Non-Technical Summary

CULTURAL HERITAGE

While the area around the Scheme contains various known archaeological sites and findspots, few, other than some cropmarks, have potential to be affected by the Scheme. Archaeological investigations including a geophysical survey and programme of trial trenching have taken place. These investigations have identified few archaeological features and those which were identified were considered of low importance. Therefore the scheme will have a Slight Adverse effect on 7 sites which are of low or medium importance and a Slight Beneficial effect on 1 site resulting from a decrease in noise and traffic. Mitigation proposals will take the form of archaeological watching briefs undertaken during topsoil stripping of the scheme footprint and the access track. This has been agreed by the Development Control Archaeologist.

There are no Listed Buildings or Conservation Areas in the vicinity of the Scheme.

1. Introduction
2. The Project
3. Transport Forecast
4. Method Statement
5. Air Quality
6. Cultural Heritage

INTRODUCTION

6.1 This chapter considers the potential for impacts on archaeology, built heritage and historic landscapes. Such resources could include archaeological sites, listed buildings, undesignated historic buildings, Scheduled Monuments, Conservation Areas, historic parks and gardens and areas of historic landscape.

METHOD

6.2 The cultural heritage assessment is produced in accordance with the Institute of Field Archaeologists (IFA) Standards and Guidance for Desk-Based Assessments and in accordance with the Stage 3 assessment process detailed in the Design Manual for Roads and Bridges, Volume 11, Section 3, Part 2, Cultural Heritage (1993).

Baseline conditions

6.3 Information was obtained from the following sources for a study area of 500 metres either side of the proposed new road centreline. The following sources have been consulted:

- Northamptonshire County Council Sites and Monuments Record (SMR)
- Northamptonshire Records Office
- Myk Flitcroft, Development Control Archaeologist, Northamptonshire County Council Historic Environment Team
- Documentary information held at the Sites and Monuments Record Office at Northamptonshire County Council
- English Heritage National Monuments Record (EH-NMR) for details of archaeological sites
- English Heritage National Monuments Record (EH-NMR) for details of Listed Buildings
- Details of Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields and World Heritage Sites identified from the Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)

6.4 A gazetteer of known archaeological and built heritage resources in the study area has been compiled (Appendix 6D). All assets have been given a specific number for the purposes of this report (ATK *). The locations of these known resources can be seen on Figure 6.1, with details of the Scheme and study area.

6.5 The results of a geophysical survey and subsequent archaeological evaluation, which took place in November 2006, supplement the documentary findings of the previous Environmental Statement. This addendum of information therefore provides a
reassessment of the effects of the Scheme on the cultural heritage resource as laid out below. The acceptability of this approach was agreed in advance with Northamptonshire County Council.

Value of the affected resource

6.6 The value (or importance) of each element of the cultural heritage resource has been developed using the Secretary of State’s criteria for Scheduling Monuments (Planning Policy Guidance (PPG) 16, Annex 4, DOE, 1990). The criteria (period; rarity; documentation; group value; survival/condition; fragility/vulnerability; diversity; potential) were used to determine whether the resources are of High, Medium or Low value. An additional grade of ‘no grade’ has been given to assets that are significantly destroyed or disturbed so that they would not warrant inclusion in a higher grade.

6.7 The value of the built heritage also takes into consideration whether the structures are listed or not. The various grades for Listed Buildings are hierarchical, Grade I buildings being of exceptional interest, Grade II* buildings being particularly important buildings of more than special interest, and Grade II buildings of special interest (Department of Transport 1994, 9/1). This has been combined with the above referenced four-tier system. As an example it is generally considered that Grade I and II* buildings are judged to be of High value while Grade II buildings are considered to be of Medium value, Grade I and II* English Heritage Registered Parks and Gardens of Special Historic Interest are judged to be of High value, whilst Grade II Registered Parks are considered of Medium value and Conservation Areas and assets such as areas of archaeological interest identified within Local Plans / Unitary Development Plans are judged to be of Medium Value.

Prediction and evaluation of effects

6.8 There is no standard scale for determining the significance of the environmental effect with regard to cultural heritage assets. The assessment draws on current approaches and is based on guidance outlined in DMRB and TAG (www.webtag.org.uk) which is the Department for Transport’s detailed guidance on the appraisal of transport projects where Section 3.3.9 provides a methodology of assessment for Historic Resources. These approaches are founded on the principle that the significance of environmental effect is determined by assessing the magnitude of change and the value of the affected resource. In this way a Small-scale negative change on a High value asset may result in the same effect as a Substantial negative change on a Low value asset.

Magnitude of change

6.9 In order to assess the magnitude of change brought about by the proposed development on the identified assets and areas of the cultural heritage resource, the following grading system has been used:

- **Substantial negative change:** the proposals would result in the complete destruction of an element of the built heritage or historic landscape; be highly visually intrusive and would seriously damage the setting of a cultural heritage asset, such that its integrity is compromised and appreciation and understanding
of it is diminished; or the proposals would disturb more than 75% of the area of known or estimated buried archaeological features

- **Intermediate negative change**: the proposals would result in the partial destruction of an element of the built heritage or historic landscape; the proposals would be intrusive in the setting, and would negatively impose on the appreciation and understanding of the characteristic heritage resource; or the proposals would disturb between 25% and 75% of the area of known or estimated buried archaeological features

- **Small-scale negative change**: the proposal would change the existing setting of the heritage resource but would not result in the severance or loss of integrity, appreciation or understanding of the resource; or the proposals would disturb less than 25% of the area of known or estimated buried archaeological features

- **No change**: the proposals would not result in the destruction of any element of the built heritage; the proposals would not alter the integrity or setting of the cultural heritage resource and would therefore maintain the existing historic character and the proposals would not disturb buried archaeological features

- **Small-scale positive change**: the proposals would re-introduce accessibility to archaeological remains or an element of the built heritage resource; the proposals would improve the setting of a cultural heritage asset

- **Intermediate positive change**: the proposals would retard any further natural or accelerated degradation of buried archaeological remains by improving the existing situation (such as the cessation of ploughing), the proposals would provide accessibility to visible archaeological remains or an element of the built heritage resource such that the understanding and appreciation of the asset is improved, the proposals would greatly improve the setting of a cultural heritage asset or remove existing intrusive elements such that the integrity and setting of the resource would be enhanced

- **Substantial positive change**: the proposals would prevent any further natural or accelerated degradation of buried archaeological remains and potentially ensure their long-term preservation, the proposals would provide increased accessibility to visible archaeological remains or an element of the built heritage and through the restoration of lost or damaged elements enhance the understanding and appreciation of the asset.

**Significance**

6.10 By combining the magnitude of the impact (or change) of the potential development and the value of each resource and qualified by professional judgement, an assessment can be made of the significance of the effect, defined as being large beneficial, moderate beneficial, slight beneficial, neutral, slight adverse, moderate adverse or large adverse. The qualitative judgement includes consideration of the degree of compliance with the regulatory and policy framework derived primarily from the following:

- Planning Policy Guidance Note 15: Planning & the Historic Environment
- Planning Policy Guidance Note 16: Archaeology & Planning
- Ancient Monuments and Archaeological Areas Act 1979
- Planning (Listed Buildings and Conservation Areas) Act 1990
6.11 Further details of these documents and the policies contained therein are included in Appendix 6A.

Table 6.1 - Matrix for scale of the significance of the effect

<table>
<thead>
<tr>
<th>Magnitude of Change</th>
<th>Value of affected resource</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>No Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial Negative</td>
<td>Large Adverse</td>
<td>Large / Moderate Adverse</td>
<td>Moderate / Slight Adverse</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Intermediate Negative</td>
<td>Large / Moderate Adverse</td>
<td>Moderate Adverse</td>
<td>Slight Adverse</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Small-scale Negative</td>
<td>Moderate / Slight Adverse</td>
<td>Moderate / Slight Adverse</td>
<td>Slight Adverse</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>No Change</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Small-scale Positive</td>
<td>Moderate / Slight Beneficial</td>
<td>Moderate / Slight Beneficial</td>
<td>Slight Beneficial</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Intermediate Positive</td>
<td>Large / Moderate Beneficial</td>
<td>Moderate Beneficial</td>
<td>Slight Beneficial</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Substantial Positive</td>
<td>Large Beneficial</td>
<td>Large / Moderate Beneficial</td>
<td>Moderate / Slight Beneficial</td>
<td>Neutral</td>
<td></td>
</tr>
</tbody>
</table>

**Baseline conditions**

6.12 A summary of the known cultural heritage resources and potential for as-yet undiscovered resources within the study area is provided below. This has been derived from all fieldwork undertaken to date, up to and including geophysical survey (August 2006) and archaeological evaluation undertaken in November 2006, a historic map analysis (as summarised in Appendix 6B), and the archaeological and historical background to the study area outlined on a period by period basis (as detailed in Appendix 6C). This research establishes the nature of the Cultural Heritage resource that may be affected by the proposed road and provides all available baseline information.

**Archaeology**

**Scheduled Monuments**

6.13 There are no Scheduled Monuments within the study area.
Designated sites

6.14 There are no sites designated for their archaeological value in the local plans within the study area.

Sites and Monuments Record

6.15 There are approximately 100 sites identified in the Sites and Monuments Record within the study area, many of which are smaller parts or individual elements associated with one larger site. These sites have been amalgamated where appropriate to form a coherent collection of sites within the study area. Figure 6.1 shows the sites, study area and cropmark transcripts, with full details of the sites available in the Gazetteer in Appendix 6D. A summary of all the sites is provided below while those located within the Scheme footprint are also listed in Table 6.2.

6.16 Prehistoric sites - Generally there are a number of cropmark sites that could date to the prehistoric period. These comprise:-

- ATK 11 represented by cropmarks which have been interpreted as a possible group of rectilinear and curvilinear enclosures with possible internal features to one of the enclosures, as well as an oval enclosure. Iron Age pottery has been recovered at this site during fieldwalking. This site is likely to be of medium importance.
- ATK 12 which is believed to be a possible prehistoric enclosure and trackway although the SMR have advised that this may be a mis-location of another site and the location of the site itself has now been subject to residential development. This former site is of no importance since it is very likely to have been destroyed by subsequent development.
- ATK 13 are cropmarks which appear to represent a pit alignment, linear ditch and possible rectangular enclosure and possible ring ditch. This site is likely to be of medium importance.
- ATK 14 are cropmarks which have been interpreted as linear ditches, pit alignments and a possible rectangular enclosure. This site is likely to be of low to medium importance.
- ATK 23 is a well weathered ditch with traces of banks and could relate to nearby pit alignments. It is thought that this feature is a prehistoric boundary/land division. This site is considered of low to medium value.

6.17 A number of isolated individual flints or small scatters of flint have been identified during fieldwalking in 1992 (NAU, 1992) (ATK 8, 13, 15, 18, 20). They are not in distinct enough concentrations to be important but they do suggest a possible settlement site in the area. These are considered of no value as determined by the specified criteria. However, they do help infer potential archaeological remains.

6.18 There are also some Iron Age pottery scatters recovered from Field 6 (Figure 6.2) which may relate to and help date the cropmark site (ATK 11). Again, these finds are considered of no value, but they do help infer potential archaeological remains.

6.19 Roman (AD43 – AD450) - The former line of a Roman road runs along the Berrywood Road at the southern section of the Scheme (ATK 9). This site is of medium importance.
6.20 Three sherds of Romano-British pottery were identified in field number 4 (Figure 6.2) (ATK 15) and this indicated that that there was activity dating to this period in the area (confirmed by the presence of the Roman road). The sherds do not indicate anything of importance. A small number of finds of Roman date have been recovered from the study area (ATK 18).

6.21 Finally a number of the cropmarks such as ATK 11, 14, 22, 24 and most specifically ATK 19 could range in date from the prehistoric period into and beyond the Roman period. These cropmarks are likely to be of low to medium importance.

6.22 Saxon (AD540 – 1066) - There are no sites of known Saxon date within the study area.

6.23 Medieval (AD1066 – 1547) - The settlements of Duston, Harpole and Harlestone are all listed in the Domesday survey of 1086, and show that the surrounding area was settled within the medieval period.

6.24 There are scatters of medieval pottery which have been identified in the study area during fieldwalking, which are probably indicative of manuring scatter (ATK 11 & 20). Some isolated medieval finds have also been recovered including a lead stud (ATK 17). These isolated finds are not of any importance.

6.25 Finally a set of earthworks have been identified on the boundary of Harlestone Heath. These are probably a series of hollow ways or ditches that are likely to be medieval or earlier in origin (ATK 23). These earthworks are considered to be of medium importance.

6.26 Post-medieval and modern (1547 – present) - There are a number of farm buildings and associated structures which were identified on the first OS map dated 1886. Although post-medieval in date they may be located on earlier sites of farm buildings (ATK 2, 3, 4, 5 & 6). These structures are of low importance.

6.27 There are also a number of post medieval pottery scatters. As with the medieval pottery, these are likely to result from the process of manuring scatter (ATK 11, 13, 20), again of no importance.

6.28 Two mileposts have been identified at the junction of Sandy Lane and Berrywood Road (ATK 1) from the 1st edition OS map dated 1886, and a further milepost at the Port Road / White’s Lane junction which was first identified on the OS dated 1965 (ATK 7). Both of these mileposts could have earlier origins but their survival and/or exact location is unknown. These mileposts are of low importance.

6.29 A group of cropmarks showing ten regular dark patches are thought to be modern or at least recent in origin (ATK 10). These could be related to the fact that the fields were used as allotments in the 1930s as identified on the OS maps. These cropmarks are likely to be of low importance.

Geophysical survey and archaeological evaluation

6.30 In August 2006 a gradiometer survey was undertaken within the footprint of the Scheme, the results of which informed the siting of trial trenches for the subsequent
archaeological evaluation. The archaeological fieldwork took place in November 2006. The reports on these evaluations are contained in Appendix 6E.

6.31 The geophysical survey revealed anomalies which corresponded well with previously identified cropmarks of possible archaeological origin. These anomalies confirmed the likely survival of features associated with possible Prehistoric, Roman and probable post-medieval settlement activity. Specifically, two discrete areas of possible settlement activity were identified in the north and centre of the survey area. These correspond with sites ATK 11 and ATK 13.

6.32 The former site, ATK 11 encompasses an area of cropmarks where anomalies indicated possible cut features associated with the entrance to a linear enclosure of either Prehistoric or Roman date. Other anomalies were indicative of possible boundary and pit features. The latter, ATK 13 encompasses and area of cropmarks where the anomalies indicated possible cut features of archaeological and probable natural origin. Naturally occurring features were in all likelihood to be associated with Dallington Brook. A number of anomalies of probable recent archaeological origin were also detected in the other significant area of cropmarks at site ATK 10.

6.33 The archaeological fieldwork which followed the geophysical survey comprised 33 trenches, sited in order to ascertain the origin and date of cropmark and magnetic anomalies based on a 1% sample of the scheme footprint. Only four of these encountered features of archaeological origin. These corresponded well with cropmarks and magnetic anomalies though none were datable. Other features identified by the geophysical survey were found to be either the product of modern disturbance or of geological origin. In the area of site ATK 11 a single northwest – southeast aligned ditch was excavated (Trench 11), which corresponded with cropmarks and magnetic anomalies indicating possible Prehistoric – Roman settlement activity associated with an enclosure system. In the area of site ATK 13 two trenches yielded evidence of a northeast – southwest field boundary or trackway ditch (Trench 26) and a possible drainage ditch (Trench 25) aligned northwest - southeast. These may also have been associated with the enclosure system in site ATK 11 to its southwest, though no direct relationship was evident.

6.34 Trial trench results indicated that many of the magnetic anomalies identified by the geophysical survey are likely to be naturally occurring variations and features of geological and fluvial origin. The majority of the features of archaeological origin that were highlighted by the survey are plough marks of undetermined date. It is likely, however, that the magnetic anomalies 11 – 13 at the western boundary of the Scheme footprint are to be associated with Prehistoric – Roman period settlement. These anomalies were not investigated as part of the most recent archaeological evaluation since they lay just to the west of the scheme footprint.

Potential for further archaeological remains

6.346.35 The location of the Scheme within an area of known prehistoric (predominantly Bronze Age and Iron Age) and Roman activity means that there was considered to be a high potential for the presence of further as-yet undiscovered remains associated with these dates, as well as with other periods, within the study area. In order to ascertain the nature, importance and extent of potential remains within the Scheme footprint, a geophysical survey followed by a programme of trial trenching was undertaken as discussed above. This identified only 4 archaeological
features and these were of low importance. Therefore, overall there is deemed to be a low potential for important archaeological remains within the Scheme footprint, and archaeological remains which are located within the Scheme are likely to take the form of cut features such as ditches which may be associated with nearby prehistoric or Roman settlement. These remains are likely to be of low importance given that this area seems to be at the very periphery of any former settlement or activity.

**Built heritage**

**Listed Buildings and Conservation Areas**

6.356.36 There are no Listed Buildings or Conservation Areas within the study area.

**Historic landscapes**

**Historic Parks and Gardens**

6.366.37 There are no Historic Parks and Gardens within the Study Area, the closest being Althorp Park some 2km from the Scheme and visually protected by shelter belts, woodland and settlement.

**PREDICTION AND EVALUATION OF EFFECTS - CONSTRUCTION**

**Types of impact**

6.376.38 An archaeological resource can be affected by construction in a number of ways: the removal of material during works, the destruction to sensitive deposits caused by the presence of heavy plant, and the alteration of stable ground conditions which may lead to degradation of the quality and survival of buried archaeological remains.

6.386.39 Equally, the built heritage and historic landscape can be affected by development through possible demolition or loss of part of a structure or its grounds; increased visual intrusion, noise or vibration; changes in the original landscape; severance from linked features such as gardens, outbuildings etc or through the loss of amenity value.

**Impacts prior to mitigation**

6.396.40 Table 6.2 describes the impact of the Scheme on the known cultural heritage resources within the footprint of the Scheme and additional temporary land take required during construction to accommodate working widths, site compounds and haul roads. It provides a summary of the importance of the resource affected and the change to the site that is likely to take place (whether positive or negative) and the significance of the effect on that resource, prior to mitigation. Effects resulting from the construction of a scheme can be temporary or permanent and the type of impact is outlined in the table. In the absence of the further archaeological evaluation (Paragraph 6.44) the significance of impacts on unknown remains must be considered of potentially high severity. The results of the further evaluation may lead to a re-classification of the importance of archaeological remains which may affect the overall severity of impacts of the Scheme. Any such revisions will be provided in the addendum to be submitted to Northamptonshire County Council.
### Table 6.2 - Impact and Significance of Construction Effects

<table>
<thead>
<tr>
<th>ATK No.</th>
<th>Brief Description of Site</th>
<th>Importance of Site</th>
<th>Nature and Magnitude of Impact on Site</th>
<th>Significance of effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Milepost</td>
<td>Low importance</td>
<td>May have to be removed during construction = temporary substantial negative change.</td>
<td>Slight adverse effect.</td>
</tr>
<tr>
<td>9</td>
<td>Former line of Roman road.</td>
<td>Medium Importance.</td>
<td>Surviving remnants of the Roman Road fabric may be destroyed but only small sections = Permanent small-scale negative change</td>
<td>Slight Adverse Effect</td>
</tr>
<tr>
<td>18</td>
<td>Findspots</td>
<td>No Importance</td>
<td>Have already been removed from the site.</td>
<td>No effect</td>
</tr>
<tr>
<td>10</td>
<td>Cropmarks, probably associated with former allotments</td>
<td>Low importance Probable Low importance</td>
<td>Most of the site will be destroyed by the Scheme = permanent substantial negative change.</td>
<td>Slight Adverse effect Probable Slight Adverse effect</td>
</tr>
<tr>
<td>11</td>
<td>Cropmarks, likely to be prehistoric (Iron Age) settlement</td>
<td>Medium importance Probable Medium importance</td>
<td>Only the periphery of the known site is affected = permanent small-scale negative change.</td>
<td>Slight Adverse effect Probable Slight to Moderate Adverse effect</td>
</tr>
<tr>
<td>20</td>
<td>Findspots</td>
<td>No importance</td>
<td>Have already been removed from the site.</td>
<td>No effect</td>
</tr>
<tr>
<td>5</td>
<td>Structures / outbuildings</td>
<td>Low Importance</td>
<td>Will be demolished as part of the Scheme = permanent substantial negative change.</td>
<td>Slight Adverse effect.</td>
</tr>
<tr>
<td>13</td>
<td>Cropmarks of probably pit alignment possible enclosure and ring ditch</td>
<td>Low importance Probable Low importance</td>
<td>Approximately half of the known site will be destroyed = permanent intermediate negative change.</td>
<td>Slight Adverse effect Probable Moderate Adverse effect</td>
</tr>
<tr>
<td>25</td>
<td>Turnpike road</td>
<td>Low importance</td>
<td>A small section of the fabric of the road will be destroyed = permanent small-scale negative change.</td>
<td>Slight Adverse effect.</td>
</tr>
<tr>
<td>16</td>
<td>Area of cropmarks, possibly archaeological in origin</td>
<td>Probable Low importance</td>
<td>A small corridor of potential archaeological remains associated with the cropmarks will be destroyed during construction of the access track = permanent small-scale negative change.</td>
<td>Probable Slight Adverse effect Probable Slight Adverse effect</td>
</tr>
<tr>
<td>17</td>
<td>Finds, including a Lead Stud</td>
<td>No importance as find been removed from site.</td>
<td>No impact.</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Mitigation and residual effects**

Although archaeological mitigation is required as part of Planning Policy Guidance 16, for the most part the effect on archaeological remains cannot be reduced through excavation or other fieldwork. This is because, although a greater understanding and knowledge of the site is enabled though fieldwork, excavation or...
other forms of intrusive fieldwork still result in the destruction of some or all of a site and is still destructive. Unless it results in avoidance of disturbance to a resource, fieldwork and recording does not therefore alter the adverse change to a site and so does not truly ‘mitigate’ the effects. Therefore those archaeological sites which will be subject to a Slight Adverse impact, will remain so.

Therefore, the scheme will result in a Slight Adverse effect on 7 sites (ATK 5, 9, 10, 11, 13, 16 & 25).

Based on the results of the geophysical survey and archaeological evaluation, which constitute the remainder of outstanding preliminary fieldwork, the mitigation strategy described in the Environmental Statement (October 2006) has been amended to ensure an appropriate response to the surviving archaeological resource that may lie within the area of the Scheme.

The mitigation strategy will broadly comprise:

- An archaeological watching brief during topsoil stripping of the scheme footprint
- An archaeological watching brief during topsoil stripping at the location of the proposed access track which lies approximately 200 metres west of the scheme footprint
- An archaeological watching brief on the removal of tarmac at the Berrywood Road junction to ascertain the presence of the former Roman road at this location
- A walkover survey in the northern wooded section of the scheme within the plantation, which currently remains unevaluated. This will take place prior to tree felling and vegetation clearance in order to confirm the absence of earthworks
- An archaeological watching brief in the northern wooded section of the scheme during tree felling and topsoil stripping

It is possible that due to the results of these archaeological watching briefs, a further programme of archaeological fieldwork may be required. The need for any further works beyond the archaeological watching briefs will be discussed when the findings of this mitigation work are known.

The mitigation strategy detailed above has been discussed and agreed with the Development Control Archaeologist, Myk Flitcroft at Northamptonshire County Council.

Mitigation of effects on the built environment and historic landscape is often easier to achieve e.g. through avoidance of features, modifications to avoid impacts on setting etc. Certain preliminary mitigation measures have therefore been identified at this stage. Notably the locations of any mileposts including ATK 1 which may be affected during construction of the proposed road will be marked so that they are not damaged, or they will removed and reinstated in the same location when the works are completed. This impact on the milestone ATK 1, without mitigation would be Slight Adverse effect, however as it will be reinstated, there will be no overall lasting effect on the milestone.
6.476.48 In addition compounds, working areas and haul roads would be located to avoid and minimise disturbance to unevaluated areas. Where this is not possible these areas may require archaeological investigation prior to implementation of the Scheme. The details of these investigations would be determined in consultation with the Development Control Archaeologist County Archaeologist and would be reported appropriately. Depending on the results on any investigations, further mitigation measures may be required.

Prediction and Evaluation of Effects - Operation

6.486.49 No impacts beyond those occurring during construction, discussed above, will be experienced by archaeological resources as a result of operation of the Scheme. The built heritage resource and historic landscape can, however, be affected through the presence and operation of a new scheme. Operational effects can comprise increased visual and noise intrusion or vibration that remains after the construction period.

6.496.50 Only one cultural heritage asset would be affected through the operation of the Scheme. This is the farm building Wykes Lodge (ATK 3). This building is adjacent to White’s Lane, which is itself used as a cut through onto the Harlestone Road from the south. The level of traffic, proportion of lorries and noise at this road is currently high for a small country lane. The Scheme aims to remove much of this cut through traffic onto the new Sandy Lane leaving Whites Lane to be used for local traffic and access to the farm building itself. The resulting reduction in noise and traffic would result in a permanent small-scale positive change on Wykes Lodge which is of low importance. This constitutes a Slight Beneficial effect on Wykes Lodge.

Overall Effects and Further archaeological Evaluation

Mitigation summary

6.506.51 There will be a Slight Adverse effect on seven sites (ATK 5, 9, 10, 11, 13, 16, 25). The Slight Adverse effect on ATK 1, the milestone will be reduced to no effect as it will be reinstated as part of the mitigation proposals. There will be a Slight Beneficial effect on Wykes Lodge (ATK 3) due to the decrease in noise and traffic during operation of the Scheme.

6.516.52 Following the results of the evaluation, an archaeological watching brief during topsoil stripping in all areas evaluated to date, the Berrywood Road junction area and at the proposed access track, is deemed appropriate. In the northern area of the Scheme a walkover survey of the wooded portion will be undertaken prior to tree felling and an archaeological watching brief undertaken during felling and topsoil stripping.

Summary

6.526.53 The potential for important archaeological remains within the scheme footprint is very low.
The Scheme will result in a Slight Adverse effect on 7 sites within the scheme footprint. These sites are of low or medium importance.

The Scheme will have no residual effects on milestone ATK 1, due to its reinstatement as discussed in the mitigation proposals.

The presence of the Scheme would result in a Slight Beneficial Effect on Wykes Lodge farm due to reduction in noise and traffic near this building.

Watching briefs during topsoil stripping within the scheme footprint, at the location of the Berrywood Road junction and at the access track will be undertaken in order to record any unknown archaeological remains. This mitigation strategy has been agreed with the Development Control Archaeologist.

REFERENCES

- Ancient Monuments and Archaeological Areas Act 1979, London. HMSO.
- Phoenix Consulting (PC), 2002. Lodge Barn Farm, Harpole.