

**Chapter 7: Historic Environment**  
**Land West of White Post Road, Banbury**  
**ENVIRONMENTAL STATEMENT**  
**July 2015**

This page has been  
left intentionally  
blank

## 7.1 INTRODUCTION

7.1.1 This chapter of the ES has been prepared by Archaeological Research Services Ltd on behalf of Gladman Developments Ltd to accompany an outline planning application for residential development on land south-west of Salt Way, Banbury, Oxfordshire.

7.1.2 The baseline information is considered before the likely environmental effects of the proposed development upon cultural heritage resources are identified that may occur during the construction and operation phases of the development. Mitigation measures to reduce any negative environmental effects are identified as appropriate, before the residual environmental effects are assessed.

### **The Development**

7.1.3 Full details of the proposed development are included in ES Chapter 3. In summary the proposals comprise the development of up to 280 residential dwellings with associated access, landscaping and amenity space (7.97 ha) with a total site area of approximately 17.53ha. Access to the development would be from White Post Road.

### **Scope of Assessment**

- 7.1.4 The following sources of information were consulted to inform and update this assessment:
- An archaeological desk-based assessment and heritage statement (Appendix 7.1 and A7.4) both produced by Archaeological Research Services Ltd (ARS Ltd) (Clarke 2013; Park 2014). These assessments produced a detailed study of the archaeological potential of the site and the potential effect the development will have on designated heritage assets within the wider area. Both documents are referred to throughout this chapter.
  - The results of an archaeological geophysical survey (Appendix 7.2) carried out by ARS Ltd in 2014 (HER No. SOX5114).
  - The results of archaeological evaluation trenching (Appendix 7.3) across the proposed development area (PDA) undertaken by Archaeological Research Services Ltd (HER No. SOX 5379).

## 7.2 POLICY CONTEXT

### **National Planning Policy**

7.2.1 The importance of heritage assets is recognised in legislation as well as national and local policy. Certain monuments and built features that are deemed to be of particular importance are given legal protection through the following legislation.

- The Ancient Monuments and Archaeological Areas Act 1979 (AMAAA);
- The Planning (Listed Buildings and Conservation Areas) Act 1990.

- 7.2.2 The key policy affecting how heritage assets should be treated within the planning process is given in the National Planning Policy Framework (NPPF) paras 126-141 (CLG 2012). The most relevant paragraphs of the NPPF to this application are set out below.
- 7.2.3 In section 12 the NPPF addresses conserving and enhancing the historic environment. At paragraph 128 it states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.
- 7.2.4 Paragraph 129 identifies that Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.
- 7.2.5 At paragraph 135 it states that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
- 7.2.6 At paragraph 139 it states that non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.
- 7.2.7 In paragraph 141 amongst other matters it states that planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

### **Local Planning Policy**

- 7.2.8 The saved policies of the adopted Cherwell Local Plan (1996) which relate to the historic environment are described below.
- 7.2.9 Policy C23, Paragraph 9.52 states *"The conservation areas have distinct visual characteristics and it is important that these are recognised when proposals or new development are formulated. Formality or*

*informality of building line, the methods of boundary enclosure, homogeneity of building materials, local architectural styles and building practice, the importance of undeveloped space within the settlement structure, and the setting of existing buildings, are some of the matters that should be taken into account”.*

- 7.2.10 In relation to the setting of monuments and archaeological sites, Policy C25 states *“In considering proposals for development which would affect the site or setting of a Scheduled Ancient Monument, other nationally important archaeological sites and monuments of special local importance, the council will have regard to the desirability of maintaining its overall historic character, including its protection, enhancement and preservation where appropriate”.*
- 7.2.11 Paragraph 9.56 states that *“It must be acknowledged that the character and setting of an archaeological site or monument which may include historic landscapes, parks and gardens may be damaged or even destroyed by certain forms of development. In such cases policy C25 will apply. 9.57 Some ancient monuments are scheduled by the Secretary of State under the Ancient Monuments and Archaeological Areas Act 1979. The scheduled ancient monuments in this District are listed in Appendix D. In addition to planning permission granted by the District Council, the Secretary of State's consent is required in the form of scheduled monument consent for any development likely to affect the site of a scheduled ancient monument. PPG16 states that “where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation”.* It should be noted, however, that PPG16 is no longer in force and has been replaced in whole by the NPPF.
- 7.2.12 The emerging Cherwell Local Plan was submitted to the Secretary of State for Communities and Local Government for formal examination on January 2014. In June 2014 the Inspector suspended the examination to allow the Council to undertake main modifications in relation to meeting its objectively assessed housing needs over the plan period. The Council has since undertaken modifications along with further public consultation and has re-submitted these to the Inspector in October 2014. The Inspector's Report on Examination of the modified submission has been published and council officers are considering the report. It is intended that it will be presented to Members at meeting of the Council on 20 July 2015 with a recommendation for adoption. The emerging plan contains the following policy (ESD16) concerning the historic environment:

*Successful design is founded upon an understanding and respect for an area's unique built, natural and cultural context. New development will be expected to complement and enhance the character of its context through sensitive siting, layout and high quality design. All new development will be required to meet high design standards. Where development is in the vicinity of any of the district's distinctive natural or historic assets, delivering high quality design that complements the asset will be essential.*

*New development proposals should:*

- *Be designed to deliver high quality safe, attractive, durable and healthy places to live and work in. Development of all scales should be designed to improve the quality and appearance of an area and the way it functions*

- 
- *Deliver buildings, places and spaces that can adapt to changing social, technological, economic and environmental conditions*
  - *Support the efficient use of land and infrastructure, through appropriate land uses, mix and density / development intensity*
  - *Contribute positively to an area's character and identity by creating or reinforcing local distinctiveness and respecting local topography and landscape features, including skylines, valley floors, significant trees, historic boundaries, landmarks, features or views, in particular within designated landscapes, within the Cherwell Valley and within conservation areas and their setting*
  - *Conserve, sustain and enhance designated and non designated 'heritage assets' (as defined in the NPPF) including buildings, features, archaeology, conservation areas and their settings, and ensure new development is sensitively sited and integrated in accordance with advice in the NPPF and NPPG. Proposals for development that affect non-designated heritage assets will be considered taking account of the scale of any harm or loss and the significance of the heritage asset as set out in the NPPF and NPPG. Regeneration proposals that make sensitive use of heritage assets, particularly where these bring redundant or under used buildings or areas, especially any on English Heritage's At Risk Register, into appropriate use will be encouraged*
  - *Include information on heritage assets sufficient to assess the potential impact of the proposal on their significance. Where archaeological potential is identified this should include an appropriate desk based assessment and, where necessary, a field evaluation.*
  - *Respect the traditional pattern of routes, spaces, blocks, plots, enclosures and the form, scale and massing of buildings. Development should be designed to integrate with existing streets and public spaces, and buildings configured to create clearly defined active public frontages*
  - *Reflect or, in a contemporary design response, re-interpret local distinctiveness, including elements of construction, elevational detailing, windows and doors, building and surfacing materials, mass, scale and colour palette*
  - *Promote permeable, accessible and easily understandable places by creating spaces that connect with each other, are easy to move through and have recognisable landmark features*
  - *Demonstrate a holistic approach to the design of the public realm to create high quality and multi-functional streets and places that promotes pedestrian movement and integrates different modes of transport, parking and servicing. The principles set out in*
  - *The Manual for Streets should be followed*
  - *Consider the amenity of both existing and future development, including matters of privacy, outlook, natural lighting, ventilation, and indoor and outdoor space*
  - *Limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation*
  - *Be compatible with up to date urban design principles, including Building for Life, and achieve Secured by Design accreditation*
  - *Consider sustainable design and layout at the masterplanning stage of design, where building orientation and the impact of microclimate can be considered within the layout*
-

- *Incorporate energy efficient design and sustainable construction techniques, whilst ensuring that the aesthetic implications of green technology are appropriate to the context (also see Policies ESD 1 - 5 on climate change and renewable energy)*
- *Integrate and enhance green infrastructure and incorporate biodiversity enhancement features where possible (see Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment and Policy ESD 18 Green Infrastructure ).*
- *Well designed landscape schemes should be an integral part of development proposals to support improvements to biodiversity, the micro climate, and air pollution and provide attractive places that improve people's health and sense of vitality*
- *Use locally sourced sustainable materials where possible.*

## 7.3 ASSESSMENT METHODOLOGY & SIGNIFICANCE CRITERIA

### Assessment Methodology

- 7.3.1 The methodology adopted here for assessing predicted changes to the historic environment follows the guidance provided in the Highways Agency's (DfT 2007) Design Manual for Roads and Bridges (DMRB). This methodology was designed for the assessment of impacts resulting from road construction, but it is also a useful approach to the assessment of other development schemes. The original methodology was developed in consultation with the key historic environment stakeholders in the UK, including English Heritage (now Historic England), Historic Scotland, Cadw, The Environment and Heritage Service of Northern Ireland, and the Institute for Archaeologists (now the Chartered Institute for Archaeologists - ClfA). The original methodology has also been adapted for this assessment to take cognisance of the updated national planning policy contained within the National Planning Policy Framework (NPPF) and more recent guidance concerning assessment of significance and impacts to setting (English Heritage 2008; English Heritage 2011).
- 7.3.2 The methodology identifies three cultural heritage 'sub-topics', each with its own assessment methodology: Archaeological Remains, Historic Buildings and Historic Landscape.

### Magnitude of Change

- 7.3.3 The scale and magnitude of change to cultural heritage assets can be assessed using the five tier grading system presented below in Tables 1-3.

**Table 1: Factors in the Assessment of the Magnitude of Change for Archaeological Remains**

Magnitude	Description
Major	<ul style="list-style-type: none"> <li>• Changes to most or all key archaeological elements, such that the resource is totally altered</li> <li>• Comprehensive changes to setting (where this affects the significance of the asset).</li> </ul>

Moderate	<ul style="list-style-type: none"> <li>Changes to many key archaeological elements, such that the resource is clearly modified</li> <li>Considerable changes to setting (where this affects the significance of the asset)</li> </ul>
Minor	<ul style="list-style-type: none"> <li>Changes to key archaeological elements, such that the asset is slightly altered</li> <li>Slight changes to setting (where this affects the significance of the asset).</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>Very minor changes to elements or setting (where this affects the significance of the asset)</li> </ul>
No Change	<ul style="list-style-type: none"> <li>No change.</li> </ul>

**Table 2: Factors in the Assessment of the Magnitude of Change for Historic Buildings**

Magnitude	Description
Major	<ul style="list-style-type: none"> <li>Changes to key historic building elements such that the resource is totally altered</li> <li>Comprehensive changes to setting (where this affects the significance of the asset).</li> </ul>
Moderate	<ul style="list-style-type: none"> <li>Changes to many key historic building elements, such that the resource is significantly modified</li> <li>Changes to the setting of an historic building, such that it is significantly modified (where this affects the significance of the asset).</li> </ul>
Minor	<ul style="list-style-type: none"> <li>Changes to key historic building elements, such that the asset is slightly different</li> <li>Changes to the setting of an historic building, such that it is noticeably changed (where this affects the significance of the asset)</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>Slight changes to historic building elements or setting that hardly affect it.</li> </ul>
No Change	<ul style="list-style-type: none"> <li>No change to fabric or setting.</li> </ul>

**Table 3: Factors in the Assessment of the Magnitude of Change for Historic Landscapes**

Magnitude	Description
Major	<ul style="list-style-type: none"> <li>Change to most or all key historic landscape elements, parcels or components</li> <li>Extreme visual effects</li> <li>Gross change of noise or change to sound quality</li> <li>Fundamental changes to use or access: Resulting in total change to historic landscape character unit.</li> </ul>
Moderate	<ul style="list-style-type: none"> <li>Changes to many key historic landscape elements, parcels or components</li> <li>Visual change to many key aspects of the historic landscape</li> </ul>



Magnitude	Description
	<ul style="list-style-type: none"> <li>• Noticeable differences in noise or sound quality</li> <li>• Considerable changes to use or access: Resulting in moderate changes to historic landscape character.</li> </ul>
Minor	<ul style="list-style-type: none"> <li>• Changes to few key historic landscape elements, parcels or components</li> <li>• slight visual changes to few key aspects of historic landscape</li> <li>• limited changes to noise levels or sound quality</li> <li>• slight changes to use or access: Resulting in limited changes to historic landscape character.</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>• Very minor changes to key historic landscape elements, parcels or components</li> <li>• Virtually unchanged visual effects</li> <li>• Very slight changes in noise levels or sound quality</li> <li>• Very slight changes to use or access: Resulting in a very small change to historic landscape character.</li> </ul>
No Change	<ul style="list-style-type: none"> <li>• Very minor changes to key historic landscape elements, parcels or components</li> <li>• No visual or audible changes</li> <li>• No changes arising from amenity or community factors.</li> </ul>

### The Value of Heritage Assets

7.3.4 In order to assess the significance of the different magnitudes of change resulting from the proposed development, the above factors have to be weighed against the value of each cultural heritage asset. This 'value' is broadly equivalent to an asset's significance in NPPF terminology, but the term 'value' has been retained here in order that this is not confused with the significance of effects which is discussed in paragraphs 7.3.6-7.3.7 below. In addition to the DMRB methodology, 'heritage values' were also assessed in accordance with the guidance contained within Conservation Principles (English Heritage 2008). The DMRB tables 4-6 below have also been modified to bring them into accordance with NPPF paragraph 132 which states that heritage assets 'of the highest significance' include scheduled monuments, protected wreck sites, battlefields, grade I and II\* Listed Buildings, grade I and II\* parks and gardens, as well as World Heritage Sites. Consequently all of these assets have been grouped into the single category of 'high' value rather than 'high' and 'very high' as in DMRB.

7.3.5 Cultural heritage assets can include archaeological sites, historic buildings, and/or historic landscapes, and different criteria are provided in the DMRB guidance for establishing a value for each of these assets, as tabulated in Tables 4-6 below:

**Table 4: Factors for Assessing the Value of Archaeological Assets**

<b>Value</b>	<b>Criteria</b>
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> <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>
Negligible	<ul style="list-style-type: none"> <li>• Assets with very little or no surviving archaeological interest</li> </ul>
Unknown	<ul style="list-style-type: none"> <li>• The importance of the asset cannot be ascertained</li> </ul>

**Table 5: Criteria for Establishing Value of Historic Buildings**

<b>Value</b>	<b>Criteria</b>
High	<ul style="list-style-type: none"> <li>• Standing structures inscribed as of universal importance as World Heritage Sites</li> <li>• Other buildings of recognised international importance</li> <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 association</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 that contribute significantly to its historic character</li> </ul>

Value	Criteria
	<ul style="list-style-type: none"> <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 historical significance</li> </ul>

**Table 6: Evaluating Historic Landscape Character**

Value	Criteria
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> <li>Designated historic landscapes of outstanding interest</li> <li>Undesignated historic 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 factors</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 sensitivity 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>

## Significance Criteria

7.3.6 The ES classifies the effect of the development (both positive and negative impact) using the following measures:

- i. Substantial<sup>1</sup> beneficial
- ii. Moderate<sup>2</sup> beneficial
- iii. Minor<sup>3</sup> beneficial
- iv. Neutral/negligible
- v. Minor<sup>3</sup> adverse
- vi. Moderate<sup>2</sup> adverse
- vii. Substantial<sup>1</sup> adverse

7.3.7 Table 7 below has been adapted from the DMRB 'Significance of Effects' matrix to accord with the terminology described above, and with the definition of 'heritage assets of the highest significance' provided in NPPF (DCLG 2012, 31).

**Table 7: Significance of Effects Matrix**

VALUE/SENSITIVITY	High	Neutral/ Negligible	Minor	Minor/ Moderate	Moderate/ Substantial	Substantial
	Medium	Neutral/ Negligible	Neutral/ Minor	Minor	Moderate	Moderate/ Substantial
	Low	Neutral/ Negligible	Neutral/ Minor	Neutral/ Minor	Minor	Minor/ Moderate
	Negligible	Neutral/ Negligible	Neutral/ Negligible	Neutral/ Minor	Neutral/ Minor	Minor
	No change	Negligible	Minor	Moderate	Major	
MAGNITUDE OF CHANGE (Beneficial or adverse)						

<sup>1</sup> **Substantial** - considerable effects (by extent, duration or magnitude) or of more than local significance or breaching identified standards or policy.

<sup>2</sup> **Moderate** - limited effects which may be considered significant.

<sup>3</sup> **Minor** - slight, very short or highly localised effects.

## 7.4 BASELINE CONDITIONS

### Archaeological and Historical Background

- 7.4.1 The desk-based assessment (Appendix 7.1) considered the archaeological and historical background of the proposed development area (PDA) together with a wider 1km study area, and elements of this work is drawn on in the discussion which follows.

### The Prehistoric and Romano-British Periods

- 7.4.2 The earliest recorded remains in the wider study area beyond the PDA date to the Neolithic period. A Neolithic causewayed enclosure (HER no. MOX4460) has been identified in aerial photographs to the west of the site at Wykham Farm. Two pits (HER no. MOX12816) were also identified in a watching brief within 100m of the enclosure. The earlier pit, from the Early Neolithic period, is believed to have been contemporary with the enclosure, while the later pit dated to the Late Neolithic period. This may be indicative of continued or seasonal occupation of the enclosure throughout the Neolithic period.
- 7.4.3 To the west of the PDA and beyond the concentration of Neolithic activity, a potential Bronze Age curvilinear enclosure (HER no. MOX24691) has been identified in aerial photographs. Also from aerial photographs, two round barrows (HER no. MOX12183) have been identified within 60m of the western edge of the development site, although the crop marks could also represent earlier hengiform monuments or causewayed ring enclosures. Round barrows are often associated with both cremation and inhumation burials.
- 7.4.4 Iron Age activity has been identified in small settlements located to the west (HER no. MOX24118 and ARS no. ARS07) and east (HER no. MOX 23935) of the site. These settlements had an agricultural basis and probably continued in use into the Romano-British period. The dominance of mid to late Iron Age activity may be a result of increased flooding of river valleys at this time (Lang 2010), with abandonment of lower-lying land in favour of more elevated land, such as that in the study area.
- 7.4.5 Romano-British activity within the wider study area is dominated by the presence of Roman Roads: one (NHRE no. 1028401) along the southern edge of the site – approximately along the alignment of Wykham Lane and Weeping Cross, and the other oriented south-west to north-east to the north of the PDA (NHRE no.1035203). Beyond this, Romano-British activity is sparse with a ditch and gully (HER no. MOX23937) recorded 700m to the east of the PDA and a findspot (HER no. MOX4409) in the Sor Brook valley to the south of the site, although the nature of the findspot is uncertain. Beyond the wider study area, a probable villa has been identified 130m to the west of the site, to the south of Wykham Lane (OAU 2001). The pattern for settlement in Roman north Oxfordshire was generally of larger, affluent villas, probably with large estates in their hinterland. They often date to earlier periods than elsewhere in the country (Booth 2010).

## The Medieval Period

- 7.4.6 The earliest records for Bodicote are from the early medieval period and indicate that it was a small settlement within the parish of Adderbury. The etymology of Bodicote (Old English meaning 'Boda's shelter) indicates that the settlement originated at this time. Indeed, most place names in the vicinity have an Anglo-Saxon origin (e.g. Banbury, Adderbury, Bloxham). The earliest medieval activity within the wider study area is attested by coarse late Saxon pottery (HER no. MOX4444) found 225m to the south of the PDA and this represents the only known early medieval activity. There is some suggestion that Bodicote was an offshoot of the larger settlements of Adderbury by freemen, as evidenced by differences in their respective organisation (Lobel and Crossley, 1969). It has been shown that early medieval boundaries often used, as reference points, prehistoric barrows (Ford 1984) such as those 60m to the west of the PDA (HER no. MOX12183).
- 7.4.7 Bodicote is mentioned in the Domesday Book (1086) as having three manors tenanted by Walter Giffard, Robert of Tosny and the Count of Evreux. The manors were worth a total of £5, which was a rise of ten shillings on their value in 1066. Twelve households are recorded in the settlement, including two households of villagers, eight households of smallholders and two households of slaves. The estates were reckoned to have land available for 4.5 plough teams, although only three plough teams were extant, suggesting that the land was under-cultivated. Traces of extensive ridge and furrow farming have been located at College Fields, 300m to the east of the site (WYAS 2005, HER no. EOX3097), and in the land between Wykham Farm and the Salt Way, immediately to the west of the site (Cotswold Archaeological Trust 2012, HER no. MOX24118; Cotswold Archaeology 2013, ARS07).
- 7.4.8 The overlordship of Bodicote belonged to William Marshal from 1190 as part of his inheritance from the de Clare family and in 1245 passed to the Earldom of Oxford until 1632. It was tenanted by the Holcot family from 1242 until the early 18th century. In a 1327 assessment, it was recorded that half of the tax contributors for that year paid 2-5 shillings, which gives an impression of a reasonably wealthy community, possibly benefiting from its location 3km from the market town of Banbury and from the rural market at Adderbury (granted in 1218). A sizeable, probably late medieval, building has been suggested 800m to the south-west of the PDA (CBA South Midlands Group 1998, HER No. EOX2811).
- 7.4.9 The Black Death would have arrived in Oxfordshire in 1349 and experienced higher than usual casualties – five per cent of Oxfordshire's settlements were abandoned compared with an English average of 1.5 per cent (Mileson 2010). The resulting drop in population created the opportunity for estate owners to start enclosing their land for the rearing of animals. By 1495, much of Adderbury parish had been turned over to pastoral use. However, the population of Bodicote actually expanded during the 14th century (Lobel and Crossley 1969) and so may have bucked the parish trend for enclosure.
- 7.4.10 The settlement of Bodicote did not possess its own burial ground throughout the medieval period and bodies were taken to Adderbury for burial instead of to the medieval chapel in Bodicote, components of which are still extant at the church of St. John the Baptist (HER No. MOX4423). It is

believed that pall-bearers at funerals would stop at the Weeping Cross (HER No. MOX4406), which stood at the junction of the main roads to Oxford and Buckingham and takes its name from the Old English for way (weg) but this monument has not been extant since the 19th century (Gepp 1924). The site is also adjacent to the Salt Way along its northern boundary, which is believed to have been the main carriageway for the salt trade between Droitwich and London. The veracity of this information is uncertain, however, as the designation of this route appears to owe its existence of the Third Edition of the Ordnance Survey (OS) in 1924 rather than any physical archaeological evidence.

### **The Post-medieval and Modern Periods**

- 7.4.11 The area around the site, from Cropredy in the north (north of Banbury) to Adderbury just south of Bodicote, was strategically important throughout the First English Civil War as it was the location of several crossings of the River Cherwell. During 1643, Adderbury parish was occupied by cavalry under the command of the Earl of Northampton, who raised the siege of the Royalist garrison in Banbury that year. By the autumn of 1644, it had become occupied by Parliamentary troops who had begun to besiege Banbury again (Lobel and Crossley 1969).
- 7.4.12 In 1675, Ogilby's map of the road from Oxford to Ashby-de-la-Zouche showed the land around Bodicote to be 'arable' (sic). However, the development of the weaving industry in Banbury and the plush industry in nearby Shutford would have encouraged the enclosure of land for pastoral use. This occurred in 1768 after the Duke of Argyll had purchased much of the land in the area. Prior to this, Bodicote had been the location of plentiful common pasture (Lobel and Crossley 1969). The opening of the Oxford Canal (1100m to the north-east of the site) in 1790 encouraged the diversification of industry and the export of goods. By 1841, at least 15 families in Bodicote were involved in cloth production industries (Lobel and Crossley 1969). There is also evidence for some degree of mechanisation within the parish as Luddites are recorded as having come from Banbury to smash machinery. Indeed, Bodicote Mill (MOX4396) on the Sor Brook to the south of the PDA was constructed in the late 18th century.
- 7.4.13 The enclosure of the fields also had the effect of significantly moving the alignment of the main roads around the village. The Oxford Road was turnpiked in 1755, which allowed it to maintain its significance whilst the Salt Way continued as a track way. A toll house was located on the Oxford Road (MOX4438). The earliest map available of any detail is Davies' New Map of the County of Oxford from 1797 (Figure 5). This shows the Salt Way, White Post Road and Wykham Lane (none named on the map), as well as 'Wickham Farm' and the extent of Bodicote – narrower east to west than present but forming a linear settlement along the Main Road. It also shows a distinction between extant hedgerow boundaries along the northern (ARS21) and eastern (ARS19) boundaries of the site, and non-hedgerow boundaries; although it is unlikely that all field boundaries are shown.
- 7.4.14 The village of Bodicote experienced a 35% population increase between 1801 and 1831, from 574 to 779 people (Lobel and Crossley 1969). This is represented in the study area by the preponderance

- of post-medieval buildings in the village and beyond that are built of local stone and give the village its character.
- 7.4.15 The First Edition OS map of 1882 (see Appendix 7.1 for historic OS maps) shows the PDA site with hedgerows on all sides, with three hedged internal boundaries. The middle plot of the PDA is shown with its current boundaries and contains two small buildings in its north-east corner, whilst the eastern plot is shown containing open woodland and a tank on its northern boundary. The vicarage is shown just beyond the northern site boundary, with four auxiliary buildings and ordered gardens to the rear. The western plot was divided into larger southern and smaller northern plots. The site was surrounded at this time by agricultural fields in all directions, whilst White Post Road and Wykham Lane are shown as being retained roads and the Salt Way is shown as a track way.
- 7.4.16 The Second Edition OS map of 1900 shows the northern portion of the eastern plot partitioned. The western fields had been united into one large plot and it is shown that they were used as allotments, with a pump located towards the centre of the field. Two small buildings (ARS38) are also shown in the western field. The Third Edition OS map of 1923 noted the Salt Way by name for the first time. A record of field names from 1955 shows the central field named as the 'White Post Ground', whilst the western field was named as 'The Long Ground' in the north and 'Gold Hill' in the south. The fact that the western field had two names suggests that the names date to before the combination of those fields, in other words before 1900. Whilst The Long Ground is named after the shape of the field and the White Post Ground is named after a post-medieval or modern feature, it is not clear what Gold Hill refers to.
- 7.4.17 The 1966 Edition OS map showed that the allotments currently in the south-west corner of the site were extant by this time. Part of the western field had also been subsumed into the central field. Two of the auxiliary buildings around the vicarage had been demolished. The housing estate to the north of the site had been built to within 100m of the site boundary and was completed by 1984, as shown by the OS map of that year. Land to the east and south-east of the site was developed for a school, housing and a recreation ground.
- 7.4.18 By 1989, all buildings on the site had been demolished and by 1993 the current boundary between the central and western fields was reinstated. Bodicote Cricket Club was founded in 2002 on land to the south-east of the PDA and access to the club was provided by an asphalt track along the southern boundary of the eastern plot, within the site boundary. An iron fence was constructed to delineate this land.

### **Previous Archaeological Investigations within the PDA**

- 7.4.19 A significant programme of archaeological assessment and evaluation has been undertaken within the PDA as part of this planning application (see Appendix 7.2 and 7.3) and includes geophysical survey and archaeological evaluation trenching.
- 7.4.20 A geophysical survey was undertaken across the three fields that comprise the PDA, totalling approximately 18 hectares (HER No.SOX5114).



7.4.21 The full report on the geophysical survey is provided in Appendix 7.2. The principal findings of the survey were:

- In the south-west corner of the PDA, a c.150m – 200m linear feature was identified bordering the western extent of three, rectilinear enclosures, in addition to multiple sub-oval and sub-circular anomalies identified in association with these enclosures. These features are thought to be part of a late Iron-Age/Romano-British settlement, possibly a farm complex.
- The possible remains of four circular features were identified within the north-central part of the PDA. Three of these features, c.15m in diameter, were thought to indicate remains of Iron Age roundhouses, with the fourth circular feature measuring c.40m in diameter and thought to date from the Neolithic or Bronze Age.
- Boundary ditches showing evidence for more than one phase of agricultural activity was identified across the entire site. Further evidence for field boundary ditches and possible pits were also recorded.

7.4.22 An extensive programme of evaluation trenching was undertaken within the PDA in 2014 (see full report in Appendix 7.3), comprising 73 trenches which were targeted to investigate and characterise the anomalies identified in the geophysical survey, as illustrated on Figure 1 (Appendix 7.5), as well as to sample 'blank' areas.

7.4.23 The principal findings of the programme of evaluation were:

- An Iron Age settlement in the south-west corner of the PDA. These features confirmed the presence of a mid-late Iron Age pastoral enclosure, which included evidence for a N-S aligned boundary ditch and smaller boundary ditches identified as either stock pens or domestic enclosures. In addition to these ditches, a number of domestic waste pits excavated from within the boundaries of the ditches suggested domestic activity associated with animal husbandry and butchery. The remains associated with this pastoral enclosure are located at an average depth of 0.35m below the current ground surface.
- The smaller, sub-circular ditches in the north-central parts of the PDA were interpreted as Iron Age ring gullies associated with settlement structures. The largest sub-circular feature, thought date from the Neolithic or Bronze Age, provided no definitive evidence to confirm this attribution, as no finds or dating evidence was recovered and the feature had been heavily eroded by agricultural activity.

### **Designated Heritage Assets**

#### *On Site*

7.4.24 There are no designated heritage assets within the PDA.

#### *Off-Site*

- 7.4.25 There are 39 Listed Buildings within the wider 1km study area, as depicted on Figures 3 and 4 (Appendix 7.5). The Church of St. John the Baptist (NHLE. No. 1277948) is Grade II\* Listed. This building is partially visible from the southern boundary of the site. Also partially visible from this area of the site, although outside the study area, are the Churches of St. Mary in Adderbury and Bloxham, both of which are Grade I Listed.
- 7.4.26 The other 35 Listed Buildings that lie within the Bodicote Conservation Area are Grade II Listed. One Grade II Listed Building, Wykham Farmhouse (NHLE No. 1046877), is visible from the western half of the site and five others are partially visible from the southern or eastern boundaries of the site: Old Barn House (NHLE No. 1248679), Old Barn Cottage (NHLE No. 1277817), The Paddocks and curtilage (NHLE Nos. 1248741 and 1277765) and the Lodge to Bodicote House (NHLE No. 1277788).
- 7.4.27 There is one designated Conservation Area within the wider 1km study area. This is the Conservation Area of Bodicote which lies to the south-east of the PDA. At its closest, it lies 130m south of the south-eastern corner of the PDA along White Post Road.
- 7.4.28 There are no Scheduled Monuments, Registered Parks and Gardens, Battlefields, Protected Wrecks or World Heritage Sites within the within the PDA or the wider 1km study area.

**Table 8: Listed Buildings within the wider 1km study area**

ID	NHLE ID	Name
ARS09	1046877	WYKHAM FARMHOUSE
ARS16	1200199	HORTON GENERAL HOSPITAL, MAIN ENTRANCE BLOCK FRONTING OXFORD ROAD
ARS57	1248370	BRISTOW HOUSE
ARS49	1248383	HERBAL HOUSE
ARS48	1248384	WESTWAY
ARS47	1248385	HOLLY TREE COTTAGE
ARS41	1248386	BAKER'S ARMS PUBLIC HOUSE
ARS43	1248399	HEADSTONE APPROXIMATELY 15 METRES SOUTH EAST OF PORCH OF CHURCH OF ST JOHN THE BAPTIST
ARS37	1248400	HEADSTONE DATED 169? APPROXIMATELY 15 METRES SOUTH OF PORCH OF CHURCH OF ST JOHN THE BAPTIST
ARS35	1248401	ROW OF 3 HEADSTONES APPROXIMATELY 5 METRES SOUTH OF PORCH OF CHURCH OF ST JOHN THE BAPTIST
ARS36	1248674	HEADSTONE TO LEFT OF HEADSTONE DATED 169? APPROXIMATELY 15 METRES SOUTH OF PORCH OF CHURCH ST JOHN THE BAPTIST
ARS59	1248677	DRAYCOT HOUSE
ARS60	1248678	CORNER COTTAGE THATCH STONE
ARS24	1248679	OLD BARN HOUSE
ARS26	1248702	TOWN FURLONG FARMHOUSE
ARS61	1248703	BODICOTE HOUSE
ARS54	1248705	BROWN THATCH
ARS53	1248707	IVY COTTAGE
ARS44	1248721	THE OLD BAKERY
ARS42	1248722	THE CLOSE
ARS46	1248723	THE HERMITAGE
ARS45	1248732	YEW TREE COTTAGE
ARS30	1248733	43, HIGH STREET
ARS31	1248734	17 AND 19, HIGH STREET
ARS33	1248735	REAPER'S COTTAGE
ARS39	1248740	THE OVEN
ARS27	1248741	THE PADDOCKS
ARS23	1249071	BODICOTE MILL

ARS34	1277760	GOOSE COTTAGE
ARS29	1277764	THE OLD FARMHOUSE
ARS28	1277765	WALL TO FRONT AND TO LEFT OF THE PADDOCKS
ARS51	1277788	LODGE TO BODICOTE HOUSE
ARS52	1277795	WALL TO IVY COTTAGE FRONTING HIGH STREET
ARS40	1277796	12, HIGH STREET
ARS58	1277815	WEST HOUSE
ARS56	1277816	FARM PLACE
ARS25	1277817	OLD BARN COTTAGE
ARS55	1277943	GARDEN WALL TO NORTH AND SOUTH OF BRISTOW HOUSE
ARS32	1277948	CHURCH OF ST JOHN THE BAPTIST

## **Non Designated Heritage Assets**

### ***Archaeological Remains***

#### *On Site*

- 7.4.29 The DBA (Appendix 7.1) identified two archaeological remains within the PDA itself, but subsequent phases of fieldwork including geophysical survey and evaluation trenching identified numerous other dated and undated archaeological features. The numbering of these newly discovered assets (ARS70-72) follows on from the gazetteer provided in the DBA. ARS69 represents the concentration of settlement remains in the south-western area of the PDA which produced a cluster of Mid-Late Iron Age features associated with a stock-farming settlement. ARS70 represents the large ring ditch of possible Early Bronze age or possibly earlier date which produced no dating evidence. ARS71 is the cluster of three ring ditches to the east of the larger ring ditch which produced both Mid-Late Iron Age pottery and Neolithic-Early Bronze Age flint, which are considered most likely to be Iron Age roundhouse drip gullies, although an earlier date cannot be ruled out. ARS72 refers to the numerous features across the remainder of the PDA, including ditches, gullies and pits which are mostly undated, although both Iron Age, post-medieval and modern finds have been recovered from the fills of these features.

**Table 9: Archaeological Remains within the PDA**

<b>ID</b>	<b>HER/NRHE ID</b>	<b>Description</b>	<b>Period</b>
ARS18	N/A	Two Late 19th Century Buildings Associated with the Vicarage (site of)	Post medieval
ARS20	N/A	Pump (site of)	Post medieval
ARS38	N/A	Two late 19 <sup>th</sup> century agricultural buildings (sites of)	Post medieval
ARS69	28318	Pastoral enclosures and settlement	Mid-Late Iron age
ARS70	28318	Ring ditch	Early Neolithic-Late Bronze age
ARS71	28318	Ring ditches	Iron Age/Romano-British?
ARS72	28318	Various ditches, gullies, pits and post holes	Undated

*Off Site*

- 7.4.30 The Desk Based Assessment (Appendix 7.1) identified a total of 15 non-designated archaeological remains within the wider 1km study area beyond the PDA. These are listed in Table 10 below, and their locations are illustrated on Figures 1 and 2 (Appendix 7.5).
- 7.4.31 It should also be noted that the trackway immediately to the north of the PDA is known as 'The Salt Way', and this is named after the salt traders' route between Droitwich and Princes Risborough which is known to have been in existence during the medieval period. The precise course of this historic routeway is not known, and consequently the route of Salt Way is not mapped as an archaeological feature on the Oxfordshire HER or depicted on Figure 1 (Appendix 7.5). Nevertheless, the possibility that the bridleway known as The Salt Way actually follows the line of the medieval routeway cannot be discounted.

**Table 10: Archaeological Remains within the wider 1km study area**

ID	HER/NRHE ID	HER entry	Period
ARS01	MOX24691	Possible Bronze Age or Iron Age enclosure	Bronze Age/Iron Age
ARS02	MOX24118	Late Iron Age farming settlement and medieval features at Bloxham Road	Late Iron Age
ARS05	MOX4279	Post Medieval Fishpond	Post medieval
ARS06	EOX2811	Wykham Park Farm Fieldwork (Roman pottery scatter identified during fieldwalking)	Roman
ARS08	MOX12816	Neolithic activity near Causewayed Enclosure on Wykham Farm	Neolithic
ARS10	1035203	Jurassic Way - Lincoln to Stamford Section of Prehistoric Route Linking Yorkshire and Somerset. Partly Utilised by Roman Roads	Prehistoric/Roman
ARS11	MOX4460	Neolithic Causewayed Enclosure (Wykham Farm)	Neolithic
ARS13	MOX12183	2 Bronze Age Round Barrows (c.100m N of Broughton/Bodicote Road)	Early Bronze Age
ARS15	MOX4409	Unspecified Roman Remains, Upper Grove Mill	Roman
ARS17	1028401	The Route of a Roman Road Running from Ettingdon to Finmere.	Roman
ARS22	MOX4444	Anglo Saxon Pottery (Clay Close, SW of Paddock Farm)	Early medieval
ARS63	MOX23935	Neolithic to Post Medieval features and LIA-Roman settlement, NW of Cotefield Farm	Neolithic, Late Iron Age, Roman, Post medieval
ARS65	MOX4438	Site of Weeping Cross Gate Toll House	Post medieval
ARS66	MOX4406	Site of Weeping Cross	Post medieval
ARS68	MOX23937	Roman ditch and gullies, College Fields	Roman
The Salt Way	PRN8857	Saxon saltways: Tysoe/Adderbury/Aynho	Medieval

### **Historic Buildings**

#### *On-Site*

7.4.32 There are no historic buildings within the PDA.

#### *Off-Site*

7.4.33 There are two non-designated historic buildings within the wider 1km study area beyond the PDA. These are illustrated on Figure 3 and listed in Table 11 below:

**Table 11: Historic buildings within the wider 1km study area**

<b>ID</b>	<b>HER/NRHE ID</b>	<b>Description</b>
ARS12	MOX4395	Upper Grove Mill Upper Grove Mill
ARS50	MOX4408	Wesleyan Methodist Chapel, East Street

**Historic Landscape**

## On-Site

- 7.4.34 The Historic Landscape Characterisation (HLC) for Oxfordshire has yet to be completed, and therefore there are no mapped HLC units for the PDA. Nevertheless, it is possible to gain an understanding of the HLC types within the PDA through historic map regression. It is considered likely that three fields within the PDA are of Parliamentary Enclosure type, with the large western field having undergone boundary loss resulting in it evolving into the Modern Agglomerated Field type. The Parliamentary Enclosure type is considered to be of low value, whilst the Modern Agglomerated Fields are considered to be of negligible value.

## Off-Site

- 7.4.35 As the HLC for Oxfordshire is yet to be completed, the historic character of the wider landscape was not assessed.

**7.5 POTENTIAL EFFECTS****Introduction**

- 7.5.1 This section provides information on the potential effects on environmental receptors associated with the PDA during the construction phase and the operational phase of the proposed development. The potential effects are discussed before being quantified.
- 7.5.2 The main categories of potential impacts to heritage assets during the construction phase of the development are:
- A - Removal or disturbance of heritage assets during site clearance (e.g. removal of vegetation, fencing, traffic movement, topsoil stripping);
  - B - Removal and compaction of heritage assets during construction and groundworks
  - C - The urbanisation of the landscape
  - D – Removal of historic landscape elements and changes in land use resulting in changes to historic landscape character
  - E – Changes to setting of heritage assets resulting in a potential loss of significance.

### During Construction

- 7.5.3 As part of the proposed construction programme there will be significant groundwork impacts across the site. Within those areas of the proposed development area where there will be construction and groundworks, there is the potential for a major adverse effect on the significance of heritage assets due to their destruction, truncation or disturbance (without mitigation).
- 7.5.4 It is proposed to maintain the south-western area of the site as green space which will involve the creation of a cricket pitch, and a children's play area. There is therefore the potential for preservation in situ of the regionally important Iron Age settlement remains that have been identified in this area. Planting is proposed along the western boundary of the PDA, and consequently there will be some impacts to buried archaeological remains where this is proposed.
- 7.5.5 Potential Impacts to the settings of Listed Buildings and Bodicote Conservation Area will occur once the development has been completed, but these effects will also begin to occur during the construction phase of the development. As these effects will potentially be the greatest after completion, these effects are addressed in the section below
- 7.5.6 Tables 12-14 below assesses the magnitude of change that is to be expected for each of the heritage receptors using the criteria outlined in Tables 1-3 above.

### Archaeological remains

**Table 12: Magnitude of Impact**

Receptor	Source of impact	Value of receptor	Magnitude of change (without mitigation)	Significance of effects (without mitigation)
ARS18	A, B	Low	Major adverse	Moderate adverse
ARS20	A, B	Low	Major adverse	Moderate adverse
ARS38	A, B	Low	Major adverse	Moderate adverse
ARS69	A, B,	Medium	Moderate adverse	Moderate adverse
ARS70	A, B	Medium	Major adverse	Substantial adverse
ARS71	A, B	Medium	Major adverse	Substantial adverse
ARS72	A, B	Low-medium	Major Adverse	Moderate-substantial adverse

- 7.5.7 The detailed design for the development is not yet available, and therefore a 'worst case scenario' of major adverse change has been assumed for those assets that are located in areas where housing



is proposed. In reality, it may be that elements of the archaeological remains could be preserved in situ within gardens or other areas of green space.

- 7.5.8 In summary, it is predicted that there will be moderate-substantial adverse effects for archaeological remains during construction in the absence of mitigation.

### **After Completion**

- 7.5.9 After completion, the main impacts are considered to be related to the settings of the Salt Way bridleway which possibly follows a medieval route way, the settings of the designated buildings within Bodicote Conservation Area, and changes to historic landscape character within the PDA.

### **Archaeological Remains**

- 7.5.10 The Salt Way (HER PRN 8857) is a non-designated heritage asset which is listed on the Oxfordshire HER, although its route has not been mapped by the local authority HER due to uncertainty over its course and the lack of any proven evidence for its position near the PDA. It therefore remains unproven that the Salt Way bridleway that skirts the northern boundary of the PDA actually follows the medieval route of the same name. However, even if this is in fact a surviving segment of the course of the medieval trackway, there has been attrition to the rural setting of this section of the route adjacent to the PDA due to the encroachment of development to the north. The visual impact of this development upon the views from this section of the bridleway to the south would experience change as a result of the proposed development from a current mixed rural vista to a more urbanised one resulting in a minor adverse change to the setting of an uncertain and disputed segment of the course of the Salt Way.
- 7.5.11 It is difficult to quantify the magnitude of change to this possible heritage asset as it is difficult to assess the significance of this non-designated heritage asset, and also how much of the medieval routeway is fossilized in the historic landscape along its course, but as the change to its setting would be limited to a short length of this bridleway and in one direction only, it is considered that at worst, this would be a minor adverse impact to a non-designated heritage asset.

**Table 13: Magnitude of Impact for archaeological remains**

<b>Receptor</b>	<b>Source of impact</b>	<b>Value of receptor</b>	<b>Magnitude of change (without mitigation)</b>	<b>Significance of effects (without mitigation)</b>
The Salt Way	E	Medium	Minor adverse	Minor adverse

## Historic Buildings

7.5.12 The DBA (Appendix 7.1) and Heritage Statement (Appendix 7.4) identified that only the settings of two Listed Buildings within Bodicote Conservation Area and two outside of it may be adversely affected by the proposed development, as detailed in Table 14 below:

**Table 14: Magnitude of Impact for historic buildings**

Receptor	Asset	Source of impact	Value of receptor	Magnitude of change (without mitigation)	Significance of effects (without mitigation)
ARS09	Wykham Farmhouse	E	Medium	Negligible adverse	Minor adverse
ARS32	Church of St. John the Baptist	E	High	Negligible adverse	Minor adverse
ARS51	Lodge to Bodicote Farm	E	Medium	Negligible adverse	Minor adverse
ARS54	Brown Thatch	E	Medium	Negligible adverse	Minor adverse

7.5.13 It was concluded in the Heritage Statement in Appendix 7.4 that there would be, at worst, a negligible adverse magnitude of change to each of the Listed Buildings as a result of the proposed development, whilst overall, there would be a minor adverse change to the Bodicote Conservation Area.

7.5.14 In summary, it is predicted that there will be minor adverse effects for historic buildings after completion in the absence of mitigation.

## Historic Landscape

**Table 15: Magnitude of Impact for the historic landscape**

Receptor	Source of impact	Value of receptor	Magnitude of change (without mitigation)	Significance of effects (without mitigation)
Parliamentary Enclosure Fields	C,D	Negligible	Moderate adverse	Minor adverse
Modern Agglomerated Fields	C,D	Low	Moderate adverse	Neutral

7.5.15 Both the large Modern Agglomerated Field at the western side of the PDA and the Parliamentary Enclosure Fields to the east will retain areas of green space as part of the development proposals, and it is proposed to retain the historically important hedgerows that survive along the northern and eastern boundaries of the PDA, and it is concluded that the development proposals would result in what are considered to be moderate adverse impacts to historic landscape character.

- 7.5.16 In summary, it is predicted that there will be minor adverse effects for the historic landscape after completion in the absence of mitigation.

## 7.6 MITIGATION MEASURES

### Introduction

- 7.6.1 This section provides recommendations for mitigation measures for the development site to off-set the effects on each of the historic environment receptors.

### During Construction

- 7.6.2 As previous phases of fieldwork have highlighted that there is high potential for archaeological remains to be encountered across the PDA it is proposed that prior to the commencement of the construction phase, a 'strip, map and sample' should be undertaken across areas of the PDA where there is the potential for impacts to below-ground archaeology. This fieldwork will be undertaken in close consultation with the Oxfordshire Planning Archaeologist, and to a methodology detailed in an agreed Written Scheme of Investigation that will be required by a reasonable planning condition.
- 7.6.3 It is proposed that much of the known prehistoric settlement remains of regional importance which are known to be present within the south-western area of the PDA will be preserved in situ beneath a cricket pitch. Those areas along the western boundary of the PDA where new planting is proposed would be subjected to 'strip, map and sample' excavation prior to the planting taking place, as well as any other areas of ground disturbance, such as the proposed play area'.
- 7.6.4 These measures will ensure that the impacts associated with the archaeological interests on the site will be minimised.
- 7.6.5 As part of the contextual analysis, constraints and identification of mitigation measures when formulating these proposals, the location of the built development has been located on the northern half of the site for a number of reasons, including maintaining a sufficient distance to the Bodicote Conservation Area and the Listed Buildings in Bodicote. This also allows the southern part of the site to be used for recreation purposes that do not impact upon these assets.

### After Completion

- 7.6.6 The programme of mitigation will include provision for the satisfactory reporting, archiving and dissemination of all archaeological work undertaken as part of the development. This will be undertaken in consultation with the local authority's Planning Archaeologist and the opportunity to disseminate previously unpublished fieldwork conducted on the site can be seen as a significant additional benefit for the current proposed programme.
- 7.6.7 A rigorous, targeted and question-led approach to the archaeological recording and dissemination is in line with NPPF paragraph 141 which states that local authorities '*should require developers to*

*record and advance understanding of the significance of heritage assets to be lost...and to make this evidence publicly accessible' (CLG 2012, 32).*

7.6.8 It is also proposed to set back the development along the northern boundary of the site and provide planting which would help to screen and filter views of the development from the Salt Way and help reduce the urbanising effect once the trees have matured.

7.6.9 In respect to the Salt Way, and in common with the proposals for the site to the west, a series of information boards recording the historic use of the Salt Way and any matters arising or finds following the additional archaeological investigations, can enhance public understanding and appreciation of these assets. These will reduce the residual significance of effect.

7.6.10 The design principles identified with the LVIA include:

*"The provision of a substantial area of undeveloped space within the southern section of the scheme will reduce the visual impact in long distance views from the south. This zone will comprise green infrastructure in the form of a cricket pitch oval relating to the adjacent land use and an informal neighbourhood park area providing a community focus for the surrounding new residential properties. The parkland setting will promote a village green style character with wide open amenity green space punctuated by groups of specimen parkland trees, along with a children's play area. To the south of this parkland area there will be a naturalistically designed attenuation basin framed by woodland blocks.*

*An extensive area of undeveloped space within the eastern section of the scheme will help prevent coalescence of the two urban centres and promote the distinctiveness of the Bodicote village. This zone will comprise green infrastructure in the form of a more formal parkland setting incorporating a recreational ground character thereby relating to the adjacent land use. A youth games court will be provided adjacent the existing recreational ground and a small parking facility will promote the green space as a community amenity."*

7.6.11 The commitments to Green Infrastructure/Landscape mitigation identified within the DAS include:

*"The setting of Bodicote Conservation Area, with its rural feel would largely be maintained due to the retention of the key views across fields and open land to the south and west as well as the retention of the cricket ground and recreation ground which would maintain open space between Bodicote and Banbury.*

*"The proposed landscape structure seeks to complement and enhance the site boundaries, reinforcing the existing vegetation that is to be retained to form a robust green edge to the application site. Native tree, shrub and hedge planting will be incorporated to the site boundaries maintaining the degree of containment afforded to the site. The Landscape & Visual Impact Assessment prepared by Aspect Landscape Planning Ltd identifies a number of key landscape principles which have been promoted as part of the development proposals, these include:*

- *Retention of existing vegetation structures around the site with margins of open space to maintain ecological connectivity around the site;*

- *Provision of a suitable landscape buffer in the eastern and southern site area to prevent the coalescence of Banbury and Bodicote;*
- *Creation of an appropriate green infrastructure, in order to create an attractive and appropriate development setting;*
- *Provision of public open space on the southern site boundary to create a softened transition between the proposed built form and the wider countryside setting;*
- *Enhancement of the northern and western site boundaries to provide an appropriate development setback from the Salt Way and heritage assets;*
- *Reinforcement of the landscape structures on boundaries that abut existing built form to the north through native tree and hedge planting, helping to create an appropriate green edge to the development and to filter views from existing residential properties;*
- *Creation of ecologically valuable corridors to existing and proposed field boundaries through creation of species rich margins and woodland edge, where appropriate;*
- *Tree planting within the residential area to break up the appearance of urban development, and within areas of proposed open space to increase level of tree cover generally within the site;*
- *Provision of extensive Public Open Space to the south of the application site offering opportunities for wildflower grassland, tree belts and marginal planting;*
- *Creation of a new footpath and seek opportunities to link the site with the wider footpath and cycle network where possible*

## **7.7 RESIDUAL EFFECTS**

7.7.1 Table 16 overleaf outlines the predicted residual effects that would result from the proposed development, with the above mitigation in place.

**Table 16: The significance of residual effects**

<b>Temporal Phase</b>	<b>Receptor</b>	<b>Significance of Receptor</b>	<b>Magnitude of Impact</b>	<b>Significance of Effects</b>
During construction	ARS18	Low	Major adverse	Minor adverse
During construction	ARS20	Low	Major adverse	Minor adverse
During construction	ARS38	Low	Major	Minor adverse
During construction	ARS69	Medium	Moderate adverse	Moderate adverse
During construction	ARS70	Medium	Major adverse	Moderate adverse
During construction	ARS71	Medium	Major adverse	Moderate adverse
During construction	ARS72	Low-Medium	Major adverse	Minor-Moderate adverse
During construction/ After completion	ARS09 (Listed Building)	Medium	Negligible adverse	Minor adverse Neutral/Minor Adverse
During construction/ After completion	ARS32 (Listed Building)	High	Negligible adverse	Minor adverse Neutral/Minor Adverse
During construction/ After completion	ARS54 (Listed Building)	Medium	Negligible adverse	Minor adverse Neutral/Minor Adverse
During construction/ After completion	ARS51 (Listed Building)	Medium	Negligible adverse	Minor adverse
During construction/ After completion	Bodicote Conservation Area	Medium	Minor adverse Negligible/Minor Adverse	Minor adverse Neutral/Minor Adverse
During construction/ After completion	Parliamentary Enclosure Fields	Low	Moderate adverse	Minor adverse
During construction/ After completion	Modern Agglomerated Fields	Negligible	Moderate adverse	Neutral
During construction/ After completion	The Salt Way bridleway (Non-Designated Heritage Asset)	Medium	Minor adverse Minor/Negligible Adverse	Minor adverse Minor/Neutral Adverse

## 7.8 SUMMARY & CONCLUSIONS

- 7.8.1 The Master Plan has been designed to respect the setting of nearby heritage assets and to effectively reduce the visual effects upon the historic resource.
- 7.8.2 During the construction phase of the development there will be moderate adverse effects upon three known archaeological remains of local importance, and a substantial adverse effect upon prehistoric remains of regional importance. In mitigation, the detailed archaeological recording of any assets physically impacted upon by the proposed development and the dissemination of any advances in archaeological understanding has the potential to provide information that could contribute to regional research objectives and public benefit. It is also proposed to secure the preservation of a considerable and, previously unknown, area of Iron Age archaeological remains in situ beneath a cricket pitch. With this mitigation in place, it is considered that the significance of the effects will be reduced to moderate adverse for archaeological remains.
- 7.8.3 There would be limited minor adverse effects to the settings of three Grade II Listed Buildings, one Grade II\* Listed Building and the Bodicote Conservation Area. These effects would begin to occur during the construction phase and be at their greatest after completion. Nevertheless, once planting has matured, these impacts would be reduced to minor/neutral adverse.
- 7.8.4 The positive benefits of the provision of information boards to record, explain and increase the level of public awareness of the Salt Way and the landscape buffer will both serve to reduce the residual significance of effect to minor/negligible adverse on this non-designated heritage asset.

## 7.9 REFERENCES

- Archaeological Services WYAS. 2005. College Fields, Banbury, Oxfordshire: Geophysical Survey. Unpublished document.
- Booth, P. 2010. Roman Oxfordshire. In Tiller, K. and Darkes, G. (eds.) An Historical Atlas of Oxfordshire. Oxford: Oxfordshire Record Society Volume 67: 16-17.
- CBA South Midlands Group. 1998. South Midlands Archaeology, Volume 28: 70.
- Chartered Institute for Archaeologists. 2012. Standards and Guidance for Historic Environment Desk Based Assessments. Reading: Institute for Archaeologists.
- Clarke (2013) Land South of Salt Way, Banbury, Oxfordshire: Cultural Heritage Desk-Based Assessment. Unpublished Report for ARS Ltd
- Cotswold Archaeology. 2012. Land East of Bloxham Road, Banbury: Archaeological Evaluation. CA Report 11326. Unpublished document.
- Cotswold Archaeology. 2013. Wykham Park Farm, Banbury, Oxfordshire. Archaeological Evaluation. CA Report 13581. Unpublished document.

Department for Transport. 2007. Design Manual for Roads and Bridges. Volume 11, Section 3, Part 2: Cultural Heritage.

Ford, S. 1984. The Excavation of a Ring-Ditch at North Stoke, Oxfordshire. *Oxoniensia*, Volume XLIX: 1-7.

Foundations Archaeology. 2005. College Fields, Bodicote, Banbury, Oxfordshire. Archaeological Evaluation. Foundations Archaeology Report No. 447. Unpublished document.

Gepp, H.J. 1924. Adderbury. Banbury: Banbury Guardian.

Hey, G. 2007. Unravelling the Iron Age landscape of the Upper Thames valley. In Haselgrove, C. and Moore, T. (eds.) *The Later Iron Age in Britain and beyond*. Oxford: Oxbow Books: 156-172.

Lang, A. 2010. Iron Age Oxfordshire. In Tiller, K. and Darkes, G. (eds.) *An Historical Atlas of Oxfordshire*. Oxford: Oxfordshire Record Society Volume 67: 14-15.

Lobel, M.D. and Crossley, A., 1969, Parishes: Adderbury. In Lobel, M.D. and Crossley, A. (eds.) *A History of the County of Oxford: Volume 9: Bloxham Hundred*: 5-44.

Milesion, S. 2010. Deserted and Shrunken Settlements. In Tiller, K. and Darkes, G. (eds.) *An Historical Atlas of Oxfordshire*. Oxford: Oxfordshire Record Society Volume 67: 56-57.

Northamptonshire Archaeology. 2010. An archaeological evaluation of land south of Blackwood Place and Molyneux Drive, and north-west of Cotefield Farm, Oxford Road, Bodicote, Oxfordshire. Northamptonshire Archaeology Report No. 10/203. Unpublished document.

Oxford Archaeological Unit. 2001. Tudor Hall School, Wykham Park, Banbury, Oxfordshire. Archaeological Watching Brief Report. Unpublished document.

Park, V. 2014. Heritage Statement for Land South of Salt Way, Banbury, Oxfordshire. Unpublished Report for ARS Ltd.



**Chapter 8: Traffic and Transport (The Project)**  
**Land West of White Post Road, Banbury**  
**ENVIRONMENTAL STATEMENT**  
**July 2015**

This page has been  
left intentionally  
blank

## 8.1 INTRODUCTION

- 8.1.1 This chapter describes the impacts on transport and movement that are predicted from the proposed residential development on land west of White Post Road (henceforth referred to as the Project).
- 8.1.2 A Transport Assessment (TA) and Travel Plan (TP) have been prepared by Ashley Helme Associates (AHA) and accompany the OPA submitted to Cherwell District Council (CDC). The TA and TP will be reviewed by officer at Oxfordshire County Council (OCC), which is the highway authority. The TA and TP are appended in ES Volume 2, Appendix A8.
- 8.1.3 The Project will generate additional travel demands by all modes of transport. The TA (ES Vol 2, Appendix 8.1) assesses the ability of the existing transport infrastructure to accommodate these additional travel demands. The starting point for assessment is to establish baseline conditions, i.e. the conditions that will prevail if the Project does not proceed. The transport impact of the Project is established by comparison of the baseline conditions with those predicted when the Project becomes operational.
- 8.1.4 This chapter (and the TA) concentrates largely on peak hour conditions when transport networks generally experience the greatest traffic demands.

## 8.2 METHODOLOGY

### Significance Criteria

- 8.2.1 The nature of each residual transportation impact has been established, the significance of each impact is assessed as:
- Beneficial - Meaning that they produce environmental benefits in transportation terms, i.e. where overall traffic flows or percentage HGV decrease, where the performance of the local highway network is predicted to improve or there are improved facilities for pedestrians, cyclists or public transport users.
  - Negligible - Meaning that changes are too small to meaningfully measure.
  - Adverse - Meaning that they produce environmental dis-benefits in transportation terms, i.e. where overall traffic flows or percentage HGV increase, where the performance of the local highway network is predicted to decline or there are reductions in facilities for pedestrians, cyclists or public transport users.
- 8.2.2 Beneficial and adverse effects are further characterised as:
- Slight - Slight very short or highly localised changes of no significance.
  - Moderate - Limited change by extent, duration or magnitude which may be considered significant.
  - Substantial - Considerable change by extent, duration or magnitude of more than local significance or in breach of recognised acceptability, legislation, policy or standards.

8.2.3 The effects are either long or short term, typically with the effects of construction traffic deemed short term and those associated with the operational stages of the proposed development as long term.

#### **Assessment Scenarios**

8.2.4 2013 & 2015 are adopted as the baseline years for this assessment. The AHA TA (ES Vol 2, Appendix 8.1) includes assessment of the impact of the Project generated traffic on the study network of junctions for a future year of 2025. OCC highways officers have also requested that testing be undertaken for the situation in which there is a link road connection between White Post Road and Bloxham Road (as depicted in the supporting application material) and all of the Banbury 17 allocation sites come forward. This test is referred to herein as the OCC Sensitivity Test and further details of this are provided later in this chapter.

8.2.5 The computer programme ARCADY has been used to analyse and predict the performance of the roundabout study junctions. PICADY has been used to analyse priority controlled junctions and LINSIG has been used for traffic signal analysis.

#### **Baseline Data Collection**

8.2.6 The starting point of the assessment is to establish baseline transport conditions for all modes of travel. This requires the collection/gathering of a range data set out herein.

#### **Data Sources**

8.2.7 Traffic surveys were undertaken by AHA in 2013 & 2015 to establish the AM & PM peak hour traffic flows on the local study network.

8.2.8 Accident data for the study network, covering the period 01 January 2012 to 31 April 2015, were purchased from OCC.

8.2.9 Digital plan data were obtained from Ordnance Survey.

8.2.10 Neighbourhood statistics were derived from an interrogation of 2011 Census data.

8.2.11 Estimates of the Project generated traffic were derived from an interrogation of the TRICS database.

#### **Highway Audit**

8.2.12 AHA has undertaken an audit of the existing highway arrangements for the study network. A summary of the audit is presented in AHA TA (ES Vol 2, Appendix 8.1) and includes the following information:

- Road markings,
- Waiting restrictions,
- Traffic sign audit,
- Geometry for study junctions.

### **Pedestrian Accessibility Audit**

- 8.2.13 Figure 4 of the AHA TA (ES Vol 2, Appendix 8.1) presents the existing Public Rights of Way (PROW) near to the Project. This shows that there is a restricted byway along the northern boundary of the Project, and a bridleway close to the western Project site boundary. There are a number of footpaths connecting the restricted byway to the residential area to the north of the Project.
- 8.2.14 There is an existing footpath within the Project Site between the restricted byway and Wykham Lane. This will be maintained and improved as part of the proposed development. Improvements may include, for example, a sealed surface, street lighting etc. The on-site layout will be subject of a reserved matters application.
- 8.2.15 Figure 4 the AHA TA (ES Vol 2, Appendix 8.1) shows that there is an extensive network of PROW in the vicinity of the Project providing convenient pedestrian routes to a range of local amenities.

### **Cycle Accessibility Audit**

- 8.2.16 Figure 6 of the AHA TA (ES Vol 2, Appendix 8.1) indicates formally identified cycle routes in the locale of the Project Site. These include:
- National Cycle Network Route 5 (NCN 5): Reading to Holyhead via Oxford,
  - A local signed on-road route linking the Project and NCN 5 to Banbury Rail Station.

### **Public Transport**

- 8.2.17 Public transport travel to/from the Project is available by bus and rail. Baseline public transport accessibility has been established with reference to the following documents produced by the Chartered Institution of Highways & Transportation:
- Planning for Public Transport in Development, and
  - Providing for Journeys on Foot.

### **Bus**

- 8.2.18 An audit of all bus stops within a 5 and 10 minute walk of the Project has been undertaken. A review of services calling at these stops has been undertaken to establish routes and frequency of service.

### **Rail**

- 8.2.19 The Project site lies circa 2.5km from Banbury Rail Station. An audit of timetable information has been undertaken to establish service frequency, route and stations on-route.

### 8.3 PLANNING POLICY CONTEXT

8.3.1 A general thrust of current national and local policies is to promote and deliver sustainable transport objectives. This Chapter, in considering transportation effects, has paid due regard to the range of policy documents and considerations, including:

National Planning Policy Framework (NPPF), March 2012;

Planning Practice Guidance (PPG), March 2014;

The Cherwell Local Plan 2011 - 2031;

Cherwell Local Plan, 1996;

Oxfordshire Local Transport Plan 2011-2030

Draft Local Transport Plan 4 2015.

8.3.2 A more detailed review of these documents is undertaken in Chapter 2 of the AHA TA (ES Volume 2, Appendix A8.1) and in Chapter 4 of this ES.

### 8.4 BASELINE CONDITIONS

#### Local Highway Network

8.4.1 The identified TA study network of junctions is agreed with the highway authority and comprises:

SJ1	Site Access/White Post Road	
SJ2	Bankside/ Oxford Rd N'bound Slips/White Post Rd/Sycamore Drive	roundabout
SJ2A	Oxford Road/Northbound Slips	priority
SJ3	Oxford Road On & Off Slips/Bankside	priority/r'bout
SJ3A	Oxford Road/Southbound Slips	priority
SJ4	Broad Gap/Oxford Road/Canal Road	priority
SJ5	Weeping Cross/Oxford Road	traffic signals
SJ6	Broad Gap/High Street	priority
SJ7	Wykham Lane/White Post Road/High Street	priority
SJ8	Hightown Road/Oxford Road/Horton View	traffic signals
SJ9	Upper Windsor Street/Oxford Road	traffic signals
SJ10	Bloxham Road/South Bar Street/Oxford Road	traffic signals
SJ11	High Street/South Bar Street/ West Bar Street/Horse Fair	roundabout
SJ12	Castle Street/North Bar Street/Warwick Road/Southam Road	traffic signals
SJ13	Swan Close Road/Upper Windsor Street	traffic signals
SJ14	Bridge Street/Windsor Street/Cherwell Street	traffic signals
SJ15	Cherwell Street/Hennef Way	roundabout.

8.4.2 A detailed description of the local highway network is set out in Chapter 3 of the AHA TA (ES Vol 2, Appendix 8.1).

### Traffic Counts

8.4.3 The traffic count surveys were undertaken at the TA Study Junctions as follows:

- SJ 2 - 3: 11 September 2013,
- SJ4-8 & SJ13-15: 21 May 2015,
- SJ9 – SJ12 11 July 2013.
- 

8.4.4 The identified peak hours for the study network of junctions are:

- AM 0800-0900,
- PM 1645-1745.

### Traffic Flows

8.4.5 Table C8.1 presents the estimates of Annual Average Daily Traffic (AADT) flows for the count years (2013 & 2015) on the study network of roads.

Link		2-Way AADT Traffic Flow (Vehicles)
Name	Location	
Site Access	SJ1	-
White Post Road	SJ1 (North arm)	7497
White Post Road	SJ1 (South arm)	7497
Sycamore Drive	SJ2 (North arm)	4732
Bankside	SJ2 (East arm)	9377
Northbound slips	SJ2 (South arm)	3785
Bankside	SJ2 (West arm)	7497
Southbound slips	SJ3 (North arm)	4609
Bankside	SJ3 (East arm)	10496
College Fields Dev	SJ3 (South arm)	-
Bankside	SJ3 (West arm)	9525
Oxford Road	SJ4 (North arm)	21864
Canal Lane	SJ4 (East arm)	147
Oxford Road	SJ4 (South arm)	22442
Broad Gap	SJ4 (West arm)	2237
Oxford Road	SJ5 (North arm)	21962

Link		2-Way AADT Traffic Flow (Vehicles)
Name	Location	
College Fields Dev	SJ5 (East arm)	-
Oxford Road	SJ5 (South arm)	21667
Weeping Cross	SJ5 (West arm)	2630
High Street	SJ6(North arm)	4117
Broad Gap	SJ6(East arm)	1880
High Street	SJ6 (South arm)	2605
White Post Road	SJ7 (North arm)	4596
High Street	SJ7 (South arm)	4117
Wykham Lane	SJ7 (West arm)	4560
Oxford Road	SJ8 (North arm)	19799
Hightown Road	SJ8 (East arm)	6907
Oxford Road	SJ8 (South arm)	21888
Horton View	SJ8 (West arm)	6415
Oxford Road	SJ9 (North arm)	16850
Upper Windsor Street	SJ9 (East arm)	9279
Oxford Road	SJ9 (South arm)	19222
Oxford Road	SJ10 (North arm)	17206
Oxford Road	SJ10 (South arm)	16383
Bloxham Road	SJ10 (West arm)	12007
Horse Fair	SJ11 (North arm)	19148
High Street	SJ11 (East arm)	8972
South Bar Street	SJ11 (South arm)	15817
West Bar Street	SJ11(West arm)	9279
Southam Road	SJ12 (North arm)	11835
Castle Street	SJ12 (East arm)	8984
North Bar Street	SJ12 (South arm)	19934
Warwick Road	SJ12(West arm)	11086
Cherwell Street	SJ13 (east Arm)	21815
Swan Close Road	SJ13 (South arm)	14306
Upper Windsor Street	SJ13 (west arm)	10115
Concord Avenue	SJ14 (North arm)	25403
Bridge Street	SJ14 (East arm)	3183



Link		2-Way AADT Traffic Flow (Vehicles)
Name	Location	
Cherwell Street	SJ14 (South arm)	19811
Bridge Street	SJ14(West arm)	15805
Unnamed Road	SJ15 (North arm)	1549
Hennef Way	SJ15 (East arm)	52724
Concord Avenue	SJ15 (South arm)	22650
Hennef Way	SJ15(West arm)	40323

Table C8.1: Baseline Traffic, 2013 &amp; 2015, AADT

### Highway Safety

8.4.6 The AHA TA (ES Vol 2, Appendix 8.1) includes a review of accidents occurring in the vicinity of the Project in the period covering 01 January 2012 to 31 April 2015. The data cover 3 years and 4 months and was provided to AHA by OCC in this format. There are a total of 41 recorded accidents on the study network, as follows:

- White Post Road (near Project): 1 accident,
- SJ2: 1 accident,
- SJ2A: 0 accidents,
- SJ3: 0 accidents,
- SJ3A: 0 accidents,
- SJ4: 1 accident,
- SJ5: 2 accidents,
- SJ6: 0 accidents,
- SJ7: 0 accidents,
- SJ8: 3 accidents,
- SJ9: 2 accidents,
- SJ10: 4 accidents,
- SJ11: 7 accidents,
- SJ12: 1 accident,
- SJ13: 1 accident,
- SJ14: 6 accidents,
- SJ15: 12 accidents.

### **Pedestrians**

8.4.7 The AHA TA (ES Vol 2, Appendix 8.1) establishes the 800m and 2km walk isochrones for the Project Site, reflecting typically 10 and 25 minute journeys. Review of Figure 3 in the TA highlights that there are a number of local facilities accessible to residents of the proposed development within 800m of the Project Site. These include:

- Nursery,
- Primary school,
- Convenience store,
- Community centre,
- Playgrounds/public open space,
- Cricket club,
- Salons,
- Public house,
- Church,
- Employment (Cherwell District Council),
- Allotments,
- Bus stops.

8.4.8 Within about 1200m (typically a 15 minute walk) there are a number of additional facilities, including:

- Secondary school/sixth form,
- Convenience Store,
- Supermarket,
- Post Office,
- Bank/ATM,
- Dentist, Pharmacy & Optician,
- Restaurants/takeaways.

8.4.9 Figure 3 in the TA demonstrates that there is a substantial range of amenities within 2000m of the Project Site. The edge of Banbury town centre is within 2000m of the Project and Horton Hospital provides a substantial employment destination within 2000m of the Project.

8.4.10 It is proposed that the Project takes access onto White Post Road. There is footway on both sides of White Post Road and the proposed access includes provision for a continuation of the footway into the Project Site. The northern side of the Site access makes provision for a 3.0m wide shared footway/cycleway.

8.4.11 Additional pedestrian accesses are proposed to/from Salt Way and Wykham Lane.

### **Cycle**

- 8.4.12 The AHA TA (ES Vol 2, Appendix 8.1) establishes the 2km and 5km cycle isochrones for the Project Site, reflecting typically 10 and 25 minute journeys. Review of Figure 5 in the TA highlights that all of the built-up area of Banbury is within 5km of the Project. Additionally, all of Twyford, Adderbury, Broughton, North Newington, and most of Bloxham are accessible to Project Site residents by cycle.
- 8.4.13 Figure 6 of the AHA TA (ES Vol 2, Appendix 8.1) indicates formally identified cycle routes in the locale of the Project Site. These include:
- National Cycle Network Route 5 (NCN 5): Reading to Holyhead via Oxford,
  - A local signed on-road route linking the Project and NCN 5 to Banbury Rail Station.
- 8.4.14 It is proposed that the Project takes access onto White Post Road. There is footway on both sides of White Post Road and the proposed access includes provision for a continuation of the footway into the Project. The northern side of the Project access makes provision for a 3.0m wide shared footway/cycleway.
- 8.4.15 Additional pedestrian/cycle accesses are proposed to/from Salt Way and Wykham Lane.

### **Public Transport**

- 8.4.16 The practical options for public transport travel to/from the Project are by bus and rail.

#### Buses

- 8.4.17 An audit of bus stops within a 5 and 10 minute walk of the Project has been undertaken and this is reported in the AHA TA (ES Vol 2, Appendix 8.1). The closest bus stops to the Project are on Sycamore Drive, within 400m. There are additional bus stops on White Post Road that are circa 500m from the centre of the Project. The bus stop on the southern side of Sycamore Drive closest to SJ2 has a shelter. All other bus stops on Sycamore Drive and White Post Road comprise a 'flag and pole'.
- 8.4.18 An audit of the existing network of bus routes for services that call at bus stops near to the Project has been undertaken and is reported in the AHA TA (ES Vol 2, Appendix 8.1). The B1 service calls within 400m of the Project. The B1 operates at a 30 minute frequency, Monday – Saturday. The journey time between Sycamore Drive and Banbury bus station is 12-13 minutes. The earliest weekday departure from Sycamore Drive is 0702, and the latest weekday arrival at Sycamore Drive is at 1822.
- 8.4.19 The B2 service calls on White Post Road, circa 500m from the Project, and operates on the same frequency as the B1 service. There are additional services calling on A4260 within 800m of the Project. In a typical weekday situation there are circa 8 buses per hour calling within 800m of the Project, taking into account buses travelling in both directions along the road. Destinations include, among others, Banbury town centre, Bodicote, Easington, Oxford, Kings Sutton, Aynho, Evenly, Croughton, and Brackley.

8.4.20 All services calling within 800m of the Project also call at Banbury bus station, which is within 400m of Banbury Rail station. This provides opportunity for onward journeys by public transport to an extensive range of destinations.

#### Rail

8.4.21 Banbury Rail Station is circa 2.5km from the Project. This provides opportunity for residents to travel by rail, with the journey between the rail station and the Project by cycle or bus. Cycle storage is provided at the station, and all bus services calling close to the Project call within 400m of the rail station. Additionally, there are 795 car park spaces provided at the station. There are mobility impaired spaces available free of charge for blue badge holders.

8.4.22 The main services calling at Banbury Rail Station comprise:

OPERATOR	PRINCIPAL ROUTE	TYPICAL WEEKDAY FREQUENCY (mins)
Chiltern Railways	London – Birmingham	30
Cross Country	Manchester - Bournemouth	60
Cross Country	Newcastle – Reading	60

8.4.23 Additionally, there are a number of less frequent services calling at Banbury, operated by Chiltern Railways and First Great Western. Typically, there are circa 10-11 services per hour calling at Banbury Station.

8.4.24 Services calling at Banbury provide frequent direct trains to a wide range of destinations including, among others, London, Birmingham, Manchester, Leeds, Sheffield, Newcastle, Southampton, Bournemouth, Coventry, Stoke-on-Trent, Derby, Doncaster and York.

8.4.25 Banbury rail station provides opportunity for residents undertake regular journeys (eg for work) to a wide range of destinations. Journey times between Banbury and key destinations that may be suitable for daily commuting are:

DESTINATION	APPROXIMATE JOURNEY TIME (mins)
Bicester	14
Leamington Spa	17
Oxford	21
Warwick	22
High Wycombe	32
Reading	45
Birmingham	53
London Marylebone	54 – 64

8.4.26 It is demonstrated that there is excellent opportunity for residents of the Project to undertake journeys by rail to an extensive range of destinations.

## 8.5 POTENTIAL EFFECTS

8.5.1 The potential transport-related impacts from the Project are:

- Effects of traffic movements generated by the proposed development on the local road network (long term),
- Effects of new infrastructure provision for the Site access,
- Effects of traffic movements on highway safety,
- Provisions for sustainable travel,
- Effects of traffic movements generated on the local highway network during construction (short term).

## 8.6 ASSESSMENT OF EFFECTS

### Construction Effects

8.6.1 The overall construction period is expected to last up to circa 5 years and during this period the Project will generate traffic movements associated with construction. The main vehicle movements will be associated with:

- Workers, consultants, supervising staff and inspectors (likely to be by car), and
- Plant delivery/removal, materials delivery and waste removal (likely to be by HGV)

8.6.2 During the construction period, it is estimated there will be an average of circa 130 FTE workers per annum on Site. The amount of construction workers on site at any given time may fluctuate depending on the stage of construction and also the number of developers present on Site. On the basis that two-thirds of the workers drive to the Site then this may generate circa 86 vehicle arrivals and circa 86 vehicle departures. It is predicted that Site operations may generate circa 15-25 movements per day during the busiest period of construction. Thus, the total estimated daily 2-way traffic, during the construction period, is 197 vehicles. The daily two-way traffic on White Post Road is 7,497 vehicles. Thus, construction traffic is likely to increase traffic flows on the surrounding network by circa 2.6%, a slight adverse effect.

8.6.3 The traffic generated by the Project when operational as a residential development is estimated to be higher than the construction stage.

### Operational Effects

8.6.4 The AHA TA (ES Vol 2, Appendix 8.1) sets out the methodology for estimating the traffic generated by the Project. Table C8.2 summarises the estimates of development generated traffic for the AM & PM peak hours and the daily flows based on the TA trip rates.

Time Period	ARR	DEP	2-WAY
AM Peak Hour	44	123	167
PM Peak Hour	115	69	184
Daily	946	980	1926

Table C8.2: Project Generated Traffic, AM &amp; PM Peak Hours and Daily

### Assessment Traffic Flows

- 8.6.5 The traffic flows that are adopted for assessment are the Base and With Project flows.
- 8.6.6 The 'Base' situation represents the traffic flows on the TA study network with the full implementation (and occupation) of all of the committed developments (refer 9.6.7). This provides the proper context in which to assess the traffic impact of the Project.
- 8.6.7 The 'With Project' situation represents the 'Base' traffic flows and the addition of the traffic generated by the Project.
- 8.6.8 The Project forms part of wider area that is allocated for residential development in the Council's Submission Local Plan. The Project, together with other sites to the west, are known collectively as the Banbury 17 Allocation sites. There are 3no sites within the Banbury 17 allocation that are centred on Bloxham Road. These are:
- Wykham Park Farm,
  - Land to the east of Bloxham Road, and
  - Land to the west of Bloxham Road.
- 8.6.9 In the event that the internal road network within the proposed scheme is linked with the road network within the Wykham Park Farm scheme then this would form a road connection between Bloxham Road and White Post Road. In such a situation, traffic generated by the Banbury 17 sites to the west of the application scheme with origins/destinations to the east, may elect to use the Site Access/White Post Road junction.
- 8.6.10 The AHA TA (ES Vol 2, Appendix 8.1) sets out investigations into the feasibility of introducing a roundabout junction on White Post Road to serve the proposed development and other Banbury 17 sites. Drg 1361/12/A of the AHA TA (ES Vol 2, Appendix 8.1) presents an indicative roundabout junction.
- 8.6.11 OCC highways officers have requested that testing be undertaken for the situation in which there is a link road connection between White Post Road and Bloxham Road and all of the Banbury 17 Allocation sites come forward. This test is referred to as the OCC Sensitivity Test.
- 8.6.12 Table C8.3 presents the estimated 2025 Base, With Project and With Project + OCC Sensitivity Test AADT traffic flows for the study network of roads.

Link		Annual Average Daily Traffic (AADT)		
Name	Location	Base	With Project	With Project + OCC Sensitivity
Site Access	SJ1	0	1926	7678
White Post Road	SJ1 (North arm)	7079	8754	11188
White Post Road	SJ1 (South arm)	7079	8754	8607
Sycamore Drive	SJ2 (North arm)	5850	5997	5997
Bankside	SJ2 (East arm)	10115	11162	12870
Northbound slips	SJ2 (South arm)	5813	6295	7020
Bankside	SJ2 (West arm)	6956	8631	11065
Southbound slips	SJ3 (North arm)	6993	7674	9382
Bankside	SJ3 (East arm)	12143	12509	12509
College Fields Dev	SJ3 (South arm)	3159	5535	5535
Bankside	SJ3 (West arm)	10545	11592	13300
Oxford Road	SJ4 (North arm)	30037	30225	30582
Canal Lane	SJ4 (East arm)	209	209	209
Oxford Road	SJ4 (South arm)	30160	30348	30705
Broad Gap	SJ4 (West arm)	1635	1635	1635
Oxford Road	SJ5 (North arm)	30356	30545	30901
College Fields Dev	SJ5 (East arm)	2974	5592	5592
Oxford Road	SJ5 (South arm)	28464	28841	29295
Weeping Cross	SJ5 (West arm)	3146	3335	3433
High Street	SJ6(North arm)	4166	4355	4687
Broad Gap	SJ6(East arm)	1450	1450	1450
High Street	SJ6 (South arm)	3159	3347	3679
White Post Road	SJ7 (North arm)	4572	4823	4676
High Street	SJ7 (South arm)	4166	4355	4687
Wykham Lane	SJ7 (West arm)	3060	3102	0
Oxford Road	SJ8 (North arm)	23978	24857	N/A
Hightown Road	SJ8 (East arm)	7927	8021	N/A
Oxford Road	SJ8 (South arm)	28230	29204	N/A
Horton View	SJ8 (West arm)	6452	6452	N/A
Oxford Road	SJ9 (North arm)	21962	22475	N/A
Upper Windsor Street	SJ9 (East arm)	12524	12890	N/A

Link		Annual Average Daily Traffic (AADT)		
Name	Location	Base	With Project	With Project + OCC Sensitivity
Oxford Road	SJ9 (South arm)	25907	26787	N/A
Oxford Road	SJ10 (North arm)	21704	22165	N/A
Oxford Road	SJ10 (South arm)	21065	21578	N/A
Bloxham Road	SJ10 (West arm)	15559	15611	N/A
Horse Fair	SJ11 (North arm)	24887	25170	N/A
High Street	SJ11 (East arm)	12204	12361	N/A
South Bar Street	SJ11 (South arm)	19172	19633	N/A
West Bar Street	SJ11 (West arm)	10225	10246	N/A
Southam Road	SJ12 (North arm)	14920	15150	N/A
Castle Street	SJ12 (East arm)	15817	15817	N/A
North Bar Street	SJ12 (South arm)	25489	25772	N/A
Warwick Road	SJ12 (West arm)	16505	16558	N/A
Cherwell Street	SJ13 (east Arm)	27431	28164	N/A
Swan Close Road	SJ13 (South arm)	18963	19330	N/A
Upper Windsor Street	SJ13 (west arm)	12892	13259	N/A
Concord Avenue	SJ14 (North arm)	30037	30602	N/A
Bridge Street	SJ14 (East arm)	7116	7283	N/A
Cherwell Street	SJ14 (South arm)	26903	27636	N/A
Bridge Street	SJ14 (West arm)	16297	16297	N/A
Unnamed Road	SJ15 (North arm)	787	787	N/A
Hennef Way	SJ15 (East arm)	62482	63048	N/A
Concord Avenue	SJ15 (South arm)	30578	31143	N/A
Hennef Way	SJ15 (West arm)	46604	46604	N/A

Table C8.3: Assessment Traffic, 2025, AADT

### Effect on Road Users

- 8.6.13 Traffic flows are anticipated to increase on White Post Road in the vicinity of the Project as a result of the proposed development. Bishop Loveday CE Primary School takes access from White Post Road in the vicinity of the Project. A parking survey was undertaken on White Post Road to determine the existing on street parking demand in the vicinity of the proposed Site access. The results of the survey are presented in the AHA TA (ES Vol 2, Appendix 8.1). The parking survey data demonstrated that the



section of White Post Road in the vicinity of the Project Site access, is heavily parked on both sides of the road.

8.6.14 Consequently, it is proposed that waiting restrictions are introduced in the vicinity of the proposed Site access to ensure that parked vehicles have no detrimental impact on the operation of the proposed Site access junction. It is also proposed that car parking is provided within the Project to accommodate parking displaced by the proposed waiting restrictions.

8.6.15 ASSESSMENT:- SUBSTANTIAL BENEFICIAL

#### **Effect on Pedestrian and Cyclists**

8.6.16 Traffic flows on White Post Road are anticipated to increase by circa 20-27% in the vicinity of the Project as a result of the proposed development in the AM & PM peak hours. Existing traffic flows are relatively low on White Post Road in the vicinity of the Project (circa 610 & 485 2-way, AM & PM peaks respectively). The generated traffic flows from the Project are considered to have a negligible to slight adverse impact on pedestrians and cyclists on White Post Road, in the context of severance, pedestrian delay/amenity and fear and intimidation.

8.6.17 ASSESSMENT:- NEGLIGIBLE TO SLIGHT ADVERSE

## **8.7 MITIGATION MEASURES**

### **Construction**

8.7.1 A range of good practice measures will be implemented in order to minimise the impact of additional traffic movements generated by construction workers and delivery vehicles. These measures will include:

- Implementation of a construction strategy which will minimise the amount of waste generated (eg by precision building, use of pre-fabrication, re-use of materials on Site)
- Implementation of a waste management strategy during demolition and construction works
- Local sourcing of materials, labour and disposal sites to reduce the distance travelled by construction traffic, where possible
- The controlled routing of heavy vehicles to and from the development with routes agreed with the highway authority prior to construction commencing.

8.7.2 Standard measures will also be implemented to minimise the impact of construction works on road users. These measures will include:

- Restricted speed limits, where necessary
- Use of warning signs in accordance with Chapter 8 of the Traffic Signs Manual
- Use of temporary traffic control, where necessary

- Deployment of road sweepers to reduce and remove dust/mud.

### **Operational**

8.7.3 Development traffic will increase as the Project is developed. As set out previously, it is proposed that waiting restrictions are introduced in the vicinity of the proposed Site access to ensure that parked vehicles have no detrimental impact on the operation of the proposed Site access junction. It is also proposed that car parking is provided within the Project to accommodate parking displaced by the proposed waiting restrictions.

8.7.4 The Project also includes the implementation of a Travel Plan to encourage sustainable travel.

## **8.8 RESIDUAL EFFECTS**

### **Construction Effects**

8.8.1 Contractors would be required to implement strategies to minimise the potential effects of construction works on pedestrians and drivers. Notwithstanding this, there would be negligible to short term slight adverse residual effects on pedestrians and drivers due to construction activity.

8.8.2 Upon occupation of the Project, there would be increased volumes of traffic on the local highway network with some increases in delays.

### **Operational Effects**

8.8.3 Upon occupation of the Project, there would be increased volumes of traffic on the local highway. The mitigation measures proposed would ensure that the potential traffic impact associated with the Project can be satisfactorily accommodated.

8.8.4 OCC in their 1 April 2015 pre-application consultation response set out that:

*"It's envisaged that a new bus route will be introduced along the new spine road, and this is currently conceived as a two-way loop from the Town centre to the Town Centre via Bloxham Road, the Spine Road, Bankside and a new link along Tramway Road to the Rail Station and thence to the Town Centre. It is possible that this route could be cross-linked with other bus services, to provide direct access to workplaces to the north or east of the Town Centre. This new bus service would be procured on a pump-priming basis, to ensure that it became fully commercially viable after a few years. Bus stop infrastructure will be required and it is recommended the location of the stops is identified at an early stage. It is imperative the spine road is provided in a manner able to accommodate the bus service efficiently. Therefore due consideration must be given to its width and alignment."*

8.8.5 The internal road network within the proposed development and the adjoining Wykham Park Farm scheme is to be subject to reserved matters applications. However, it is proposed that the main access road serving the proposed development comprises a 6.75m wide carriageway. This would satisfy bus operator requirements. The access arrangements shown on Drg No 1361/21 (priority junction) and Drg

No 1361/12/A (roundabout) in the AHA TA (ES Vol 2, Appendix 8.1) both show Site access roads with a width of 6.75m.

- 8.8.6 Any future diversion of an existing bus route will provide additional patronage from residents and visitors of the Project and will have a moderate beneficial effect on public transport.
- 8.8.7 The adjacent Wykham Park Farm scheme includes a primary school and local centre. If there is a link road connection between the proposed development and the Wykham Park Farm scheme then the primary school and local centre will be within a convenient walk or cycle ride for residents of the proposed development.
- 8.8.8 The internal layout of the Project is subject to reserved matters approval but safe and convenient walking and cycle routes will be provided on Site and links to the existing PROW and cycle network will be introduced. The proposals will have a moderate beneficial effect on walking and cycling in the area.
- 8.8.9 The implementation of a Travel Plan provides good opportunity for residents and visitors of the Project to undertake sustainable non-car trips and will have a substantial beneficial effect.

## 8.9 CUMULATIVE EFFECTS

- 8.9.1 The cumulative impact of the Project and other developments on the TA study junctions is considered. The cumulative traffic flows take into account:
- Traffic counts,
  - Forecast background growth for Banbury,
  - Traffic generated by committed developments,
  - Traffic generated by the project.
- 8.9.2 A full account of the committed developments is provided in the accompanying Committed Development Report produced by AHA and included as Appendix 8.3 to this ES.
- 8.9.3 Additional testing is undertaken which takes into account all of the above plus traffic generated by the Banbury 17 sites to the west of the Project site. This test is referred to as the OCC Sensitivity Test.
- 8.9.4 Junction modelling of the impact of development traffic on the highway network is undertaken. The results of the assessments are detailed in the AHA TA (ES Vol 2, Appendix 8.1). The junction assessments presented below do not consider the Banbury 17 Allocation Sites. This is considered later in this chapter as the OCC Sensitivity Test.
- **SJ1: Site Access/White Post Road**  
Operates with a high level of spare capacity and negligible queues/delays in the 2025 AM & PM peak hour With Development situations

ASSESSMENT: NEGLIGIBLE

- **SJ2: Bankside/Oxford Road N'bound Slips/White Post Road/Sycamore Drive**

Operates with a high level of spare capacity and negligible queues/delays in the 2025 AM & PM peak hour Base situations and continues to do so if the proposed development is implemented.

ASSESSMENT: NEGLIGIBLE

- **SJ2A: Oxford Road/Northbound Slips**

Operates with spare capacity the 2025 AM & PM peak hour Base situations and continues to do so if the proposed development is implemented.

ASSESSMENT: NEGLIGIBLE

- **SJ3: College Fields Access/Oxford Road Southbound Slips/Bankside**

SJ3 is presently a 'triangle' of priority controlled junctions. SJ3 will be converted to a 4-arm roundabout junction to provide access to part of the College Fields development. The permitted roundabout junction is predicted to operate with spare capacity and negligible queues/delays in the 2025 AM & PM peak hour Base situations, and continues to do so if the proposed development is implemented.

ASSESSMENT: NEGLIGIBLE

- **SJ3A: Oxford Road/Southbound Slips**

Operates with spare capacity the 2025 AM & PM peak hour Base situations and continues to do so if the proposed development is implemented.

ASSESSMENT: NEGLIGIBLE

- **SJ8: Hightown Road/Oxford Road/Horton View**

Operates in an acceptable manner in both the 2025 AM & PM peak hour Base situations and continues to do so if the proposed development is implemented.

ASSESSMENT: SLIGHT ADVERSE

- **SJ9: Upper Windsor Street/Oxford Road**

Operates in an acceptable manner in both the 2025 AM & PM peak hour Base situations and continues to do so in the corresponding With Development situations.

ASSESSMENT: SLIGHT ADVERSE

- **SJ13: Swan Close Road/Upper Windsor Street**

Operates in an acceptable manner in both the 2025 AM & PM peak hour Base situations and continues to do so in the corresponding With Development situations.

ASSESSMENT: SLIGHT ADVERSE

8.9.5 The junction modelling results demonstrate the Project is expected to have a negligible to slight adverse impact on the local highway network.

**OCC Sensitivity Test: Banbury 17 Allocation Sites**

8.9.6 The OCC Sensitivity Test takes into account the traffic flows set out in para 8.9.1, including the committed developments outlined in the Committed Development Report produced by AHA and included as Appendix 8.3 to this ES. The traffic flows associated with the 3no Banbury allocations set out in para 8.6.8 are also included to form the OCC Sensitivity Test flows. The OCC Sensitivity Test is undertaken for the junctions in the immediate vicinity of the Project. The junction modelling results, including the OCC Sensitivity Test, demonstrate the Project is anticipated to have a negligible to slight adverse impact upon the local highway network.

- **SJ1: Site Access/White Post Road**

If the Project Site access road eventually forms a connection with the internal road network within the Wykham Park Farm scheme then this will have the effect of creating a 'link' road between White Post Road and Bloxham Road. In this situation the simple priority controlled 'T' junction shown on Drg No 1361/21 in the AHA TA (ES Vol 2, Appendix 8.1) is unlikely to have the capacity to accommodate predicted traffic flows and a roundabout junction is likely.

The proposed roundabout junction modelling demonstrates that it is predicted to operate with spare capacity and small queues/delays in the 2025 AM & PM peak hour OCC Sensitivity Test situation.

ASSESSMENT: NEGLIGIBLE

- **SJ2: Bankside/Oxford Road N'bound Slips/White Post Road/Sycamore Drive**

Operates with a high degree of spare capacity and with small queues/delays in the 2025 AM & PM peak hour OCC Sensitivity Test situations.

ASSESSMENT: NEGLIGIBLE

- **SJ2A: Oxford Road/Northbound Slips**

Operates within capacity and with modest queues in the 2025 AM & PM peak hour OCC Sensitivity Test situations.

ASSESSMENT: SLIGHT ADVERSE

- **SJ3: College Fields Access/Oxford Road Southbound Slips/Bankside**

SJ3 is presently a 'triangle' of priority controlled junctions. SJ3 will be converted to a 4-arm roundabout junction to provide access to part of the College Fields development. The permitted roundabout junction is predicted to operate with a high degree of spare capacity and with small queues/delays in the 2025 AM & PM peak hour OCC Sensitivity Test situations.

ASSESSMENT: NEGLIGIBLE

- **SJ3A: Oxford Road/Southbound Slips**

Operates operate within capacity and with modest queues in the 2025 AM & PM peak hour OCC Sensitivity Test situations.

ASSESSMENT: SLIGHT ADVERSE

8.9.7 The junction modelling results demonstrate the OCC Sensitivity Test is expected to have a negligible to slight adverse impact on the local highway network.

## **8.10 STATEMENT OF EFFECTS**

8.10.1 As a result of the proposed design measures, the effects of the Project on the surrounding local highway network will not result in any significant adverse effects.

8.10.2 All construction traffic to and from the Project will be controlled by a routing agreement. There will be a temporary negligible to short term slight adverse residual effect on pedestrians and drivers due to construction activity for both the With Development and OCC Sensitivity Test scenarios.

8.10.3 The operational phase of the Project (upon completion and occupation) will result in an increase in traffic flows on local roads in the immediate vicinity of the Project. The traffic flows are assessed during the busiest periods of the local highway network, the AM & PM peak periods. The summary of junction modelling results demonstrates the Project with cumulative effects and OCC Sensitivity Test scenarios will result in a negligible to slight adverse impact on the local highway network.

8.10.4 The site layout is subject to reserved matters approval. However, it is proposed that the main access road serving the proposed development comprises a 6.75m wide carriageway. This would satisfy bus operator requirements enabling bus penetration into the Project. This would have a moderate beneficial effect. The internal layout will provide safe and convenient walking and cycle routes and links to the existing PROW and cycle network will be introduced. The proposals will have a moderate beneficial effect on walking and cycling in the area.

8.10.5 The adjacent Wykham Park Farm scheme includes a primary school and local centre. If there is a link road connection between the proposed development and the Wykham Park Farm scheme then the primary school and local centre will be within a convenient walk or cycle ride for residents of the proposed development. This will provide a moderate beneficial effect.

8.10.6 The implementation of waiting restrictions on White Post Road and the proposed car park on the Project Site to accommodate parking displaced by the waiting restrictions will create a safer environment on White Post Road. This will have a substantial beneficial effect on the operation of White Post Road in the vicinity of the Project.

8.10.7 The implementation of a Travel Plan provides good opportunity for residents and visitors of the Project to undertake sustainable non-car trips and will have a substantial beneficial effect.

**Chapter 9: Cumulative Effects**  
**Land West of White Post Road, Banbury**  
**ENVIRONMENTAL STATEMENT**  
**July 2015**

This page has been  
left intentionally  
blank



## 9.1 INTRODUCTION

9.1.1 The requirement for cumulative assessment is stated in the following legislation:

- Directive 85/337/EEC requires the assessment of *'the direct effects and any indirect, secondary, cumulative, short, medium and long term permanent or temporary, positive and negative effects of the project'*;
- Directive 97/11/EC states that criteria for assessment includes *'the cumulation with other projects'*;
- The EIA Regulations 2011 state that, *'the characteristics of the development must be considered having regard, in particular to...the cumulation with other development'*; and
- Directive 2014/52/EU states that *'the description of the likely significant effects ... should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project'*.

9.1.2 This chapter provides an assessment of the potential cumulative effects of the proposed development in conjunction with effects arising from other developments in the surrounding area.

## 9.2 EFFECTS

9.2.1 The Project includes measures (both design and operation proposals) to ameliorate any otherwise adverse environmental effects or enhance beneficial effects. The Project Description of the ES (Chapter 3) and Design and Access Statement submitted with the application describe the Project.

9.2.2 This EIA has found that the Proposed Development would have few residual effects of more than minor significance, whether adverse or beneficial. The potential for cumulative impacts arising as a result of the Proposed Development in combination with development of additional and adjacent sites in the immediate area, have been considered as part of the environmental assessments undertaken within this ES.

### **Socio-Economic**

9.2.3 No residual adverse socio-economic effects would arise. Major beneficial effects on the housing market are described, while moderate beneficial effects on the labour market (both during the construction phase and more permanently) are also predicted in the socio-economic report included with the application submission documents.

### **Landscape and Visual**

9.2.4 The significance of effect in Landscape and Visual terms can be found within Chapter 6 of the ES, the outline application is also supported by a Landscape and Visual Impact Assessment. It was concluded that the development proposals would not give rise to any unacceptable effect on landscape and visual receptors.

- 9.2.5 Overall it is considered that the development will generally have a residual significance of effect ranging from moderate to moderate/minor upon the visual environment and that effects will be mostly limited to the immediate setting of the site
- 9.2.6 With regard to the effect of the proposals on the landscape character, it is considered that the development of the site in this location would not cause undue detrimental effects to the localised or wider character reviewed in the baseline assessment. It is considered the significance of effect upon landscape character to be moderate on a low-moderate receptor. The proposals represents an appropriate and logical addition to the urban settlement that will not compromise the integrity of the surrounding open countryside nor the heritage assets of either Banbury or Bodicote.
- 9.2.7 The local level cumulative effect assessment has found a moderate cumulative significance of effect in terms of landscape character and that the immediate southern hinterland of Banbury has the capacity to accept the cumulative large scale development of the types proposed. The various cumulative sites are generally well contained and integrated within their receiving environment with an overall residual cumulative effect of moderate to moderate/minor in terms of visual impact.
- 9.2.8 The district level visual cumulative effect is considered to be minor and indeed would not be considerably greater than the individual significance of effect considered in isolation. At a district level it is considered the cumulative effect on landscape character is moderate/minor to minor.
- 9.2.9 It is considered that the application site and receiving environment have the capacity to accommodate the proposals. The proposals will not result in significant harm to the landscape character or visual environment and, as such, it is considered that the proposed development can be successfully integrated in this location, is supportable from a landscape and visual perspective, and therefore meets the landscape requirements of both national and local planning policy.

### **Historic Environment**

- 9.2.10 The Historic Environment issues arising from the scheme have been considered within Chapter 7 of the ES and the accompanying Heritage and Archaeological Desk Based Assessment. It was concluded that the development proposals would not give rise to any unacceptable effect on any designated or non-designated heritage asset, and would not result in any significant cumulative effects.

### **Traffic and Transport**

- 9.2.11 The transport and access issues arising from the scheme have been considered within Chapter 8 of the ES and the accompanying Transport Assessment and Travel Plan.
- 9.2.12 The effect of the construction phase has been considered in terms of construction traffic on the highway network. The conclusion reached was that the effects would be short-term, localised and be slightly adverse in nature. Further, mitigation will be provided in the form of a traffic management plan to reduce the effects of the construction phase.

- 9.2.13 The cumulative impact of the Project and other developments on the TA study junctions is considered. The cumulative traffic flows take into account, traffic counts, forecast background growth for Banbury, traffic generated by committed developments (as set out in Appendix 8.3) and the traffic generated by the Project. Additional testing has also been undertaken which takes into account all of the above plus traffic generated by the emerging allocations to the west of the Project site. This test is referred to as the OCC Sensitivity Test.
- 9.2.14 The traffic generated by the scheme has been assessed and considered in terms of the impact on traffic flows, highway safety and delay on the highway network. Overall, it is forecast that there would generally be a negligible to minor impact, with mitigation offered by the sustainable transport measures proposed as part of the development, including the Residential Travel Plan.
- 9.2.15 The junction modelling results, including the OCC Sensitivity Test, demonstrate the Project is anticipated to have a negligible to slight adverse impact upon the local highway network.
- 9.2.16 Although the site layout is subject to reserved matters, it is proposed that the main access road serving the proposed development comprises a 6.75m wide carriageway. This would satisfy bus operator requirements enabling bus penetration into the Project. This would have a moderate beneficial effect. The internal layout will provide safe and convenient walking and cycle routes and links to the existing PROW and cycle network will be introduced. The proposals will have a moderate beneficial effect on walking and cycling in the area.
- 9.2.17 The adjacent Wykham Park Farm scheme, currently the subject of a live application, includes a primary school and local centre. If there is a link road connection between the proposed development and the Wykham Park Farm scheme then the primary school and local centre will be within a convenient walk or cycle ride for residents of the proposed development. This will provide a moderate beneficial effect. The implementation of waiting restrictions on White Post Road and the proposed car park on the Project Site to accommodate parking displaced by the waiting restrictions will create a safer environment on White Post Road. This will have a substantial beneficial effect on the operation of White Post Road in the vicinity of the Project. The implementation of a Travel Plan provides good opportunity for residents and visitors of the Project to undertake sustainable non-car trips and will have a substantial beneficial effect.
- 9.2.18 As a result of the proposed design measures/mitigation, the effects of the Project on the surrounding local highway network will be reduced and will not result in any significant adverse effects.

### **9.3 SUMMARY**

- 9.3.1 The ES demonstrates that significant beneficial effects are substantial, significant adverse effects are limited and beneficial effects outweigh adverse effects.
- 9.3.2 Overall, the proposed development constitutes a sustainable, high quality development that will help CDC to meet its identified housing need and there are no overriding reasons why planning permission should not be granted.

This page has been  
left intentionally  
blank

**Chapter 10: Conclusion**  
**Land West of White Post Road, Banbury**  
**ENVIRONMENTAL STATEMENT**  
**July 2015**

This page has been  
left intentionally  
blank

## 10.1 Conclusion

- 10.1.1 The proposed development has been assessed under the Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2011 (SI2011/1824). CBC stated that due to the developments size, scale and character which, when considered cumulatively with existing committed residential development in the area and the expansion of Banbury through the emerging allocation, there is the potential for cumulative impacts to arise. The ES was also required owing to potential impacts on the historic environment.
- 10.1.2 The project will constitute a high quality residential development complete with associated open space requirements to meet the community needs as part of a cohesive green infrastructure development. The planning application is submitted in outline and seeks planning approval for up to 280 new homes, together with children's play space, youth games court, land for a cricket pitch and amenity green spaces. Further details can be found within the Design and Access Statement submitted with the planning application.
- 10.1.3 A socio-economic assessment has been prepared by Regeneris Consulting and assesses the socio-economic impacts of the development. This document is submitted as part of the planning application. It concludes that there are several significant benefits arising from the scheme, including investment in construction, construction employment, increased public spending in Banbury and the wider Cherwell District and new homes bonus to the Council.
- 10.1.4 The technical areas identified as requiring assessment as a result of the screening opinion and additional assessment where Landscape and Visual, impact on the Historic Environment and Traffic and Transport.
- 10.1.5 The traffic and transportation assessment (ES Chapter 8), which included the cumulative effect of the proposed development in conjunction with the emerging allocations to the south of Banbury concluded that subject to mitigation measures, the proposed development in conjunction with other committed developments in and around Banbury will have no significant adverse impacts on the local highway network. The impact upon the local highway network is assessed as negligible to slight adverse, with several benefits arising as a result of the project.
- 10.1.6 The Landscape and Visual assessment (ES Chapter 6) concludes that there will be changes in character to the landscape and views during construction, an inevitable consequence of the residential development of a previously agricultural field. It is considered that the residual effect of the proposals upon these wider landscape character and visual environment will be minor to negligible.
- 10.1.7 The Heritage Assessment (ES Chapter 7) concludes that the residual effect on archaeological remains will be moderate adverse once mitigation is implemented. It is also possible that there would be minor adverse/negligible effects on the setting of listed buildings, Bodicote Conservation Area and the non-designated Heritage Asset of the Salt Way, although any harm would be clearly less than substantial. The proposals offer a high degree of separation from the designated assets

and through the careful design of the proposals at the reserved matters stage, the impact on these assets could be reduced yet further.

- 10.1.8 The only cumulative effects of significance are to the local landscape character and visual change. The Local Level Cumulative Effect (including the entire Banbury 17 allocation) in terms of landscape character is considered to be moderate adverse, but it is concluded that the southern hinterland of Banbury has the capacity to accept the cumulative large scale development of the types proposed. The potential Local Level Cumulative Effect (including the entire Banbury 17 allocation) in terms of Landscape Visual Effect is considered to be moderate adverse. The various cumulative sites of Banbury South are generally well contained and integrated within their receiving environment.
- 10.1.9 In consideration of potential cumulative effects on landscape character at the local and district level, it is inevitable that there will be a high magnitude of change in land use with agricultural land giving way to residential development. However the large scale development proposals correspond to strategic housing allocations and are identified as having good capacity to accommodate residential development within the CDC landscape sensitivity assessments. This is reinforced through the site's incorporation as an allocated site within the emerging Local Plan.
- 10.1.10 Overall, the proposed development constitutes a sustainable, high quality development that will help CDC to meet its identified housing need on an allocated site and there are no overriding reasons why planning permission should not be granted.