High Speed Rail in the Chilterns
Little Missenden to Wendover:
An assessment of the non-market effects of the Proposed Scheme compared
to the Alternative Proposal Scheme

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Appendix A  Landscape

By Alison Doggett

A.1 Introduction

A.1.1 The physical landscape of the Chilterns is unique amongst chalk regions in Europe because the region lay at the limit of the ice sheet in the last glacial period. Rushing melt waters in the post glacial period carved wide troughs, deep narrow valleys and deposited a thick layer of heavy stony glacial drift (clay) across much of the landscape. This created a region that was difficult to settle, a problem to farm and a challenge to cross.

A.1.2 Despite these physical constraints, the cultural heritage reflects an ancient historic landscape with archaeological evidence of human occupation from earliest prehistoric times. The imprint of the past remains clearly visible because of the unusual colonisation and evolution of settlement that occurred on the hills and in the valleys.

A.2 Unique features of the Missenden Valley

A.2.1 The Missenden Valley is the longest of the five troughs that pierce the hills. It is the highest valley with a col height of 157m at Road Barn Farm (SP 063874), compared with 145m on the Gade Valley at and 140m on the Wye Valley. It breaches the scarp between the two highest points in the Chilterns at Wendover Woods at a height of 267m (SP 890090) and at Coombe Hill at a height of 260m (SP 068849).

A.2.2 More significantly it is the least urbanised and the only one that remains predominantly rural along its length. This is reflected in the distance along the valley that is within the AONB (16km) almost double the length of that in any of the other troughs. The AONB includes only the highest quality landscapes and excludes urban developments, confirming the unspoilt character of this valley.
The Misbourne Valley is the longest and highest trough in the Chilterns AONB, with a col height of 157m. The dry gap through the scarp is between the two highest points in the Chilterns at Wendover Woods (267m) and Coombe Hill (260m).

A.3 A sense of place

A.3.1 In the Chilterns the cultural landscape does not maintain a unity of appearance throughout its length and breadth, nor do all of the defining features occur everywhere. The Missenden valley does display many of the elements of this mixture of characteristics that are clearly recognisable as ‘typical’. Above the wide valley floor an irregular patchwork of old enclosed fields develops, bounded by deep winding lanes with high hedges, some of which are a thousand years old. Numerous patches of woodland split up the fields and hug the summits.

A.3.2 A significant amount of this is ancient woodland dating back five hundred years or more with old wood banks and hollowways marking historic boundaries and routeways. Heaths, commons and downlands remain on the areas of poorest soils, accessible through one of the densest networks of rights of way in the country. A dispersed settlement pattern of farmsteads and hamlets still persists in the hills, typical of a landscape of individual closes. On the valley floor nucleated villages like Wendover and Missenden are
associated with the open strip fields. On the hilltops daughter settlements of spring line villages at the base of parishes were established, dating from Anglo-Saxon times.

A.3.3 This Missenden valley and its wooded hilltops have a rich documentary record that adds authenticity to the evidence on the ground.

Figure A.2 –Sense of Place

The contrasting elements of the wooded hilltops with smaller irregular fields and stony soils of ‘Ancient Countryside’ compared to the larger, regular field pattern of the once open fields on the valley floor.

A.4 Elements of Historic Cultural Landscape

A.4.1 Many the elements of the well-recognised regional distinctiveness of The Chilterns can be encompassed in the section from Little Missenden to Wendover. Woodlands and commons, fields and farms, tiny hamlets and grand manors reflect the long legacy of human influence first mentioned as belonging to the Cilternsaetan (‘people of the Chilterns’) in the Tribal Hidage, a 7th century document.

Ancient Countryside on the hilltops

A.4.2 The hilltops on either side of the valley reflect the local diversity of relief and soils, generating a small-scale character to the patchwork of hedged fields and woodlands, tiny winding lanes, and dispersed settlement pattern. Oliver Rackham has called this type of landscape ‘ancient countryside’.

A.4.3 Their significance lies in the fact that the landscape evolved very slowly over a long time in areas where colonisation was piecemeal. It is typical in upland that was heavily
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wooded and clearance was often very late. The Missenden Cartulary says that in 1190-1200 Ingelram of The Lee (Anglo-Saxon for “clearing in wood”) granted to the Abbey totem assartum de Pedenora (all of the assart of Pednor). Most of the local cottages such as those at Kings Ash looking down the valley sit on thin slivers of land and almost certainly started life as squatter huts on the woodland edge.

A.4.4 The parish of The Lee was originally a detached pasture and woodland that belonged to Weston Turville, part of the same group of ancient ‘hundreds’. It is one of many hilltop daughter settlements to become established in upland wooded areas as access to wood for fuel and building was a fundamental requirement in the medieval economy. The old field name of Grubb Ground indicates the late woodland clearance on the hilltop.

A.4.5 Old tracks remain in barely passable lanes, some with the ancient Anglo-Saxon names as in Arrewig Lane (-weg was the Anglo-Saxon from of ‘way’) that marks the boundary between The Lee and uphill Aston Clinton. Fields or ‘closes’ were generally small, irregular, hedged and individually held.

![Ancient Bowood Lane](image)

Figure A.3 Ancient Bowood Lane

This single track lane links the hilltop parish of The Lee to the common fields below and the “London high way between Missenden and Alisburie” as recorded on the 1620 Wendover Estate Map.

**Planned Countryside on the lower slopes and valley floor**

A.4.6 On the valley bottom where the land was flatter and the better soils were easier to farm, the major land re-organisations occurred. The first of these was in late Anglo Saxon and Medieval times in the creation of the strip fields and nucleated villages associated with the joint and co-operative working of the land. Rackham refers to this as planned or champion (from champagne) countryside.
A.4.7 The division between the two landscapes was clearly recorded by John Leland in the 1530s as he journeyed through England. It was most marked near Wendover as the valley opened out into Aylesbury Vale and he wrote:

_The tounelet selfe of Wyndover stondythe partely apone of the north-est cliffs of Chilterne Hills. The residew and north-est parte of the towne standyth in the rootes of the hills. Looke as the conterye of the vale of Allesbye for the mosste parte is clene baren of woodde, and [is] champaine; so is all Chilterne well woodyd, and full of enclosures._

A.4.8 A large measure of historical good fortune in the form of a several beautiful old maps has enabled a detailed reconstruction of the landscape changes to be done, since John Leyland made his sixteenth century observations. The late medieval landscape was recorded in 1620 on one of a pair of maps relating to the Chequers estate. The subsequent changes that it underwent during later eighteenth century enclosure could also be detailed by the discovery of a second pair of maps: an estate map of Wendover in 1794 which shows the old enclosures and common fields, and an enclosure map dated 1795 which shows the new allotments.

A.5 The Manorial Estate Map for Mary Woolley of Chequers, 1620

A.5.1 The contrasting elements of ancient and planned countryside were recorded on a detailed 1620 Estate Map drawn by Henry Lily. It was commissioned by Dame Mary Wolley, granddaughter of William Hawtree, who had inherited the Chequers Estate and *Wendover Borrough* and *Wendover Forrence*, in her marriage settlement in 1594. In exquisite detail on a parchment measuring almost eight feet long, every field and farmstead, track and routeway, common strip and hedgerow is drawn and named in detail, and attributed to those who held it.

A.5.2 The importance of this snapshot of a once Royal manor is that it records a landscape whose field patterns and woodlands, parishes and settlements would have already been well established since early medieval times. The nomenclature iterates the language of both ancient and planned countryside: woods, fields, closes, pieces, furlongs, crofts and farms. By comparing the old map with the current landscape, the status and strength of its historic significance can become a statistical reality.
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Figure A. 4 –Dame Mary Wolley’s Estate Map of Wendover Borough and Forrens 1620 (part) a,b,c,d

This rare and beautiful map was drawn by Henry Lily and commissioned by Dame Mary Wolley to identify her estate holdings.
In the 1980s the Wendover Local History Group carried out a detailed study of the map. It was led by Kate Tiller under the auspices of the Oxford University Department for External Studies and the Workers Educational Association. Detailed tracings of the original map allowed different elements of the landscape to be superimposed: Common fields and Woodland, individual holdings, roads and trackways, houses and farmsteads were all picked out.

The Common Fields, as expected, occupied the lower levels of the valley in a narrow band. Equally unsurprising was the larger areas of common fields such as South Field, Malme Field and Clay field which were situated within a mile of the Borough and the majority of the population. The strips varied in size from a quarter of an acre to five acres and the importance of access from adjacent trackways was clearly evident.

The enclosed holdings stretched up the valley sides on either side of the narrow corridor of common strip fields. The map (fig X) shows thirteen important landholders, with the biggest holdings belonged to three gentlemen: Sir Richard Farmer, Earl Carnavon and Richard Barber.

The upper flanks on the steeper sides of the valley had poor dry soils and were used as grazing common land (eg Bacombe Common) as in much of the Chilterns region. Extensive woodlands covered the summits on the heavy clay soils on both sides of the valley and some, such as Jones Hill Wood remain today.

This typical tiny patch of Ancient Woodland is first shown on the 1620 map, and retains its distinctive shape today.
A.6 Parliamentary Enclosure and the 1795 map

A.6.1 The process of parliamentary enclosure replaced the open-fields with a new planned landscape of enclosed and hedged fields. In Wendover it took an Act of Parliament to complete the process in 1795. The long-standing contrast of ‘champion’ and woodland was softened by these changes although some open fields lingered on. Many of the medieval outer field boundaries in The Missenden Valley remain stubbornly intact, despite some amalgamations. The enclosure map of 1795 tellingly included ‘old inclosures given up to be allotted’ and when compared with the Estate Map of 1794 shows that some of the fields shown to be newly enclosed common fields were, in fact, old enclosed fields. The resemblance of the field boundaries to those on the modern map is striking.

Figure A.6  1794 Pre-enclosure Map 1794 Enclosure Map (overleaf)

The open fields were eventually enclosed and completed by an Act of Parliament in 1795. The new enclosed fields were generally larger and had much more regular sizes and hedged boundaries, compared to the old enclosures.
A.6.3 The enclosure of the many Chilterns' heaths and commons that were such a vital part of the local economy waited until Parliamentary Acts after 1845. An example showing changes at South Heath was mapped in the Landscape Characterisation Project undertaken by The Chiltern Conservation Board in conjunction with Bucks County Council and English Heritage. Many, like Hyde Heath, have survived to this day and are part of the rich legacy of accessible open space enjoyed in the Chilterns.
There is a remarkable similarity between the field patterns on the 1795 map and current satellite imagery. The extent of the remaining woodland and the persistence of the historic field boundaries are notable.
Figure A.8:  View over Dutchlands Farm

This view was taken from the field named ‘Cherry Walk’ on the 1794 map overlooking what was then ‘Ditchlands Farm’. The route of the A413 and the Chiltern line are difficult to make out as they are both screened by hedges, as they follow the contours along the valley bottom.
A.7 Canals, Roads and Railways

A.7.1 The 1620 Wendover Estate Map shows clearly a route running along the Missenden Valley called the ‘London high way between Missenden and Alisburie’. It is shown again on the Ogilvy Map in 1675 and eventually became part of the Wendover to Oak Lane Turnpike Trust, founded in 1751. Many of the milestones are still clearly visible on what is now the A413 and the tollhouse built at the northern end of Missenden High street remains as Toll Bar Cottage.

A.7.2 The network of smaller lanes, tracks and holloways running up and along the valley sides is also clear by 1620 and today forms part of the labyrinth of Chilterns single track lanes such as Leather lane and Bowood lane. These are typical: deep, high-sided, over hung with tree tunnels and edged with ancient coppiced wood banks covered with wild flowers. Many have been there, like the hedgerows, for a thousand years and have been measured according to their botanical richness. Some, like Kings Lane (called Strawberry lane) between Kings Ash and The Lee follow the ancient Parish Boundary.

A.7.3 Wendover did not escape the canal building era as a branch from the Grand Junction known as the Wendover Arm was constructed as a feeder and upgraded to become navigable at little extra cost. It opened in 1797, but leaked badly and eventually had a permanent stop-lock fitted, effectively closing the branch beyond Tringford. Today it is being painstakingly restored and is a popular walking route and haven for wildlife.

A.7.4 With the coming of the railways, the first proposed line through the Chilterns was surveyed by Robert Stevenson and was presented to parliament in 1830 to go through Uxbridge, Amersham and the Wendover Gap. The reaction was colossal and bitter and the Bill was eventually rejected in the House of Lords after landowners (including the Drakes of Shardeloes), canal companies and wagon proprietors combined to throw it out. Indeed, ‘the railway with its tail of smoke curling across the country, was to them everything that was disagreeable, vulgar and mercenary’.

A.7.5 In the end the Missenden valley was to remain the very last to have its line penetrating through the very heart of the Chilterns when the Metropolitan Railway branch line was eventually built in the late 1880s. It was to promote a whole new attitude to the countryside when the concept of Metro-land was born.

A.8 Metro-land, Suburbanisation and Settlement Growth

A.8.1 The Metropolitan railway coined the term Metro-land as part of a very successful marketing ploy to promote the railway and encourage ramblers and house-hunters into the Chilterns. The railway company held a controlling interest in a property company, set up to build on land it had purchased during the construction and eventually built nine estates between Rayners Lane and Amersham. At the same time ribbon development spread along many of the roads and the eruption of new individual houses and estates from unplanned growth was reaching many Chilterns towns and villages.

A.8.2 The Missenden Valley beyond Little Missenden escaped the worst of the suburbanisation with Wendover and Great Missenden having comparatively modest growth, allowing them to maintain their village status, despite becoming larger commuter villages. The presence of Missenden Abbey, founded in 1133, and its surrounding parkland restricted new development to the South and east of the village. Unlike other valleys, major land-owners such as the Carringtons in Great Missenden and the Abel-Smiths in Wendover did not sell off large areas of their estate land for development.

A.8.3 Residential growth had already been concentrated in Prestwood and South Heath on the old commons previously dissolved by parliament and clearly visible on the maps. The
current landscape on the modern OS maps still shows a dispersed settlement pattern on the valley sides and hill tops with grander houses, tiny hamlets and individual farmsteads remaining very much where they were on the older maps stretching back to 1620.

A.9 The impact of HS2

A.9.1 The imposition of any major infrastructure project into The Chilterns protected landscape flies in the face of the region’s designation as an Area of Outstanding Natural Beauty by Government, defined as: the finest countryside protected by law to ensure conservation of their natural beauty for present and future generations.

A.9.2 The seriousness of the damage to the landscape of the Missenden Valley lies in both its position as a nationally rare and ancient historic landscape and its unique status as the single remaining non-urbanised trough through the Chiltern hills. The proposed new line destroys the integrity of the whole valley, not merely the sum of its parts, as it cuts an irreverent diagonal ‘butchers slice’ across the natural trends of the countryside.

A.9.3 There is no recognition of the imprint of the past that sits on or below the surface in the ancient hilltop woodlands and commons, the historic field boundaries and tiny lanes still serving a settlement hierarchy whose roots pre-date Doomsday.

A.9.4 The scale of the impact is exacerbated by the lack of engineering flexibility for straight ultra high-speed lines and compounded by the choice of the highest route through the hills. This has necessitated a string of cuttings, embankments and viaducts that gives the maximum level of intrusion and long-term damage.

A.9.5 The current proposed mitigation will introduce alien relief and drainage features with bunds and mounds, balancing ponds and new watercourses in crude attempts to reduce the noise, disguise the spoil and deal with the increased run-off.

A.9.6 By superimposing the proposed HS2 route and construction phase works on to a historic and modern OS maps, the extent of the potential damage of the cuttings, viaduct and embankments to this historic landscape is very clear.
References


Chilterns Historic Landscape Characterisation Project, 2010: The Making of the Chilterns Landscape


Dyer, C.C, Hopper, A, Lord, E, Tringham, N. 2011 *New Directions in Local History since Hoskins*, University of Hertfordshire Press

Hepple, L.W. and Doggett, A.M. 1994 *The Chilterns*, Phillimore


Hepple, L.W. 2003 *The Ancient Countryside* in New Perspectives on Chiltern Landscapes, Chilterns Conservation Board


Morris, J, 2009 *The Cultural Heritage of Chiltern Woods*, Chiltern Woodland project


Rackham, O. 2003 *The Illustrated History of the Countryside*, Wiedenfeld and Nicolson


Reed M, 1986 (ed) *Decline and recovery in a provincial urban network: Buckinghamshire towns, 1350-1800*, in Read, M., English Town in Decline 1350-1800


Dame Mary Wolley of Chequers, 1620, *Estate Map of Wendover and Wendover Forrens*, Centre for Buckinghamshire Studies BAS 80
Appendix B  Archaeology

Dr Yvonne Edwards and John Gover

B.1  Introduction

B.1.1 This section of the route is remarkably rich in important archaeological features; most of which are listed in Heritage Gateway (www.heritagegateway.org.uk) and some are scheduled monuments and are recorded at (www.bucksc.gov.uk/bcc/archaeology/Historic_environment_record).

B.1.2 These historical/archaeological assets intrigue, stimulate interest and provide enjoyment for local people, walkers and visitors from London and nearby counties. Many have ancient origins and are part of the history of Southern England; their presence enhances the natural wealth of the AONB in this area.

B.1.3 In some cases the Proposed Scheme passes directly through these archaeological/historical features; these will be demolished during the excavation and associated works of the HS2 route. Other archaeological sites lay relatively nearby and are in danger of damage, and indeed complete loss, during the broader scale HS2 works.

B.1.4 It is important to recognise that once demolished or damaged these features are irreplaceable - and their loss is a national loss of heritage and not just a local misfortune. Those archaeological sites that are more distant from HS2 work site will inevitably lose their peaceful setting and in some cases accessibility cannot be ignored.

B.1.5 In order to provide a structured overview, sites of archaeological and historical interest are grouped into four categories which relate to their horizontal proximity with the route. The bandwidths chosen are:

- Category 1: eliminated, severed or within 200m of the route;
- Category 2: between 200m and 500m of the route;
- Category 3: between 500m and 700m of the route; and
- Category 4: Between 700m and 1000m of the route

B.2  Sites which will be eliminated, severed or within 200m of the route

Motte and Bailey Castle (Located at SU92679967)

B.2.1 This monument includes a small motte and bailey castle, sited to overlook the natural valley routeway (scheduled monument 19056). The motte survives as a mound 27m in diameter with an oval shaped bailey, about 30-35m across, on the south side. It is enclosed by an earthen bank 12m to 18m wide and up to 1.2m high on its exterior side. There are traces of a ditch which surrounds both motte and bailey. The monument is a very complete example of a motte and bailey castle probably built as part of a military campaign and occupied for only a short time. The motte is likely to have been surmounted by a wooden tower, designed to create a secure vantage point, while the bailey may have been surrounded by a wooden palisade designed to provide a secure camp. Motte and bailey castles are medieval fortifications introduced into Britain by the Normans and the castle is thought to have been founded by William Mantel, whose family
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first appear in Buckinghamshire and were granted lands by the Duke of Normandy for their distinguished assistance at the Battle of Hastings.

B.2.2 This motte and bailey castle is unusual in its small size and, though reduced by past ploughing, survives well as a very complete example of this class of monument. The monument also contains environmental evidence relating to the landscape in which it was constructed and the economy of its inhabitants. Such evidence will survive in the land surfaces sealed beneath the motte, and in buried features within the bailey.

Bury Farmhouse (Located at SP907023)

B.2.3 The Bury Farmhouse is a former 17th-century manor house and a field survey identified a medieval moat and fishpond. Two 18th-century timber-framed barns and an 18th-century timber-framed granary are of both historic and architectural merit. A small-scale archaeological investigation in the grounds discovered a post-hole containing pottery that dated from between the late Bronze Age and early Iron Age, indicating early human occupation of the site.

Jenkins Wood earthworks (Located at SP907023)

B.2.4 The Jenkins Wood earthwork is immediately adjacent to Bury Farm and comprises a low bank which is part of an enclosure 200 x 140m, defined by a bank and external ditch. A second smaller inner enclosure 80 x 50m lies in the south west corner already partly destroyed by farm buildings. These remains are likely to be those of a 12th to 13th C manorial site, predating Bury Farm and are known locally as Nuns Walk

Grim’s Ditch (Located at SP 8895 0342; also at SP886 20366)

B.2.5 An Iron Age bank and ditch called Grim’s Ditch lies across the HS2 route near to Hunts Green Farm and in Woodlands Park and is a scheduled monument. The earthwork can be identified for about 1 kilometre towards the existing Chiltern Line railway and onto Great Hampden. Despite loss by ploughing, prior to scheduling, the bank rises to 1.5m above the base of the ditch in some places. This is clearly a significant boundary marking a border between one area and another. Despite not being a ‘military’ structure some historians suggest Grim’s Ditch defined the boundary between the territories of neighbouring Iron Age tribal communities. The lands stretching from the Chiltern Hills southwards were part of the territory held by the Catuvellauni people. Ancient linear earthworks such as this were imposing structures in Iron Age Britain and a mystery to the Saxons population who named it “Grim” after the Norse word grimr meaning devil.

B.3 Category 1 sites impact assessment

B.3.1 These archaeological monuments are irreplaceable; they have been located in their present positions, in a peaceful rural setting, for many years ranging from 2500 years to 400 years. The planned route for HS2 passes through or very close to these ancient earthworks and buildings and if the Proposed Scheme is built their destruction and damage is inevitable. These will be disastrous consequences and this will be a major loss of national as well as local heritage and change the local environment irreversibly.

B.4 Sites between 200m and 500m from the route

Potter Row (Located at SP908020 to SP897038)

B.4.1 Potter Row is a lane running through the peaceful fields and woodland of a Chiltern Plateau. The age of some buildings, field patterns and archaeological finds indicate that people have been living here at least since the 1600’s and probably before, with ancient
farms, a medieval manor and early pottery kilns dotting the landscape. Potter Row is connected to the valley by an ancient track way Leather Lane, three designated footpaths and by road via South Heath.

B.4.2 The entire length of Potter Row lies within an Archaeological Notification Area. The route of the Proposed Scheme is only 200 to 270 metres to the south-west of Potter Row. This massive intrusion on this historic environment, would be destructive and divisive both environmentally and culturally, and is irreversible.

B.4.3 There are several historically important houses small and large along Potter Row; as an example three are described below

Warren Cottage

B.4.4 Potter Row gained its name from a local pottery industry established in the 13th C which became known as Le Pottererewe 17,18,19. Finds of 13th to 15th century sherds of jugs, cooking pots, jars and bowls have been made, scattered across several of the Potter Row gardens along with medieval pottery kiln wasters (SMR: 0257704000: 0257701000: 0257702000: 0257703000: 0257702000).

B.4.5 Warren Cottage is particularly notable since here quantities of 17th C pottery, including distinctive stamped ware and kiln wasters, were found in the garden along with fragments of 17th century kiln furniture originating from kiln structures themselves. The absence of pottery pre-dating the 17th century at the Warren suggested that the Potter Row industry was of two phases, medieval and 17th century (SMR: 0234101000).

Hammonds Hall Farmhouse (Located at SP 898032)

B.4.6 This listed timber-framed farmhouse, which lies at the north-west end of Potter Row, in Leather Lane, was probably built in the early 17th century, and later cased in brick and some flint. The main building is two storeys with an old tile roof, half hipped at south end and a large central brick chimney stack, and it age can be confirmed by the position of the door opposite the stack. The building also has a small rear wing of an early date. The interior is remarkable with the original timbers exposed and a large inglenook exposed in south room. Curved wind braces can be seen in the roof.

Park Farm

B.4.7 A small, brick and flint, two bedroom dwelling was first constructed on this site in approximately 1600AD with a further extension made in 1690 which had inner walls of wattle and daub. On the third floor there is an enclosed space, perhaps a priest hole, which can only be accessed via the roof space in the 1600AD building. This is of interest since post the reformation of the monasteries, this area was a strong supporter of the Catholic faith.

B.4.8 During restoration of the fireplaces it was noted that beams for smoking meat can be seen in the lower chimney stack. A dew pond is present in the back field surrounded by oak trees. The imprint of the main farm buildings adjoining the house were present prior the Enclosure Act (see map Reference Library in Aylesbury). The farm field adjacent to Potter Row contains the ditch which marked the boundary of common land prior to the Enclosure Act.

Bacombe Hill Wendover (Located at SP 860072)

B.4.9 This location which lies 350m to the east of the proposed route has been important from prehistoric times. A number of late prehistoric flints and pottery suggesting occupation from the late Neolithic through to Late Bronze Age were encountered in the early part of
the 20th century. On the hill stands a number of Bronze Age features, a denuded bowl barrow (scheduled monument 1013936) in close proximity to a larger bell barrow (scheduled monument 1013935) and possible pond barrow.

B.4.10 These occupy a prominent position overlooking Wendover to the north east, the Vale of Aylesbury to the north and the upper part of the Misbourne valley to the south east. There is also an undated vallum and bank, probably prehistoric in origin and a complex series of holloways and tracks cross the area. The barrows are well preserved and will retain significant archaeological information buried within and around them; for example they are likely to be associated with funerary remains which may tell us about the development of ritual practices.

B.5 Category 2 sites impact assessment

B.5.1 The houses, farmhouse and cottages along and around Potter Row form part of the very attractive and historic environment. All of them fall within 200-270m of the proposed HS2 route and with the current construction plan will experience degradation of the immediate environment and landscape.

B.5.2 The insertion of the box tunnel in the Proposed Scheme will lead not only to complete loss of peace and environmental habitats together with division of agricultural land and woodland but will also involve the irreversible destruction of an archaeological/historic landscape. The evolution of the Potter Row settlement is a classic case of medieval to 19th century development which has carefully contrived to recognise and preserve its ancient past. This is achieved by a local sympathy for the historic nature of this landscape with local people and residents working together to maintain it.

B.5.3 The peaceful surroundings were created centuries ago and have been maintained which in recent times is supported by the protected status of the Chilterns AONB. Under the current plans for a box tunnel these will be replaced by large man-made structures and train noise, both will create serious problems. This is a vulnerable and important archaeological area.

B.5.4 Clustered features such as those at Bacombe Hill are major historic elements in the modern landscape and their considerable variation of form and longevity provide important information on the diversity of social beliefs and organisations amongst early prehistoric communities. The Bacombe Hill site, which is openly accessible to the public, not only provides great enjoyment from its setting but stimulates interest in the past. The views from this location also pose wider questions about the nature and location of associated Bronze Age settlement in this part of the Chiltern Hills. The disruption of the nearby landscape by the imposition of the Proposed Scheme will have major irreversible negative impacts on this particular part of the Chilterns AONB.

B.6 Sites between 500m and 700m from the route

The Castle, Rook Wood (Located at SP 90870 00430)

B.6.1 This is a nearly square enclosure measuring overall c.80 metres square with round corners which appears to be a medieval manorial stronghold. The defences consist of a rampart which at its present day highest is c.3.5 metres high and a ditch 2.3 metres deep. The entrance is on the north-east side with a causeway across the ditch. On the south-west side is another entrance, probably modern. Pieces of cooking pots dated to 12th century were found in and near a pit inside the earthwork, close to the south west entrance. On the north-east side is the original central causewayed entrance with rampart and ditch inturned on both sides. The size, good preservation and recovered finds
suggest this is a medieval structure\textsuperscript{13,15,16,20}. Importantly, the enclosure conserves beneath its surface evidence of the subsistence, status and activities of the inhabitants.

**Frith Hill (Located at SP900013)**

B.6.2 This is a medieval enclosure comprising a substantial semi-circular bank and ditch with an outer counterscarp bank. A second smaller enclosure is attached\textsuperscript{10,11,12,13}. Finds of roughly shaped chalk blocks suggests that there was originally a rampart\textsuperscript{14}. These features have been interpreted as an adulterine castle - a castle built without permission\textsuperscript{9,20}. A possible builder was Hugh de Noers, supporter of King Stephen during the anarchy of 1135-1154, when Stephen claimed the throne of England against the rights of his cousin Matilda.

B.6.3 The purpose of the ‘castle’ would have been to interrupt communications between the supporters of Queen Matilda and this site would have provided a very good ‘look-out’, across the Misbourne Valley. Medieval pottery has been recovered during several field surveys and evidence for a holloway connecting the ring work with Great Missenden church has been recorded. It is unfortunate that some damage to this site occurred during construction of the road and track way. However the banks and ditches survive and also preserve buried beneath and within them evidence of the subsistence economy of its inhabitants and environmental evidence relating to the landscape in which this monument was constructed.

**Category 3 sites impact assessment**

B.6.4 These two medieval monuments have been part of our landscape for about 1,000 years. Today they are key evidence of medieval settlement in the Great Missenden and South Heath area. At that time there would been associations with contemporary settlements such as the medieval manor of Jenkins Wood and Bury Farm (described in Category 1), the Reddingwick medieval earthwork which lies c.1km to the north-east of the proposed HS2 route, the monastery at Great Missenden Abbey.

B.6.5 The Castle and Frith Hill enclosures are well known to local people and are included on popular walking maps for visitors to the area. The planned route for HS2 passes c.650m to the north-east of these ancient earthworks. If the Proposed Scheme is approved they will lose their tranquil setting, access may be lost or changed and there is danger of damage during ancillary works. Here the Frith Hill earthwork is particularly vulnerable as it lies close to Frith Hill Road and junction with the A413; both are obvious routes for HS2 associated heavy traffic.

**B.7 Sites between 700m and 1000m from the route**

**The Old Church, The Lee (Located at SP 899 044)**

B.7.1 The Old Church of St John the Baptist was built and run by the monks of Missenden Abbey. Constructed around 1220 it was originally a ‘Chapel of Ease’. Its present structure consists of a nave and chancel with a small wooden turret and a little spire with architecture in an Early English style. A south porch was added later probably in the 18th century. The building is constructed of flint rubble and clunch blocks.

B.7.2 The inside contains traces of colour dressing of the late 13th century. There are stain glass windows dating from the 14th and 15th centuries. The original bell c. 1300 by Michael de Wyymbis was moved to a new church built in the mid-19th century. The church stands within a large ditch and bank enclosure (most accurately shown on the 1898 map) along with Church Farm house, most of which dates to the 17th century but parts may date back to the 15th century. Pike and Farley (1977) surveyed the earthwork and
concluded that it may date to the 13th -14th century when Lee was granted to Missenden Abbey 21. Excavations in 2010 found evidence for iron smelting24.

**Boddington Hill Fort (Located at SP 8824 0801)**

B.7.3 This Late Bronze Age to Iron Age hill fort occupies the summit of a steep sided chalk spur. It is oval in shape measuring some 500m by 220m22, 23. The defences consist of a single rampart and outer ditch. Today the ditch is up to 1.6m deep and the rampart extends up to 3.4m above the ditch bottom. The defences were destroyed on the northern corner of the enclosure, the probable entrance site to the fort. Pottery, part of a bronze dagger, ingot and a spindle whorl were found dating from the Late Bronze/Early Iron Ages. Other fragments of pottery excavated from the bank date to the 2nd – 1st C BC.

**Commentary**

B.7.4 While at a greater distance from the route of HS2 (750m and 1000m,) two additional important archaeological sites, the Old Church, Lee and Boddington Hill Fort, are included here because they demonstrate continuity of human settlement which follows on from those mentioned above. Furthermore both of these sites are in popular walking, and kite-flying, areas of the Chilterns. The old church and earthwork at the Lee appear in the 13th - 14th century and documentary evidence points to a strong association with Great Missenden Abbey founded in the 12th century.

B.7.5 Boddington Hill Fort appears in the late Bronze Age Early Iron Age and sits on the hill-top directly facing Bacombe Hill and the Bronze Age barrows. In both cases the interruption of the surrounding landscape by HS2 will divide irreversibly human occupation sites which are clearly part of the same historic landscape. Furthermore the noise of trains running at proposed high frequency will demolish the peace and tranquillity of the Chiltern landscape and the benefits to people walking in these areas of the Chiltern Hills.
References


2. Buckinghamshire Sites and Monuments Records (hereafter SMR): 0038401000 and 0038400001. SMR records can be accessed on-line via the Bucks County website ‘Unlocking Buckinghamshire’s Past’ at https://ubp.bucksc.gov.uk/


4. SMR: 0523800000; 0054800000


12. RCHM BUCKS 1 P176


15. G Dunning: unpublished text  Bucks Heritage Gateway

16. Cockburn RWT (1937) Two medieval sites near Great Missenden Records of Bucks 13 300


19. Press.


24. Victorian County History, Buckinghamshire pp.26

Appendix C  Tourism

Chilterns Conservation Board

C.1  Background

C.1.1  There are 55 million leisure visits to the Chilterns every year, making this one of the most popular protected landscapes in the world (Chilterns AONB Visitor Survey 2007). The Chilterns countryside is highly valued for the wide variety of recreational opportunities it offers, which includes walking, cycling and horse-riding, gliding, canoeing and bird watching.

C.1.2  The economic impacts of visits to the countryside are substantial, with an estimated £471.6 million of expenditure associated with leisure visits to Chilterns and an estimated 12,000 FTE jobs sustained. However it is not just the economic impacts which are important. The Chilterns countryside offers numerous non-monetary benefits which are hard to quantify, yet have far-reaching impacts on peoples’ lives. The countryside offers opportunities for fresh air and exercise, with benefits for physical and mental well-being. It provides opportunities for learning and discovery, volunteering and participation in events and activities. The vast majority of visits to the countryside are informal visits rather than organised ones, usually with friends and family.

C.1.3  It is the landscape and scenery that provides the backdrop to this flourishing tourism industry. There are over 500 tourism businesses in the Chilterns and a Chilterns Tourism Network with 160 members. There is a dedicated Chilterns Tourism website www.visitchilterns.co.uk and there are many projects aimed at growing the rural tourism economy.

C.2  Visits to the Chilterns Countryside

C.2.1  It is evident from local authority surveys that the Chilterns countryside is visited and enjoyed by most of its residents – usage of the Chilterns countryside by local residents varies from 81% in Buckinghamshire to over 90% in Oxfordshire. The Chilterns has an extensive rights of way network and is nationally recognised for its walking, with several promoted trails passing through the Chilterns, including the Ridgeway National Trail and the Thames Path national trail. The Misbourne Valley is also an important visitor destination, with high volumes of day visits from London and the urban areas adjacent to the Chilterns AONB. The excellent existing rail and London underground links make this the most visited protected landscape in England.

C.2.2  There are many promoted routes passing through the Misbourne Valley (see nn) and these are some of the most heavily used routes, due to their accessibility to London and other major towns in the South East. More than 200 walks and rides leaflets featured on the Chilterns AONB website

C.2.3  The formal countryside sites in the central Chilterns receive very high levels of use, the biggest receive more than 700,000 visitors per annum are shown in Table 9.1 These are by far the biggest visitor attractions in the central Chilterns, to put this in context, the other major attractions in the Chilterns receive around 300,000 visitors or less (eg Cliveden 330,000; Bekonscot Model Village 170,000).

1 See State of the Chilterns Environment Report 2012 for survey results
An assessment of the non-market effects of the Proposed Scheme compared to the Alternative Proposal Scheme
High Speed Rail in the Chilterns
Little Missenden to Wendover – VOLUME 2 APPENDICES

<table>
<thead>
<tr>
<th>Site</th>
<th>No. visitors pa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashridge Estate (National Trust)</td>
<td>700,000</td>
</tr>
<tr>
<td>Wendover Woods (Forestry Commission)</td>
<td>356,000</td>
</tr>
<tr>
<td>Go Ape at Wendover Woods</td>
<td></td>
</tr>
<tr>
<td>Aston Hill Mountain Bike Centre</td>
<td></td>
</tr>
<tr>
<td>Chilterns Open Air Museum</td>
<td></td>
</tr>
<tr>
<td>Great Missenden Cream Teas</td>
<td>Approx 5,000</td>
</tr>
</tbody>
</table>

Table C.1: Visitor numbers at major Chilterns sites in the Misbourne Valley/HS2 corridor

C.2.4 The large number of walking and cycling guide books provide a good indication of the popularity of the area for walking. These range from short pub walks to long distance trails such as the Ridgeway. The Chilterns AONB website alone lists 34 books of Chilterns walks which are widely available and most of these include walks through the Misbourne Valley. The main publicly promoted walking/cycling routes in the Chilterns affected by the proposed HS2 corridor, are shown below:

<table>
<thead>
<tr>
<th>National routes</th>
<th>Regional routes</th>
<th>Local promoted routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Ridgeway National Trail</td>
<td>The Chilterns Cycleway</td>
<td>Chilterns Country View of the Vale</td>
</tr>
<tr>
<td>The Icknield Way</td>
<td>The Chiltern Link</td>
<td>Great Missenden Circular Walk</td>
</tr>
<tr>
<td>National Cycle Network route 57</td>
<td>Sustrans route 30</td>
<td>Great Missenden Circular Walk</td>
</tr>
<tr>
<td></td>
<td>The Aylesbury Ring</td>
<td>Walks in the Misbourne Valley</td>
</tr>
<tr>
<td></td>
<td>The Chiltern Way</td>
<td>Great Missenden and Angling Spring Wood stile-free walk</td>
</tr>
<tr>
<td></td>
<td>Chiltern Heritage Trail (3 regional cycle routes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>South Bucks Way</td>
<td></td>
</tr>
<tr>
<td>Total 3</td>
<td>Total 7</td>
<td>Total 5</td>
</tr>
</tbody>
</table>

Table C.2: Walking/Cycling routes in the Central Chilterns affected by the Proposed Scheme

Health Walks Programmes

C.2.5 Number of health walk attendances in the Chilterns, includes repeat visits is 42,000 (Simply Walk, Hertfordshire Countryside Management Services, the Ramblers and Central Bedfordshire Council).

C.2.6 There are 10 health walk programmes in the Misbourne Valley organised by Simply Walk, which generated 7,000 health walk attendances in 2012/13. These walks take place in the and around the following locations:
C.2.7 The Misbourne Valley is used by a large number of groups for walking, cycling, geocaching, orienteering and other countryside-based activities. There are many affiliated clubs based in and around the Chilterns AONB, and it also attracts large numbers of groups from outside the area for day visits. For example:

- There are 28 affiliated cycle clubs based in the Chilterns who meet regularly, most of them weekly (see appendix 1). In addition to these clubs, there are many clubs based outside the Chilterns who visit the Chilterns regularly for day-rides and there are sportives and cycle events most weekends. In addition there are 30 bike shops in the Chilterns and many of these organise regular rides.

C.2.8 However the Misbourne Valley is a popular walking location for all these groups. If HS2 blights the Misbourne Valley during and after construction these groups will simply avoid visiting this area.

<table>
<thead>
<tr>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramblers, Amersham Group</td>
</tr>
<tr>
<td>Ramblers Wycombe Group</td>
</tr>
<tr>
<td>Chess valley U3A:</td>
</tr>
<tr>
<td>Walk into History group walk</td>
</tr>
<tr>
<td>Thames Valley Long Distance Walkers Assoc.</td>
</tr>
<tr>
<td>The Chiltern Society Walking Group</td>
</tr>
</tbody>
</table>

Outdoor Events in the Chilterns (walking, cycling etc)

C.2.9 There are regular outdoor events taking place in the central Chilterns, using the rights of way network and quiet lanes. Some of these events attract hundreds of participants. In
addition there are trail running events, half marathons, orienteering events and many others.

**Cycling Events**

C.2.10  EG Annual Chilterns Hundred Cycling Event from Amersham – attracts 1,400 participants plus friends/family/spectators.

**Walking Events**

C.2.11  EG Chilterns Three Peaks Challenge includes Wendover/Coombe Hill area. This attracts around 1,000 participants each year.

**C.3  Volunteering in the Chilterns countryside**

C.3.1  Volunteering linked to the countryside is very strong in the Chilterns, with many different opportunities on offer with organisations such as the National Trust, Natural England and BBOWT. These volunteer programmes provide important health and social benefits to a wide cross-section of people, some of them with physical or mental health issues.

<table>
<thead>
<tr>
<th>Title</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural England</td>
<td>There are 104 volunteers registered in the Chilterns. Natural England (NE) estimate that National Nature Reserve based volunteers give an average of 104 hours pa (14.4 days), collectively for the Chilterns this comes to 765 days a year. NE estimate the value of this volunteering time to be £76,500 in 2012/13.</td>
</tr>
<tr>
<td>The National Trust</td>
<td>Awaiting data from Neil Harris</td>
</tr>
<tr>
<td>BBOWT</td>
<td>Have emailed Martin Lane</td>
</tr>
</tbody>
</table>

Table C.3: Volume and value of volunteering in the Chilterns' nature reserves

**C.4  Chilterns Tourism**

C.4.1  The Misbourne Valley is an important visitor destination in its own right, with a range of attractions, accommodation and festivals/events which bring people to the area. There are many promoted walking and cycling routes passing through the Misbourne Valley (including national trails) and these, in addition to the formal countryside sites such as Wendover Woods, attract large numbers of visitors. It is the beauty of the countryside, its tranquillity, unspoilt views and accessibility which bring people to the area.

<table>
<thead>
<tr>
<th>Attraction</th>
<th>Visitor Numbers 2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roald Dahl Museum</td>
<td>68,000</td>
</tr>
<tr>
<td>Several Roald Dahl Open Days throughout the year visiting Gipsy House, also people following the Roald Dahl trail.</td>
<td>Numbers not recorded.</td>
</tr>
<tr>
<td>Humbug Balloon Company</td>
<td></td>
</tr>
<tr>
<td>Sunday Cream Teas at local churches (eg Great</td>
<td></td>
</tr>
<tr>
<td>Attraction</td>
<td>Visitor Numbers 2012/13</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Missenden</td>
<td></td>
</tr>
<tr>
<td>Chilterns Open Air Museum</td>
<td></td>
</tr>
<tr>
<td>Milton's Cottage</td>
<td></td>
</tr>
<tr>
<td>Great Missenden Food Festival</td>
<td></td>
</tr>
<tr>
<td>Little Missenden Comedy Festival</td>
<td></td>
</tr>
<tr>
<td>Great Missenden Cream Teas</td>
<td>Approx 5,000</td>
</tr>
</tbody>
</table>
Appendix D  Health and Wellbeing

Ray Payne

D.1  Introduction

D.1.1  The impact of the Proposed Scheme impact on the health and wellbeing of the resident and non-resident population must be considered. It is useful to consider how this effects the population by considering it as a time based problem because with the passage of time the nature of the effect on health and wellbeing changes.

D.2  Planning phase

D.2.1  The planning stage for HS2 has already taken three years and may have another four years to run. During this period the main characteristic running as an acidic vein through the population effected, and those who are not, is worry. Seven years of worry will take its toll on even the stoutest constitution and most pragmatic mind. It is also a lot to expect from those affected to shoulder this burden. The subject of this worry falls under four heads.

D.2.2  Loss of familiarity and long term use or acquaintance with familiar routines or objects may sound trivial but for many, and the elderly are not the only age group in this state, it can become an all-consuming thought. Not as all-consuming it could be argued as worry about loss of land and rights of ownership, loss of investment in fixed assets, and loss caused by the Proposed Scheme which does not touch the property but by its very existence as an idea it has the effect of remotely diminishing values.

D.2.3  Anxiety brought about by uncertainty is the second head. The main concern here in the first instance is uncertainty about the nature of the proposal and then the probability of it being built. The first of these it would be reasonable to expect to diminish over time as further and better particulars of the Scheme were developed and released. This seems not to have been the case. The probability of it being built waxes and wanes with each throw of the legal dice and the perception which those affected take of breaking parliamentary and other news. Again, seven years is a long time to bear this burden.

D.2.4  Many residents and non-residents have become extremely well-informed and have researched those aspects of the Proposed Scheme which will generate local effects. For many of them the primary expression of anxiety is a deep and pervading frustration at the shortcomings of the government’s proposal and its manner of implementation. This it seems is coupled with this is the frustration that communicating their point of view has often been perceived as a less than worth wile exercise.

D.2.5  This leads into the last category of worry which is lack of understanding. Understanding that is about subjects such as noise, disruption, scale, vibration and many others. For many this will never go away. It will continue to haunt and persist uppermost in people’s minds not only for the first seven years but for some time after that until reality begins to take shape during construction.

D.3  Construction phase

D.3.1  During construction worry will take a different turn. It will concentrate and be the focus of attention on the actual effects on life style, work and livelihood, access or lack of it. It will also be more depressing because by then it will be beyond control because it is actually
happening. The idea will gradually become a reality, and in the minds of many the reality of what is being built will be there far in excess of their life span especially given the aging resident population.

D.4 Operation phase

D.4.1 During operation, and probably sometime before, this reality will be a thing of the present and for all time. Worry will then turn to the unavoidable and unchangeable. This will cover a wide range of concerns including noise, visibility of the working route and loss. In a way the worries at the outset over loss, uncertainty, effects and understanding will continue but in a different form and with different degrees of severity and concern depending on the effect of the Proposed Scheme on each individual.

D.4.2 A reasonable assertion which can be made on the basis of this discussion is the effect of the planning, construction and operation of the Proposed Scheme will have an impact of the health and wellbeing of those affected. For the purposes of this report the effect of noise is used to illustrate the point.

D.5 Health Impact Assessment

D.5.1 The contents of the Draft Environmental Statement are determined by EU regulation and it is for this reason that details of the Health Impact Assessment (HIA) and Equality Impact Assessment will not be available until the Hybrid Bill is deposited. They will not be part of the final Environmental Statement, but will be additional reports. The HIA should include an assessment of stress, anxiety and other mental wellbeing impacts of the proposed scheme, as well as a review of research-based evidence to underpin the assessment of likely effects of the scheme on health and wellbeing. Sound research must form the basis of the HIA which presumably is now being prepared or has already been completed.

D.6 Noise

D.6.1 Noise is broadly defined as any unwanted sound, and to some extent it is an inevitable consequence of living in a mature and vibrant society. Most noise is generated as a by-product of economic activity, from the production and consumption of goods and services, and in the case of the Proposed Scheme by the intermittent sound of high speed trains. In managing noise the aim should be to strike a balance between the demand for noise making goods and services and the detrimental effect that noise has on the population exposed. In this case the effect on the populations in and visiting a protected landscape.

D.6.2 Defra has recently reported that the social cost of environmental noise has been estimated at £7-10bn per annum and its Noise Policy Statement for England sets out the government’s position and key responsibilities for the management of noise, which are to:

- Avoid significant adverse impacts on health and quality of life;
- Mitigate and minimise adverse impacts on health and quality of life; and
- Where possible, contribute to the improvement of health and quality of life