheme study area - operation impacts of minor and negligible magnitude on historic buildings**

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
40	Lodge, Girton College	Medium	A minor adverse noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 935). In consideration of existing noise intrusion on this asset's setting, this impact has been assessed to be of negligible magnitude.	Negligible adverse	Slight adverse
63	Cambridge Crematorium	Low	Closure of access route from A14 and introduction of new access road from west, detracting from legibility of the axial layout of the main crematorium building.	Minor adverse	Slight adverse
109	Pillbox, A14 Conington crossing	Low	Reduction in traffic levels on the adjacent A14 resulting in decreased intrusion on setting.	Negligible beneficial	Slight adverse
115	Conington Park	Medium	Negligible noise impact ( <i>Appendix 14.6</i> ; assessment location ID 122)	Negligible adverse	Slight adverse
122	Conington Hall	High	Negligible noise impact ( <i>Appendix 14.6</i> ; assessment location ID 122)	Negligible adverse	Slight adverse
223	Brooklands	Medium	A minor adverse noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 209). In consideration of existing noise intrusion on this asset's setting, this impact has been assessed to be of negligible magnitude.	Negligible adverse	Slight adverse
497	Woodhouse Farm	Low	A major beneficial noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 868). In consideration of the existing character of this asset's setting, and its contribution to the asset's value, the magnitude of this impact has been assessed to be minor beneficial.	Minor beneficial	Slight adverse

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
501	American Military Cemetery	High	Vehicles moving along the embanked westbound A14 would be visible in long distance views from the northern edge of the cemetery. Due to the location of the scheme over 1km from the cemetery. It is not considered that this would result in a noticeable increase in intrusion on the setting of the cemetery.	Negligible adverse	Neutral
503	Grange Farm	Low	The access track to the south of the farm would form a new element within the asset's setting. The scheme mainline would be screened by existing woodland planting.	Negligible adverse	Neutral
507	Hazlewell Court	Negligible	The B1050 Hattons Road bridge and traffic moving across it would form a new element in the asset's setting located over 200m away. Road noise within the asset's setting would also slightly increase as a result of the scheme's operation ( <i>Appendix 14.6</i> ; assessment location ID 759). This would slightly diminish the rural character of the asset's setting.	Negligible adverse	Neutral
508	Noon Folly Farm	Negligible	The B1050 Hattons Road bridge and traffic moving across it would form a new element in the asset's setting, located over c.218m away. Road noise within the asset's setting would also slightly increase as a result of the scheme's operation ( <i>Appendix 14.6</i> ; assessment location ID 694). This would increase intrusion on the asset's setting.	Negligible adverse	Neutral
512	Hill Farm Cottages	Negligible	Robin's Lane bridge would form a prominent new feature in the building's setting, increasing the prominence of the road. A major beneficial noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 686).	Minor adverse and minor beneficial	Slight adverse and slight beneficial
523	Friesland Farm	Negligible	Increased intrusion on setting due to movement of the scheme mainline c.52m closer to the asset.	Negligible adverse	Neutral

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
525	New Barns Farm	Negligible	Intrusion on setting due to presence of the scheme mainline and overbridge c.174m to the north. Noise intrusion from movement of vehicles along the scheme detracting from the rural character of the asset's setting ( <i>Appendix 14.6</i> , assessment location ID 656).	Negligible adverse	Neutral
528	Milestone / parish boundary marker north of Hilton	Low	Visual intrusion on setting from presence of B1040 Potton Road Bridge.	Minor adverse	Slight adverse
535	Wyboston Farm	Negligible	A minor adverse noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 541). In consideration of contribution that setting makes to the value of this asset, this impact has been assessed to be of negligible magnitude.	Negligible adverse	Neutral
536	Offord Hill Farm	Low	Scheme mainline would be located c.180m to the south of the building and would form an intrusive element in the rural setting of the asset. A moderate adverse noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 538), and visual intrusion would result from movement of vehicles, detracting from the asset's tranquil rural setting.	Minor adverse	Slight adverse
539	Vicarage Farm	Low	Scheme located c.180m to the south of the asset, resulting in noise and visual intrusion, and detracting from the rural character of setting.	Minor adverse	Slight adverse
560	Fen Drayton Conservation Area	Medium	Reduced intrusion from traffic within the conservation area due to changes in traffic levels as a result of scheme operation.	Minor beneficial	Slight beneficial
561	Fenstanton Conservation Area	Medium	Reduced traffic levels on the existing A14 would reduce intrusion within the conservation area and improve amenity.	Minor beneficial	Slight beneficial

Asset number	Asset name	Value	Description of impact	Magnitude of impact	Significance of effect
599	Barn to south-east of the Gables farmhouse	Medium	A minor beneficial noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 942).	Negligible beneficial	Slight beneficial
602	Manor House	High	A minor beneficial noise impact has been identified on this asset ( <i>Appendix 14.6</i> ; assessment location ID 575).	Negligible beneficial	Slight beneficial

## Historic landscape

### *Huntingdon study area*

- 9.5.24 The magnitude of the impact of increased noise and visual intrusion on grazed land (HLC11) resulting from operation of the scheme, including the graded out embankment associated with the Pathfinder Link has been assessed to be moderate adverse and the significance of effect as moderate adverse.
- 9.5.25 The removal of the A14 embankment to the east of Views Common (HLC11) would reduce the existing severance between areas of this historic landscape type increasing its historic legibility. This magnitude of this impact has been assessed to be minor and the significance of effect as slight beneficial.

### *Scheme mainline study area*

- 9.5.26 Impacts on the historic landscape within both study areas which commenced during the construction phase would continue during the operation of the scheme (HLC1, HLC2, HLC3, HLC4, HLC5, HLC8, HLC11, HLC12). The movement of vehicles along the route would introduce traffic noise and visual intrusion to all character types within the offline parts of the scheme (HLC1, HLC5, HLC12). The increased prominence of and intrusion from modern highways infrastructure during operation of the scheme would result in a slight change to the rural setting of character types HLC1, HLC2, HLC3, HLC4, HLC5, HLC8 and HLC12. In light of this, the magnitude of impact on these character types has been assessed as minor adverse and the significance of effect as slight adverse.

## 9.6 Mitigation

- 9.6.1 Mitigation will be secured by way of requirements in the Development Consent Order and through contractual responsibilities placed by the Highways Agency on the detailed design and construction contractors.

### **Archaeological remains**

- 9.6.2 As part of the previous scheme a series of fieldwork investigations were undertaken, including surface artefact collection, trial trenching and geophysical survey (*Patten, Slater and Standing, 2009*). This has been augmented by a further programme of trial trenching, geophysical survey and Unmanned Aerial Vehicle survey along the route of the current scheme and borrow pits (*Appendix 9.4, Annexes I and J*). The combined results of the separate phases of works have informed the specific mitigation strategy for the scheme as a whole. The mitigation would include targeted archaeological excavation to enable preservation by record to mitigate the impact of the scheme on known archaeological remains. Mitigation proposals for individual archaeological assets are detailed in *Tables 9.12 and 9.16* below. Discussion of these proposals is provided in the following paragraphs.
- 9.6.3 A programme of earthwork survey and targeted excavation will be undertaken at Mill Common; this will include analysis of the possible WWI runway (asset 344) and examination of the medieval features identified at

- asset 401. In addition, trial trenching will be undertaken on the earthwork on Mill Common (asset 442) within the scheme footprint. This will enable any archaeological remains associated with the scheduled monument surviving below the modern road to be identified and a scheme of archaeological mitigation to be developed.
- 9.6.4 Earthwork survey of the extant ridge and furrow at Hinchingbrooke (asset 460) will be undertaken to level 3 standards as presented in *Understanding the Archaeology of Landscapes – A guide to good recording practice* (page 23 of English Heritage (2007)).
- 9.6.5 Geoarchaeological assessment will be undertaken to establish the palaeoenvironmental potential of the peat deposit (asset 159). This will comprise assessment of material recovered from window samples driven through the peat deposit. Further analysis may be undertaken depending on the results of the assessment. Where possible this would include radiocarbon dating of pollen or other suitable material.
- 9.6.6 A programme of geophysical survey will be carried out on the flood compensation areas and borrow pit 5, followed by a subsequent phase of trial trenching, targeted on anomalies identified through the geophysical survey and blank areas where no anomalies have been identified. Following the results of this evaluation, it is likely that a programme of targeted excavation will be undertaken on the identified areas of archaeological sensitivity. These areas include assets 80, 108, 187, 195, 209, 211, 617 and 621, 622 and 623.
- 9.6.7 A programme of archaeological excavation will be undertaken in the area to the south of Brampton Hut services across borrow pit 1 and the off-line section of the scheme. An area of probable enclosures has been identified here from aerial photography and through geophysical survey (assets 185,190, 193, 200 and 201). The remains are undated, but they are considered to have a high potential to contribute to the understanding of settlement from a variety of periods within the study area. The off-line section of the scheme was also subject to a programme of trial trenching in 2009/2010 and 2014 which has verified the results of the non-invasive surveys.
- 9.6.8 Targeted excavation would be undertaken on borrow pit 2 where air photo analysis and trial trenching have identified Iron Age and Romano-British activity (asset 180). Targeted excavation would also be undertaken on the section opposite borrow pit 2 that includes assets 176, 178, 179, 182 and 183.
- 9.6.9 Targeted excavation would be undertaken on the area to the south of borrow pit 1 to include the Romano-British field system (asset 165), Bronze Age burials (asset 162), at the western side of the Great Ouse crossing to the junction with the B1043 (assets 154, 157, 158, 159) and an area of possible Iron Age/Romano-British activity identified by trial trenching (asset 147).
- 9.6.10 Targeted excavation would be undertaken where the Roman roads of Ermine Street and the Sandy to Godmanchester Roman road cross the

scheme (assets 487 and 488). This would also target an area of roadside activity identified during trial trenching in 2014 (asset 618).

- 9.6.11 Further archaeological excavations would be undertaken in borrow pit 3 and the area to the west of the B1040 where archaeological surveys have identified areas of multi-phase Roman-British settlement and later fieldsystems (assets 127, 129, 133, 136, 138, 530 617). An area 1km to the east of borrow pit 3 would also be part of the programme of targeted excavations (asset 616).
- 9.6.12 Targeted excavation would be undertaken on areas of Iron Age to Anglo-Saxon activity located at the point where the off-line section of the scheme joins with the existing A14. This would include assets 103, 108, 111, and 114. Excavations will also include an area of borrow pit 5 where a possible enclosure was identified (asset 66), features identified adjacent to the access track at Girton Interchange (assets 75, 76, and 77) and the embankment adjacent to the M11 motorway to the west of Girton.
- 9.6.13 A watching brief will be undertaken on assets 451 and 491 where the possible survival of any physical remains of the site, such as foundations, is considered to be low, but cannot be dismissed.

### Historic buildings

#### *Huntingdon study area*

- 9.6.14 Measures to reduce potential impacts on historic buildings have been incorporated into the design throughout its development to achieve mitigation through design. These measures include:
- review and redesign of the scheme proposals for Mill Common to minimise land take from the area as far as possible;
  - maintenance of existing embankments along the A14 in Huntingdon as far as possible to provide screening of the road;
  - removal of the A14 viaduct close to Huntingdon Station (asset 458) which currently dominates the townscape in this area;
  - removal of the A14 embankment to the east of Views Common in Huntingdon enabling Mill Common and Views Common to be reunited to form a single privately owned open space; and
  - erection of acoustic barriers to reduce noise intrusion as a result of the scheme.
- 9.6.15 Within Huntingdon, landscaping would be put in place along the scheme including the use of estate railings around the scheme boundaries and avenues of lime trees, similar to existing treatments within the town. This would enhance approaches to the town centre from the scheme, and create a good quality urban environment.
- 9.6.16 Specific landscaping measures have been incorporated into the Outline Environmental Design (*Figure 3.2*) to mitigate impacts from the scheme on the setting of individual historic buildings, as set out in *Table 9.17* below.
- 9.6.17 A photographic survey of Mill Common and Views Common within Huntingdon Conservation Area (asset 235) would be undertaken in

advance of construction works to provide a permanent documentary record of the form and appearance of Mill Common in its current condition. The survey would be undertaken in accordance with English Heritage guidance (English Heritage, 2007).

*Mainline study area*

- 9.6.18 Mitigation proposals for individual historic buildings are detailed in *Tables 9.14 and 9.18* below. Discussion of these proposals is provided in the following paragraphs.
- 9.6.19 Landscape planting would be put in place along the scheme to aid its integration into the surrounding landscape and reduce its visual impact.
- 9.6.20 Proposals for the reinstatement of the borrow pits are set out in *Appendix 3.3 of the ES*. These include the creation of large permanent water bodies; limited habitat areas; and establishment of native grassland and tree and shrub planting. Borrow pit 5 would be restored to agricultural use. This would reduce intrusion from the presence of the borrow pits on the setting of Brampton Lodge (asset 541) and Rectory Farm (asset 543).
- 9.6.21 Specific landscaping measures have been incorporated into the Outline Environmental Design to mitigate impacts from the scheme on the setting of individual historic buildings.
- 9.6.22 To mitigate impacts resulting from the removal of listed milestones along the A1 and A14 (assets 79, 104 and 213), the following works would be undertaken:
- A photographic survey in accordance with guidance in *Understanding Historic Buildings – A guide to good recording practice* (English Heritage, 2006) to document the existing setting of the assets;
  - Removal of the milestones and storage in a secure and weatherproof location for the duration of the construction works; and
  - Reinstatement of the milestones as close to their original location as possible within the scheme boundary.
- 9.6.23 To mitigate impacts on the WWII pillbox at Girton, (asset 54), historic building recording will be undertaken to level 2 standards in accordance with guidance in *Understanding Historic Buildings, a guide to good recording practice* (English Heritage 2006). The survey would provide a permanent documentary record of the pillbox in its current form and condition, achieving preservation by record of the asset.
- 9.6.24 To mitigate impacts on Grafham Road Cottages (asset 540), a photographic survey of the buildings and their setting would be undertaken in accordance with guidance in *Understanding Historic Buildings, a guide to good recording practice* (English Heritage, 2006). The survey would provide a permanent documentary record of the cottages in their current form and condition, achieving preservation by record of the asset.
- 9.6.25 To avoid the risk of accidental damage during the construction phase, the following assets would be protected by fencing during construction works:

- the WWII Pillbox at Girton (asset 54);
- Milestone / Parish boundary marker north of Hilton (asset 528);
- the milestone south of Washpit Lane (asset 551); and
- the milestone at Brampton Hut Services (asset 552).

### Historic landscape

9.6.26 Mitigation proposals for the historic landscape are detailed in *Tables 9.15 and 9.19* below. Discussion of these proposals is provided in the following paragraphs.

#### *Huntingdon study area*

9.6.27 A programme of historic landscape recording to English Heritage level 3 standards (English Heritage, 2007), followed by sample excavation of impacted remains, would be carried out for Mill Common and Views Common, to provide a permanent record of the historic landscape character type and better understand its value, context, date and function within the wider historic landscape of Huntingdon. This would supplement the existing earthwork study of Mill Common (Fradley, 2010). Scheme mainline study area

9.6.28 Proposals for the restoration of the borrow pits include the return of borrow pit 5 to agriculture with some smaller areas of native grassland. Parcels of arable land would also be retained within the other borrow pit envelopes. This would mitigate the overall loss of 20<sup>th</sup> century agriculture (HLC4), which mainly comprises large open fields, by reinstating a similar type of landscape.

## 9.7 Likely significance of effects

9.7.1 The likely residual significant effects within both study areas are presented in *Tables 9.12 to 9.19* below.

**Table 9.12: Residual effects of construction on known archaeological remains**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
58	Undated features, A14 Improvement Scheme	Low	Moderate	Slight adverse	Targeted excavation	Minor	Neutral
61	Ridge and furrow, Oakington and Westwick	Negligible	Major	Slight adverse	None	Negligible	Neutral
62	Heavy anti-aircraft battery Cambridge H4	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
66	Ditches of possible Romano-British date, Oakington	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
71	Ridge and furrow, Oakington	Negligible	Minor	Slight adverse	None	Minor	Neutral
75	Worked and burnt flint, Oakington	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
76	Undated ditches, Longstanton	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
77	Roman coin, Oakington	Low	Moderate	Slight adverse	Targeted excavation	Minor	Neutral
80	Cropmarks near New Close Farm, Longstanton	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
94	Ridge and furrow, east of College Farm, Lolworth	Negligible	Minor	Slight adverse	None	Minor	Neutral
100	Ridge and furrow, Girton	Negligible	Minor	Slight adverse	None	Minor	Neutral
102	Ridge and furrow, Swavesey	Negligible	Negligible	Slight adverse	None	Negligible	Neutral
103	Undated features, A14 Improvement Scheme	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
108	Enclosures, Conington	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
111	Undated features, A14 Improvement Scheme	Low	Moderate	Slight adverse	Targeted excavation	Minor	Neutral
112	Settlement cropmarks of probable Iron Age and/or Roman date	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Slight adverse
114	Cropmarks and ditches, Conington	Low	Minor	Slight adverse	Targeted excavation	Minor	Neutral
119	Undated features, A14 Improvement Scheme	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
121	Ridge and furrow, Fenstanton	Negligible	Minor	Slight adverse	None	Minor	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
123	Ridge and furrow, Fenstanton	Negligible	Minor	Slight adverse	None	Minor	Neutral
126	Ridge and furrow anomalies, Fenstanton	Negligible	Minor	Slight adverse	None	Negligible	Neutral
127	Enclosures, Fenstanton	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
129	Cropmarks, Fenstanton	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Slight adverse
133	Post-medieval field system, Fenstanton	Low	Moderate	Slight adverse	Targeted excavation	Minor	Neutral
135	Post-medieval remains, Hemingford Grey	Low	Moderate	Slight adverse	Targeted excavation	Minor	Neutral
136	Undated ditch, Hemingford Abbots	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
138	Linear and pit-like features, Hemingford Abbots	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
139	Worked and burnt flint, Godmanchester	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
140	Scatter of burnt stone and slag, Godmanchester	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
141	Undated features, A14 Improvement Scheme	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
147	Linear and pit-like features, Godmanchester	Negligible	Minor	Slight adverse	None	Negligible	Neutral
151	Ridge and furrow, Godmanchester	Low	Negligible	Slight adverse	None	Negligible	Neutral
153	Cropmark field boundaries and enclosure, Offord Cluny	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Slight adverse
154	Artefact scatter, Offord Cluny	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
157	Artefact scatter, Offord Cluny	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
158	Linear features and pits, Offord Cluny	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
159	Neolithic/Early Bronze Age peat deposits	Medium	Major	Moderate adverse	Geoarchaeological assessment and targeted excavation	Minor	Slight adverse
162	Early Bronze Age barrow and associated features, Buckden	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
165	Romano-British field systems, A14 Improvements, Buckden	Low	Minor	Slight adverse	Targeted excavation	Minor	Neutral
167	Artefact scatter, Buckden	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
168	Romano-British field systems, Brampton Road, Buckden	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Slight adverse
174	Middle Iron Age to Romano-British activity, Brampton	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
176	Middle to Late Iron Age activity, Brampton	Medium	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
177	Square barrow, Brampton	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
178	Neolithic pit, Brampton	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
179	Artefact scatter, Brampton	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
180	Cropmarks, Brampton	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
182	Saxon settlement activity, Brampton	Medium	Minor	Slight adverse	Targeted excavation	Negligible	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
184	Cropmarks, Brampton	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Neutral
185	Late Iron Age to Romano-British settlement activity, Brampton	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
190	Late Iron Age ditches, Brampton	Low	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
191	Ridge and furrow, Brampton	Negligible	Moderate	Slight adverse	None	Moderate	Neutral
192	Cropmark remains of irregular enclosure of uncertain date	Medium	Negligible	Slight adverse	None	Negligible	Neutral
193	Cropmark ditch system, Grove Farm, Brampton	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
195	Houghton deserted medieval village	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
197	Ridge and furrow, Brampton	Negligible	Moderate	Slight adverse	None	Negligible	Neutral
199	Cropmark remains of a probable Later Prehistoric settlement	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
200	Enclosures and stockade cropmarks, Brampton	Medium	Major	Moderate adverse	Targeted excavation	Minor	Slight adverse
201	Palaeochannel and Middle Iron Age ditch, Brampton	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
209	Weybridge Forest / Weybridge Park	Low	Negligible	Slight adverse	None	Negligible	Neutral
211	Undated cropmarks, near Brampton	Low	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
212	Iron Age features, Alconbury	Low	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
221	Ridge and furrow south of Alconbury House	Negligible	Minor	Slight adverse	None	Minor	Neutral
344	Possible crude WWI runway, Mill Common	Low	Moderate	Slight adverse	Earthwork survey and targeted excavation	Minor	Neutral
401	Medieval features, Mill Common, Huntingdon	Negligible	Negligible	Slight adverse	Targeted excavation	Negligible	Neutral
442	Earthwork on Mill Common	High	Minor	Slight adverse	Earthwork survey and targeted excavation	Negligible	Slight adverse
451	Huntingdon East Station (site of)	Low	Minor	Slight adverse	Watching brief	Minor	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
460	Ridge and furrow, Hinchingsbrooke, Huntingdon	Low	Minor	Slight adverse	Earthwork survey	Negligible	Neutral
468	Iron Age features on land adjacent to Cambridgeshire Constabulary HQ, Hinchingsbrooke Park, Huntingdon	Low	Moderate	Slight adverse	Targeted excavation	Minor	Neutral
484	Cambridge to Denver Roman Road	Low	Negligible	Slight adverse	None	Negligible	Neutral
485	Dismantled Railway: Cambridge and St Ives Branch	Low	Negligible	Slight adverse	None	Negligible	Neutral
486	Godmanchester to Colchester Roman road	Low	No change	Neutral	None	No change	Neutral
487	Ermine Street	Medium	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
488	Sandy to Godmanchester Roman Road	Low	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
491	Thrapston to Huntingdon railway	Low	Negligible	Slight adverse	Watching Brief	Negligible	Neutral
494	King's Hedges site of camp	Negligible	Major	Slight adverse	None	Major	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
500	New Cottages (site of)	Negligible	Major	Slight adverse	None	Negligible	Slight adverse
504	Catch Hall	Negligible	Negligible	Neutral	None	Negligible	Neutral
505	Building (site of)	Negligible	Major	Slight adverse	None	Major	Slight adverse
509	King William IV Pub (site of)	Negligible	Major	Slight adverse	None	Negligible	Neutral
511	Lodge Cottages (site of)	Low	Major	Slight adverse	Targeted excavation	Minor	Neutral
518	New Barn (site of)	Negligible	Moderate	Slight adverse	None	Moderate	Neutral
530	Linton's Farm (site of)	Negligible	Minor	Slight adverse	None	Negligible	Neutral
542	Grove Farm (site of)	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
581	Early medieval ingot	Low	Major	Moderate adverse	Targeted excavation	Minor	Neutral
617	Settlement (cropmarks)	Medium	Moderate	Moderate adverse	Targeted excavation	Minor	Slight adverse
618	Enclosed Settlement (cropmarks)	Low	Minor	Slight adverse	Targeted excavation	Negligible	Neutral
620	Ridge and furrow (cropmarks)	Low	Negligible	Slight adverse	None	Negligible	Neutral
621	Roman Pottery (findspot)	Low	Major	Moderate adverse	Geophysical survey and trial trenching to determine mitigation strategy	Negligible	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
623	Bell (findspot)	Low	Major	Moderate adverse	Geophysical survey and trial trenching to determine mitigation strategy	Negligible	Neutral
630	Ridge and Furrow Cropmarks North of Rectory Farm	Low	Major	Moderate adverse	Watching Brief	Negligible	Neutral

**Table 9.13: Huntingdon study area: residual effects of construction on historic buildings**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
235	Huntingdon Conservation Area	High	Major	Large adverse	Survey of Mill Common and Views Common to English Heritage Level 3 standard (English Heritage, 2007)	Major	Moderate adverse
353	2 The Walks North, Huntingdon	Medium	Major	Moderate adverse	None proposed	Major	Moderate adverse
359	3 - 4 The Walks North, Huntingdon	Medium	Major	Moderate adverse	None proposed	Major	Moderate adverse
362	5 - 6 The Walks North, Huntingdon	Medium	Major	Moderate adverse	None proposed	Major	Moderate adverse
445	Huntingdon County Hospital (main building only listed)	Medium	Moderate	Moderate adverse	None proposed	Moderate	Moderate adverse
458	Huntingdon Station	Medium	Moderate	Moderate adverse	None proposed	Moderate	Moderate adverse
469	Gatehouse and Walls at Hinchingsbrooke House	High	Minor	Slight adverse	None proposed	Minor	Slight adverse
471	Hinchingsbrooke House	High	Minor	Slight adverse	None proposed	Minor	Slight adverse
472	Park wall of Hinchingsbrooke House fronting Brampton Road	High	Minor	Slight adverse	None proposed	Minor	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
548	St Mary's Parish Hall, Huntingdon	Low	Major	Slight adverse	None proposed	Major	Slight adverse
549	Water Tower, Huntingdon	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
550	Hinchingbrooke Cottage, Huntingdon	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
563	1-8 George St, Huntingdon	Medium	Negligible	Neutral	None proposed	Negligible	Neutral
564	Red Lodge, Huntingdon	Medium	Minor	Slight adverse	None proposed	Minor	Slight adverse

**Table 9.14: Mainline study area: residual effects of construction on historic buildings**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
54	WWII Pillbox, Girton	Low	Major	Moderate adverse	Recording to level 2 standard.	Negligible	Neutral
63	Cambridge Crematorium	Low	Negligible	Slight adverse	None proposed	Negligible	Neutral
79	Milepost, A14, Oakington and Westwick	Medium	Major	Moderate adverse	Recording to level 1 standard. Milepost to be removed before construction and reinstated close to original location at close of construction.	Negligible	Neutral
84	Gardens, Lolworth Grange	Medium	Negligible	Slight adverse	None proposed	Negligible	Neutral
96	All Saints' Church, Lolworth	High	Minor	Slight adverse	None proposed	Minor	Slight adverse
104	Mile post to west of Scotland Drove	Medium	Major	Moderate adverse	Recording to level 1 standard. Milepost to be removed before construction and reinstated close to original location at close of construction.	Negligible	Neutral
213	Milestone, Alconbury	Medium	Major	Moderate adverse	Recording to level 1 standard. Milepost to be removed before construction and reinstated close to original location at close of construction.	Negligible	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
489	Great Northern Railway	Low	Negligible	Slight adverse	None proposed	Negligible	Neutral
490	River Great Ouse Navigation	Low	Negligible	Slight adverse	None proposed	Negligible	Neutral
496	Impington Farm	Low	Negligible	Slight adverse	None proposed	Negligible	Neutral
497	Woodhouse Farm	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
501	American Military Cemetery	High	Negligible	Slight adverse	None proposed.	Negligible	Slight adverse
503	Grange Farm	Low	Minor	Slight adverse	None proposed	Minor	Neutral
507	Hazlewell Court	Negligible	Minor	Slight adverse	None proposed	Minor	Neutral
512	Hill Farm Cottages	Negligible	Minor	Slight adverse	None proposed	Minor	Neutral
514	New Inn	Negligible	Major	Slight adverse	None proposed	Major	Slight adverse
515	Grapevine Cottages	Low	Minor	Slight adverse	None proposed.	Minor	Slight adverse
516	Gardens of Boxworth House, formerly the Rectory, Boxworth	Low	Minor	Slight adverse	None proposed.	Minor	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
523	Friesland Farm	Negligible	Minor	Slight adverse	None proposed	Minor	Neutral
525	New Barns Farm	Negligible	Negligible	Slight adverse	None proposed	Negligible	Neutral
528	Milestone / Parish boundary marker north of Hilton	Low	Negligible	Slight adverse	Protection during construction	Negligible	Neutral
534	Depden Farm	Negligible	Moderate	Slight adverse	None proposed	Moderate	Neutral
535	Wyboston Farm	Negligible	Negligible	Slight adverse	None proposed	Negligible	Neutral
536	Offord Hill Farm	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
537	Offord Cluny Conservation Area	Medium	Moderate	Moderate adverse	None proposed	Moderate	Moderate
538	Lodge Farm	Negligible	Minor	Slight adverse	None proposed	Minor	Neutral
539	Vicarage Farm	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
540	Grafham Road Cottages	Low	Major	Moderate adverse	Photographic survey in accordance with English Heritage guidance (2006)	Negligible	Neutral
541	Brampton Lodge	Negligible	Moderate	Slight adverse	None proposed	Moderate	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
543	Rectory Farm	Low	Moderate	Slight adverse	None proposed	Moderate	Slight adverse
553	Porch House, Offord Cluny	Medium	Moderate	Moderate adverse	None proposed	Moderate	Moderate
554	208 High Street, Offord Cluny	Medium	Moderate	Moderate adverse	None proposed	Moderate	Moderate
555	Offord Hill House	Low	Moderate	Moderate adverse	None proposed	Moderate	Slight adverse
638	Weybridge Farm	Low	Negligible	Slight adverse	None proposed	Negligible	Neutral

**Table 9.15: Huntingdon study area: residual effects of construction on the historic landscape**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
HLC1	20 <sup>th</sup> century agriculture with relict 18 <sup>th</sup> -19 <sup>th</sup> century boundaries	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC2	18 <sup>th</sup> -19 <sup>th</sup> century enclosures	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC3	Woodland	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC4	20 <sup>th</sup> century agriculture	Negligible	Minor	Slight adverse	None proposed	Minor	Neutral
HLC5	Water bodies and features	Negligible	Minor	Slight adverse	None proposed	Minor	Neutral
HLC8	Recreation	Negligible	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC11	Privately owned grazed land (Huntingdon Study Area only)	Medium	Moderate	Moderate adverse	Landscape survey of Mill and Views Commons; sample excavation.	Minor	Slight adverse
HLC12	Small scale settlement	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse

**Table 9.16: Huntingdon study area: residual effects of operation on archaeological remains**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
250	Huntingdon Castle (Castle Hills)	High	Minor	Slight adverse	None proposed	Minor	Slight adverse

**Table 9.17: Huntingdon study area: residual effects of operation on historic buildings**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
235	Huntingdon Conservation Area	High	Major adverse and moderate beneficial	Large adverse and moderate beneficial	Hard and soft landscaping	Moderate adverse and moderate beneficial	Moderate adverse and large beneficial
236	Godmanchester Post Street Conservation Area	High	Moderate beneficial	Moderate beneficial	None proposed	Moderate beneficial	Moderate beneficial
241	Huntingdon Bridge	High	Moderate beneficial	Moderate beneficial	None proposed	Moderate Beneficial	Large beneficial
353	2 The Walks North, Huntingdon	Medium	Major adverse and negligible beneficial	Large adverse and slight beneficial	Hard and soft landscaping	Moderate	Moderate adverse and slight beneficial

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
359	3 - 4 The Walks North, Huntingdon	Medium	Major adverse and negligible beneficial	Large adverse and slight beneficial	Hard and soft landscaping	Moderate	Moderate adverse and slight beneficial
362	5 - 6 The Walks North, Huntingdon	Medium	Major adverse and negligible beneficial	Large adverse and slight beneficial	Hard and soft landscaping	Moderate	Moderate adverse and slight beneficial
445	Huntingdon County Hospital (Main Building only Listed)	Medium	Minor adverse and Minor beneficial	Slight adverse and slight beneficial	Hard and soft landscaping	Negligible and minor beneficial	Neutral and slight beneficial
458	Huntingdon Station	Medium	Major beneficial	Large beneficial	Hard and soft landscaping	Major beneficial	Very large beneficial
469	Gatehouse and Walls at Hinchingsbrooke House	High	Minor	Slight adverse	Landscape planting	Negligible	Slight adverse
471	Hinchingsbrooke House	High	Minor	Slight adverse	Landscape planting	Negligible	Slight adverse
472	Park wall of Hinchingsbrooke House fronting Brampton Road	High	Negligible	Slight adverse	None proposed	Negligible	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
548	St Mary's Parish Hall, Huntingdon	Low	Moderate adverse and negligible beneficial	Slight adverse and neutral	Hard and soft landscaping	Minor	Slight adverse and Neutral
549	Water Tower, Huntingdon	Low	Moderate beneficial	Slight beneficial	Restoration of former A14 carriageway as part of Views Common	Major beneficial	Slight beneficial
550	Hinchingbrooke Cottage, Huntingdon	Low	Moderate beneficial	Slight beneficial	Restoration of former A14 carriageway as part of Views Common	Major beneficial	Slight beneficial
562	Brampton Conservation Area	Medium	Minor beneficial	Slight beneficial	None proposed	Minor beneficial	Slight beneficial
563	1 - 8 George St, Huntingdon	Medium	Negligible beneficial	Neutral	None proposed	Negligible beneficial	Neutral
564	Red Lodge, Huntingdon	Medium	Negligible beneficial	Neutral	None proposed	Negligible beneficial	Neutral
565	Godmanchester Earning Street Conservation Area	High	Moderate beneficial	Moderate beneficial	None proposed	Moderate beneficial	Moderate beneficial
566	Edward House, Mill Common, Huntingdon	Low	Negligible beneficial	Neutral	None proposed	Negligible beneficial	Neutral
567	Monthermer, Mill Common, Huntingdon	Low	Negligible beneficial	Neutral	None proposed	Negligible beneficial	Neutral

**Table 9.18: Mainline study area: residual effects of operation on historic buildings**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
40	Lodge, Girton College	Medium	Negligible	Slight adverse	None proposed	Negligible	Neutral
63	Cambridge Crematorium	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
96	All Saints' Church, Lolworth	High	Moderate	Moderate adverse	Landscape planting	Minor	Slight adverse
109	Pillbox, A14 Conington crossing	Low	Negligible beneficial	Slight adverse	None proposed	Negligible beneficial	Neutral
115	Conington Park	Medium	Negligible	Slight adverse	None proposed	Negligible	Slight adverse
122	Conington Hall	High	Negligible	Slight adverse	None proposed	Negligible	Slight adverse
223	Brooklands, Alconbury	Medium	Negligible	Slight adverse	None proposed	Negligible	Neutral
497	Woodhouse Farm	Low	Minor beneficial	Slight adverse	None proposed	Minor beneficial	Neutral
501	American Military Cemetery	High	Negligible	Neutral	Landscape planting	No change	Neutral
503	Grange Farm	Low	Negligible	Neutral	None proposed	Negligible	Neutral
507	Hazlewell Court	Negligible	Negligible	Neutral	None proposed	Negligible	Neutral
508	Noon Folly Farm	Negligible	Negligible	Neutral	None proposed	Negligible	Neutral

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
512	Hill Farm Cottages	Negligible	Minor adverse and minor beneficial	Slight adverse and slight beneficial	Landscape planting	Negligible and minor beneficial	Neutral
523	Friesland Farm	Negligible	Negligible	Neutral	None proposed	Negligible	Neutral
525	New Barns Farm	Negligible	Negligible	Neutral	None proposed	Negligible	Neutral
528	Milestone / Parish boundary marker north of Hilton	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
534	Depden Farm	Negligible	Moderate	Slight adverse	None proposed	Moderate	Neutral
535	Wyboston Farm	Negligible	Negligible	Neutral	None proposed	Negligible	Neutral
536	Offord Hill Farm	Low	Minor	Slight adverse	Landscape planting	Minor	Neutral
537	Offord Cluny Conservation Area	Medium	Moderate	Moderate adverse	Landscape planting to aid integration of scheme into landscape	Minor	Slight adverse
538	Lodge Farm	Negligible	Moderate	Slight adverse	None proposed	Moderate	Neutral
539	Vicarage Farm	Low	Minor	Slight adverse	Landscape planting	Negligible	Neutral
541	Brampton Lodge	Negligible	Moderate	Slight adverse	Landscape planting	Minor	Neutral
543	Rectory Farm	Low	Moderate	Slight adverse	Landscape planting	Minor	Slight
553	Porch House, Offord Cluny	Medium	Moderate	Moderate adverse	Landscape planting	Minor	Slight adverse
554	208 High Street, Offord Cluny	Medium	Moderate	Moderate adverse	Landscape planting	Minor	Slight adverse

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
555	Offord Hill House	Low	Moderate	Moderate adverse	Landscape planting	Minor	Slight adverse
599	Barn south-east of Gables Farmhouse	Medium	Negligible beneficial	Neutral	None proposed	Negligible	Neutral
560	Fen Drayton Conservation Area	Medium	Minor beneficial	Slight beneficial	None proposed	Minor beneficial	Slight beneficial
561	Fenstanton Conservation Area	Medium	Minor beneficial	Slight beneficial	None proposed	Minor beneficial	Slight beneficial
602	Manor House,	High	Negligible beneficial	Slight beneficial	None proposed	Negligible beneficial	Slight beneficial

**Table 9.19: Mainline study area: residual effects of operation on the historic landscape**

Asset number	Asset name	Value	Magnitude of impact	Significance of effect	Mitigation	Magnitude of residual impact	Significance of residual effect
HLC1	20 <sup>th</sup> century agriculture with relict 18 <sup>th</sup> -19 <sup>th</sup> century boundaries	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC2	18 <sup>th</sup> -19 <sup>th</sup> century enclosures	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC3	Woodland	Low	Minor	Slight adverse	None proposed	Minor	Neutral
HLC4	20 <sup>th</sup> century agriculture	Negligible	Minor	Slight adverse	Restoration of borrow pit 5 to agriculture; retention of some areas of arable land within borrow pits.	Negligible	Neutral
HLC5	Water bodies and features	Negligible	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC8	Recreation	Negligible	Minor	Slight adverse	None proposed	Minor	Slight adverse
HLC11	Privately owned grazed land (Huntingdon Study Area only)	Medium	Moderate	Moderate adverse	None proposed	Moderate	Moderate adverse
	Views Common Only		Slight beneficial	Slight beneficial	None proposed	Slight beneficial	Slight beneficial
HLC12	Small scale settlement	Low	Minor	Slight adverse	None proposed	Minor	Slight adverse

## 9.8 Summary and conclusion

- 9.8.1 The assessment of likely significant effects of the scheme on cultural heritage has been informed by desk-based studies, walkover survey and a programme of archaeological investigations.
- 9.8.2 Construction of the scheme has been assessed to result in a number of adverse and beneficial impacts and effects on known archaeological remains, historic buildings and historic landscape. The majority of the known archaeological remains within the footprint of the scheme would be physically impacted by construction and have been assessed to result in major adverse impacts; moderate and slight adverse impacts have also been identified. The proposed mitigation measure of preservation by record would reduce the residual significance of this effect to neutral or slight adverse. Operation of the scheme would have a slight adverse effect on one archaeological asset as a result of new lighting.
- 9.8.3 Both adverse and beneficial impacts have been assessed on historic buildings within the study areas. Construction of the scheme has been assessed to result in the removal of three historic buildings of limited architectural or historical value and the removal and reinstatement of three listed milestones. Adverse impacts on the setting of historic buildings are also predicted to result from construction of the scheme in the absence of mitigation, including an large adverse effect on Huntingdon Conservation Area. During operation of the scheme, adverse and beneficial effects have been identified on Huntingdon Conservation Area and historic buildings around Mill Common; the former as a result of the introduction and operation of the scheme across Mill Common and Views Common, and the latter due to the removal of the A14 viaduct, and reduced traffic levels along the existing A14 carriageway. Adverse operational effects have been identified on the setting of historic buildings within the scheme mainline study area due to noise and visual intrusion from the presence of the scheme and the movement of vehicles along it. Beneficial effects on four conservation areas have also been identified due to reduction in traffic levels as a result of the scheme's operation. A programme of mitigation has been recommended to reduce the impact of the scheme including temporary removal and storage of listed milestones during construction and their subsequent reinstatement; historic building recording, and landscape planting.
- 9.8.4 After mitigation, a moderate adverse and large beneficial effect is predicted for Huntingdon Conservation Area. The construction of new elements of road infrastructure would have an adverse effect on the conservation area as discussed; however, this would not result in a total loss of the asset and is reversible. The road infrastructure could be removed and the area returned to grazing land. The removal of the A14 Viaduct and reductions in traffic levels using the existing A14 would have a residual beneficial effect of large significance. The removal of the viaduct and related reduction in traffic would have a greater beneficial effect on the significance of the Huntingdon Conservation Area than the construction of the new road elements on Mill Common. The public benefits resulting from the construction and operation of the scheme more broadly are set out in

*Chapters 8, Chapter 10 and Chapter 14* of the *ES* and the *Case for the Scheme*. There are no likely adverse effects of a large or very large significance, and it is concluded that the scheme would not cause significant harm to cultural heritage; substantial harm is as noted in 9.2.18.

- 9.8.5 As with the previous sub-topics, the impact on the historic landscape is assessed to be both adverse and beneficial. The construction of the scheme would remove areas of historic landscape resulting in adverse impacts, some of which cannot be mitigated. The value of these impacted historic landscape types is low and the significance of effect has been assessed to be slight adverse. Operation of the scheme would have neutral effects on the historic landscape, as some of the land taken for borrow pits would be reinstated to agricultural use.

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