

High Speed Rail (West Midlands - Crewe) Supplementary Environmental Statement 2 and Additional Provision 2 Environmental Statement

Volume 5: Technical appendices

CA4: Whitmore Heath to Madeley

Landscape and visual assessment and photomontages

(LV-001-004)

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(LV-001-004)



Department
for Transport

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1 Introduction

1.1 Structure of this appendix

- 1.1.1 This document is an appendix to the landscape and visual assessment which forms part of Volume 5 of the Supplementary Environmental Statement 2 (SES2) and Additional Provision 2 Environmental Statement (AP2 ES) for the Whitmore Heath to Madeley community area (CA4).
- 1.1.2 This appendix provides details of changes to the landscape and visual assessment since the production of the High Speed Two (HS2) Phase 2a (West Midlands - Crewe) Environmental Statement (ES)¹ published in July 2017 (the main ES), as well as the Supplementary Environmental Statement (SES1) and Additional Provision Environmental Statement (AP1 ES) published in March 2018².
- 1.1.3 This report should be read in conjunction with Volume 5, Appendix LV-001-004, which accompanied the main ES, and Volume 5, Appendix LV-001-000 of the SES1 and AP1 ES.
- 1.1.4 Maps referred to in this appendix are contained in the main ES and the SES2 and AP2 ES Volume 2 and Volume 5: Landscape and Visual Map Books.
- 1.1.5 In order to differentiate between the original proposals assessed as part of the main ES and subsequent changes the following terms are used throughout the SES2 and the AP2 ES to define the scheme as it relates to the HS2 Phase 2a project:
- 'the original scheme' – the Bill scheme submitted to Parliament in July 2017, which was assessed in the main ES;
 - 'the SES1 scheme' – the original scheme with the changes described in the SES1 that are within the existing powers of the Bill, submitted to Parliament in March 2018;
 - 'the AP1 revised scheme' – the SES1 scheme as amended by the Additional Provision 1 (AP1) submitted to Parliament in March 2018;
 - 'the SES2 scheme' – the SES1 scheme with the changes described in the SES2 that are within the existing powers of the Bill; and
 - 'the AP2 revised scheme' – the SES2 scheme as amended by Additional Provision 2 (AP2).

1.2 Methodology, data sources, assumptions and limitations

- 1.2.1 The assessment scope, key assumptions and limitations are as set out in the main ES Environmental Impact Assessment Scope and Methodology Report (SMR) and the SMR Addendum (see main ES Volume 5, Appendices CT-001-001³ and CT-001-002⁴), and the SMR Addendum 2 (see SES2 and AP2 ES Volume 5, Appendix CT-001-000).

1.3 Landscape assessment

Introduction

- 1.3.1 This section is organised as follows:
- information on each LCA within the area including a description of the landscape (with OS maps, photography and sketches to help illustrate character, and patterns of land uses and vegetation of the area), as well as an analysis of the value, susceptibility and sensitivity of each LCA. These are ordered from south to north along the route of the AP2 revised scheme;
 - description of future baseline conditions, where relevant; and
 - assessment of the effects of the AP2 revised scheme on the landscape at construction, year 1, year 15 and year 60.

Approach to the landscape characterisation

- 1.3.2 The LCA have been determined as part of an integrated approach to environmental characterisation in collaboration with other topics including heritage and ecology, with reference to a number of published studies at the national⁵, county level⁶. A wide variety of spatially referenced data were also reviewed in developing the landscape characterisation, including Historic Landscape Characterisation (HLC), Phase

¹ HS2 Ltd (2017), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Environmental Statement*, <https://www.gov.uk/government/collections/hs2-phase-2a-environmental-statement>

² HS2 Ltd (2018), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Supplementary Environmental Statement and Additional Provision Environmental Statement*, <https://www.gov.uk/government/collections/hs2-phase-2a-supplementary-environmental-statement-and-additional-provision-environmental-statement>

³ HS2 Ltd (2017), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Scope and Methodology Report, Volume 5: Appendix CT-001-001*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627187/E23_EIA_SMR_CT-001-001_WEB.pdf

⁴ HS2 Ltd (2017), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Scope and Methodology Report Addendum, Volume 5: Appendix CT-001-002*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627188/E24A_CT-001-002_Part_1_WEB.pdf and https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627189/E24-B_CT-001-002_Part_B_WEB.pdf

⁵ Natural England (2013-2014), *National Character Area profiles*.

⁶ Staffordshire County Council (1996), *Planning for Landscape Change Supplementary Planning Guidance, Volume 3*.

¹ Habitat Survey, geological and hydrological data and aerial photography. The national landscape character context is illustrated on Map LV-00-101 (SES2 and AP2 ES Volume 5: Landscape and Visual Map Book). The county Landscape Character Types (LCT) of relevance to the Whitmore Heath to Madeley area are summarised below:

- Terrace Alluvial Lowlands: A landscape type associated with older river terraces, relatively remote from the floodplain. A flat landscape of predominantly intensive arable farmland and improved pasture, with pockets of ancient, irregular fields;
- Sandstone Hills and Heaths: A series of pronounced sandstone hills and plateaux dissected by minor stream valleys, with significant areas having either original heathland vegetation or coniferous forestry established on heathland. In areas of farmland, stock rearing predominates, set within large regular, hedgerow bounded fields. The landscape is characterised by a dispersed settlement pattern;
- Ancient Redlands: An undulating 'upland' landscape on sandstones and mudstones with mixed farming set within an irregular patchwork of hedged fields with a scattering of small, often ancient woodlands. Settlement is dispersed, being characterised by hamlets and scattered farmsteads; and
- Ancient Clay Farmlands: A landscape defined by an irregular pattern of hedged fields with ancient hedgerows and oaks, and fragments of former heathland, with a dispersed settlement pattern of small towns.

1.3.3 Where LCA are located across boundaries with other study areas, these are reported in each study area section.

1.4 Visual assessment

Introduction

1.4.1 Effects have been assessed where relevant for construction, operation year 1, year 15 and year 60.

1.4.2 Photographs have been included to represent the view from visual receptors during winter and, where relevant, summer. For some visual receptors no appropriate or accessible location from which to capture representative photographs of the view was available, therefore no photograph has been included and the assessment has been undertaken based on professional judgement.

1.4.3 All photography included within this document has been taken in accordance with the methodology set out within the Technical Note - Approach to photography contained within the Environmental Impact Assessment Scope and Methodology Report (SMR) Addendum (Volume 5: Appendix CT-001-002) of the main ES.

1.4.4 Photomontages have also been included for all relevant viewpoints and all photography associated with photomontages is verifiable and has been taken in accordance with the Technical Note - Approach to verifiable photomontages contained within the SMR Addendum, Volume 5: Appendix CT-001-002. All verifiable photography includes additional image specification and data information.

Visual receptors

1.4.5 The number on each viewpoint identifies the viewpoint locations which are shown on maps in the SES2 and AP2 ES Volume 5: Landscape and Visual Map Book. In each case, the middle number (xxx.xx.xxx) identifies the type of receptor represented as described below:

1. protected views – these relate to those viewpoints, panoramas and viewing corridors that have been designated by local authorities, county councils or other relevant stakeholders. Protected views have a high sensitivity to change;
2. residential views – these have a high sensitivity to change, as attention is often focussed on the landscape surrounding the property, rather than on another focused activity (as will be the case in predominantly employment or industrial areas);
3. recreational views – these receptors generally have a high sensitivity to change, as attention is focussed on enjoyment of the landscape. Tourists engaged in activities whereby attention is focused on the surrounding landscape also have a high sensitivity to change;
4. transport views – travel through an area is often the means by which the greatest number of people view the landscape. Because of the glimpsed nature of the view from trains or vehicles, people travelling through an area on main roads have a low sensitivity to change, while those on scenic routes have a medium sensitivity. People travelling through urban areas have a low sensitivity to change although in residential areas this increases to medium;
5. hotels and healthcare institutions – people staying in hotels or healthcare institutions have periods of time where their attention may be focussed on the landscape, whilst at other times attention is more likely to be focused on other activities. Based on the level of interaction with the surrounding landscape, these receptors have a medium sensitivity to change; and
6. employment – people at work and within educational institutions (other than residential educational facilities) are the least sensitive receptors, as their attention is likely to be focused on their work activity. These receptors have a low sensitivity to change.

- 1.4.6 Night time baseline and assessments have only been indicated where continuous working during construction or additional lighting in operation has the potential to result in significant effects on residential receptors. Further detail is set out within the SMR Addendum of the main ES.

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2 Part 2: Additional Provision 2 Environmental Statement

2.1 Landscape assessment

Introduction

2.1.1 The landscape character areas are shown on Maps LV-02-203 to LV-02-207-R1 (SES2 and AP2 ES Volume 5: Landscape and Visual Map Book).

Landscape receptors

Upper Meece Brook Valley Alluvial Lowlands LCA

Upper Meece Brook Valley Ancient Redlands LCA

Whitmore Hall Valley Ancient Redlands LCA

Upper Lea Valley Ancient Redlands LCA

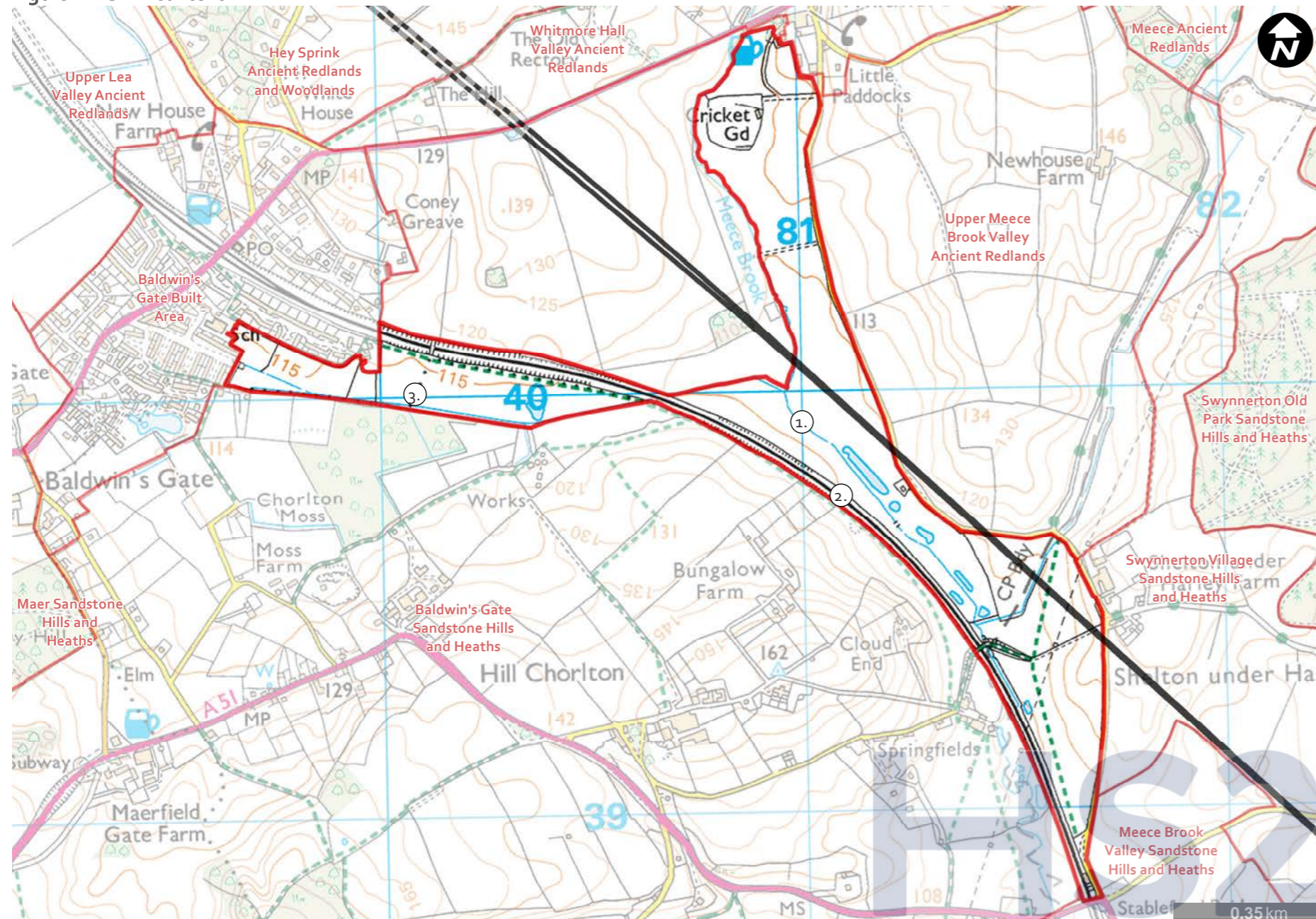
Hey Sprink Ancient Redlands and Woodlands LCA

Upper Meece Brook Valley Alluvial Lowlands LCA

Landscape character baseline description

The Upper Meece Brook Valley Alluvial Lowlands LCA includes the valley of the Meece Brook (1), which is narrow at the southern end of the LCA but widens out and forks further north. The low lying fields of rough grazing, marsh and heath along the valley extend up into narrower tributary stream valleys. This is a working agricultural landscape bounded by the West Coast Main Line (WCML) to the south-west and west (2). Tree cover is sparse, with willow carr present along Meece Brook, and an area of raised bog near Chorlton Moss (3). The overhead line equipment of the WCML is a noticeable feature in the valley and the rail line limits PRoW access across the area. The higher arable and drier farmland of the Upper Meece Brook Valley Ancient Redlands LCA and the prominent plantations of the Swynnerton Old Sandstone Hills and Heath, which forms the skyline to the north and east, contrast with the lower wetter farmland of this LCA.

Figure 1: LCA in context



- Key**
- AP2 revised scheme
 - LCA boundary
 - 1. Meece Brook
 - 2. Bent Lane, Whitmore
 - 3. Bent Lane looking west, Whitmore

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Principal vegetation



Principal vegetation key



Figure 2: Whitmore Cricket Club, from Bent Lane



Key value characteristics - Landscape condition and scenic qualities: Surviving riparian elements associated with the Meece Brook, such as tree lined wetlands and ditches, contribute to landscape value in an area of farmland otherwise altered by 20th century agricultural intensification and displaying evidence of field amalgamation and loss of hedgerows.

Figure 3: Meece Brook valley landscape, from Bent Lane



Key value characteristics - Perception of the landscape: This is a working agricultural landscape with low lying wetland habitats adding visual diversity and interest. Due to limited public access there is a sense of seclusion and tranquillity, although this is reduced by intermittent noise from moving trains on the WCML.

Upper Meece Brook Valley Alluvial Lowlands LCA

Key susceptibility characteristics in relation to the AP2 revised scheme

Figure 4: Hill Chorlton from Bent Lane



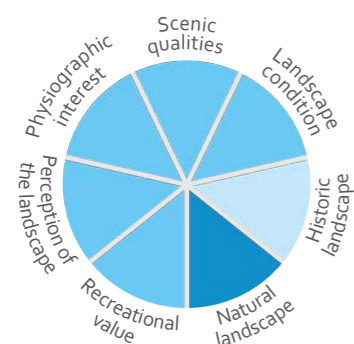
Landscape character assessment

Description of overall landscape value: This LCA comprises the low lying, gently undulating valley floor of the Meece Brook. The scenic quality of the landscape is reduced due to 20th century agricultural intensification with field amalgamation and loss of hedgerows. The large fields are extensively grazed. There are few historic sites and the area does not appear to be highly valued for recreation, other than the PRoW network and Whitmore Cricket Club to the north-east. The WCML is a visible feature in the valley and restricts PRoW and vehicular access across the area. Overall, given the above, the value of the landscape is low-medium.

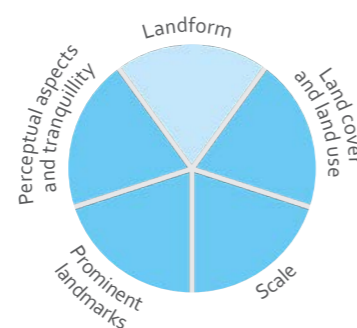
Description of overall landscape susceptibility: The landscape comprises low lying fields of rough grazing, marsh and small pockets of heath within the broad valley of the Meece Brook. Tree cover is typically sparse other than some riparian vegetation along the watercourse. The hedgerow network has been partially eroded through field amalgamation and a decline in management. Infrastructure present includes the WCML, the A51 London Road and the A53 Newcastle Road. The lack of distinctive features within the large-scale farmland means that it is considered reasonably robust to change arising from the AP2 revised scheme, particularly where the valley broadens out to the north. Overall, given the above, the susceptibility of the landscape is low-medium.

Description of overall landscape sensitivity: The landscape is relatively simple and there are relatively few natural or perceptual landscape features that are susceptible to change arising from the AP2 revised scheme. Overall, given the above, the sensitivity of the landscape to change arising from the AP2 revised scheme is low-medium.

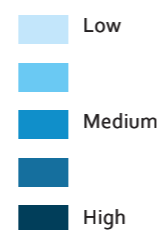
Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction: The main ES reported a major adverse significant effect due to construction activity associated with Meece Brook viaduct, Meece embankment and Bent Lane (north) diversion. This, and the presence of site haul roads, construction plant, material stockpiles, and changes to the landform would intensify the severance currently experienced due to the presence of the WCML, and introduce new uncharacteristic features that would alter much of the landscape within this LCA. Cranes used for construction of Meece Brook viaduct would also impact skyline character. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area and consequent reduction in height of Meece Brook viaduct by approximately 2.2m (AP2-004-002) will slightly reduce the effect on landscape character compared to the original scheme by reducing the geographical extent of the works. This improvement will however be minimal given the scale and extent of the wider construction activity within this LCA, which will be extensive. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 1: The main ES reported a major adverse significant effect due to the prominence of Meece Brook viaduct (and the operational railway) and Meece embankment, both of which are large engineered features which would reduce scenic quality, introduce a sense of severance in relation to rural character, disrupt the existing field pattern, and introduce intermittent disturbance, which would locally reduce the tranquillity of the landscape. Impacts would be intensified close to the Bent Lane (North) diversion where the WCML and the original scheme would run in proximity to each other. The reduction in height of Meece Brook viaduct by approximately 2.2m (AP2-004-002) will slightly improve the effect on landscape character compared to the original scheme. This improvement will however be minimal given the size and prominence of Meece Brook viaduct and Meece embankment and will not affect the wider landscape character of the Upper Meece Brook Valley Alluvial Lowlands LCA. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 15: The main ES reported a moderate adverse significant effect as the maturing mitigation planting would achieve some screening and integration of Meece Brook viaduct and Meece embankment within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

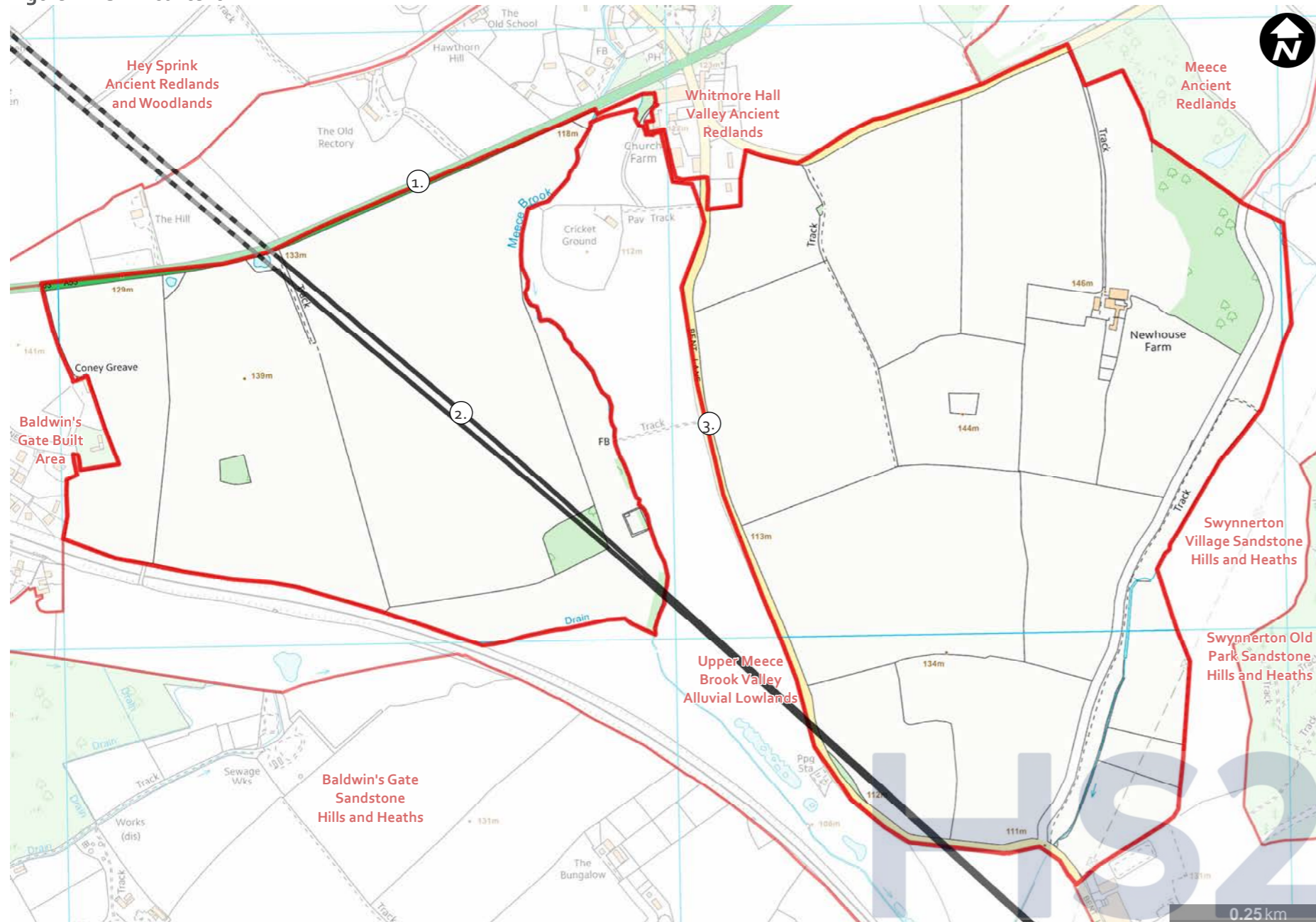
Year 60: The main ES reported a moderate adverse significant effect as the mature mitigation planting would achieve more screening and greater integration of Meece Brook viaduct and Meece embankment within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Upper Meece Brook Valley Ancient Redlands LCA

Landscape character baseline description

The Upper Meece Brook Valley Ancient Redlands LCA lies north-west of Swynnerton Old Park. The area is defined by a rolling ridge and valley landform with views to distinctive ridgeline woodlands such as The Rookery and to the designed landscape of Whitmore Hall. A network of medium and large-scale rectilinear arable fields dating back to the post medieval period is defined by a partially eroded hedgerow network. The A53 Newcastle Road (1) runs parallel to and along the LCA's northern boundary, with the WCML (2) forming a defining edge to the western boundary. Rural lanes (such as Bent Lane (3)), PRoW and farm tracks serve occasional scattered farmsteads and the hamlet of Acton to the north-east. There are few apparent natural, historic or recreational features in this landscape other than a small PRoW network, and some loss of scenic quality due to the influence of 20th century agricultural practices and the presence of the A53 Newcastle Road and WCML.

Figure 1: LCA in context



- Key
- AP2 revised scheme
 - LCA boundary
 - 1. A53 Newcastle Road
 - 2. WCML
 - 3. Bent Lane

Principal vegetation



Hedgerow
Hawthorn, Holly, Hazel



Hedge/field trees
Hawthorn, Sycamore, Oak

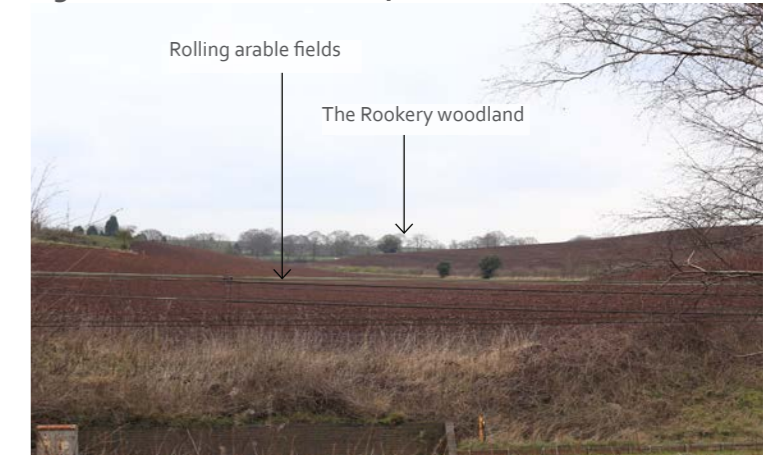


Field tree
Ash, Oak, Pine

Principal vegetation key



Figure 2: Towards Whitmore, from Hill Chorlton



Key value characteristics - Scenic qualities: This is a rolling landscape of medium to large-scale, often rectilinear arable fields and pastures bounded by hedgerows with mature hedgerow trees. There has been some loss of hedgerows and field amalgamation.

Figure 3: Undulating pastures, south of Newhouse Farm



Key value characteristics - Perception of the landscape: This is a working agricultural landscape of arable land and pastures. Infrastructure, including the A53 Newcastle Road and WCML locally reduces the quality of views and sense of tranquillity in the area.

Upper Meece Brook Valley Ancient Redlands LCA

Key susceptibility characteristics in relation to the AP2 revised scheme

Figure 4: Elevated pastures and woodland, west of Bent Lane



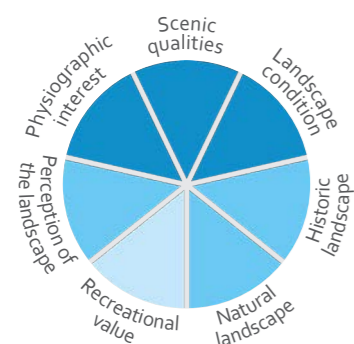
Landscape character assessment

Description of overall landscape value: This is a mostly gently rolling ridge and valley farming landscape which has been affected by a decline in traditional farming practices, resulting in some field enlargement and hedgerow loss. Its value, which is higher than would otherwise be expected, derives from it forming part of the wider setting of Swynnerton Old Park rather than from its intrinsic qualities. For this reason the value of the landscape is medium.

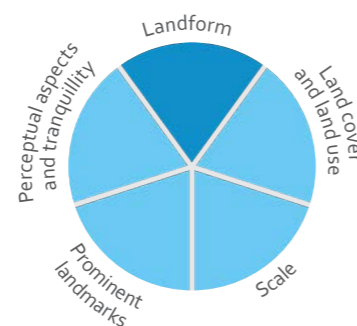
Description of overall landscape susceptibility: The large-scale field pattern, sparse tree cover and intermittent hedgerows are not particularly susceptible to the AP2 revised scheme although the gently rolling landform will require more embankments and cuttings than a flatter landscape and is therefore more susceptible. There are some notable views to hilltop woodlands such as 'The Rookery' and the designed landscape of Whitmore Hall to the north, which will be interrupted by the new infrastructure, but the visual character and tranquillity of parts of this LCA are already influenced by the A51 London Road, A53 Newcastle Road and the WCML. For these reasons, the susceptibility of the landscape is low-medium.

Description of overall landscape sensitivity: The large-scale rolling farmland with its relatively simple land cover has been affected by 20th century agricultural intensification resulting in field enlargement and loss of hedgerows. Infrastructure including the WCML and A53 Newcastle Road are present and locally reduce landscape tranquillity. Given the above, the sensitivity of the landscape to change arising from the AP2 revised scheme is medium.

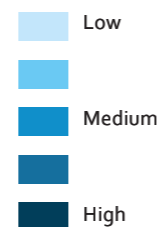
Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction: The main ES reported a major adverse significant effect due to construction activity associated with Stableford North embankment, Meece embankment, Whitmore South cutting, Whitmore Heath tunnel, the southern porous portal of Whitmore Heath tunnel and associated earthworks. These works and the presence of the A53 Newcastle Road transfer node, site haul routes, construction plant and material stockpiles would substantially change the rural character in terms of changes to landform and the pattern of arable fields and pastures. The western part of the LCA, which has already been eroded by 20th century agricultural intensification, would be particularly affected. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area and consequent reduction in height of Meece Brook viaduct by approximately 2.2m (AP2-004-002) will slightly reduce the effect on landscape character compared to the original scheme by reducing the overall extent of the works to the viaduct. This improvement will however be minimal given the scale and extent of the wider construction activity within this LCA, which will be extensive. The amendment will therefore not result in a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 1: The main ES reported a major adverse significant effect due to the substantial changes to landform and field pattern caused by the presence of Stableford North embankment, Bent Lane (north) diversion, Meece embankment and the new A53 Newcastle Road overbridge. These engineered landforms would cut across the natural landform and appear incongruous in the naturally rolling landscape. The reduction in height of Meece Brook viaduct by approximately 2.2m (AP2-004-002) will slightly improve the effect on landscape character compared to the original scheme as the viaduct will be less prominent. This improvement will however be minimal given the size and prominence of Meece Brook viaduct and Meece embankment which will continue to affect the landscape character of the Upper Meece Brook Valley Ancient Redlands LCA. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 15: The main ES reported a moderate adverse significant effect as the maturing mitigation planting would achieve some screening and integration of Meece Brook viaduct and Meece embankment within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

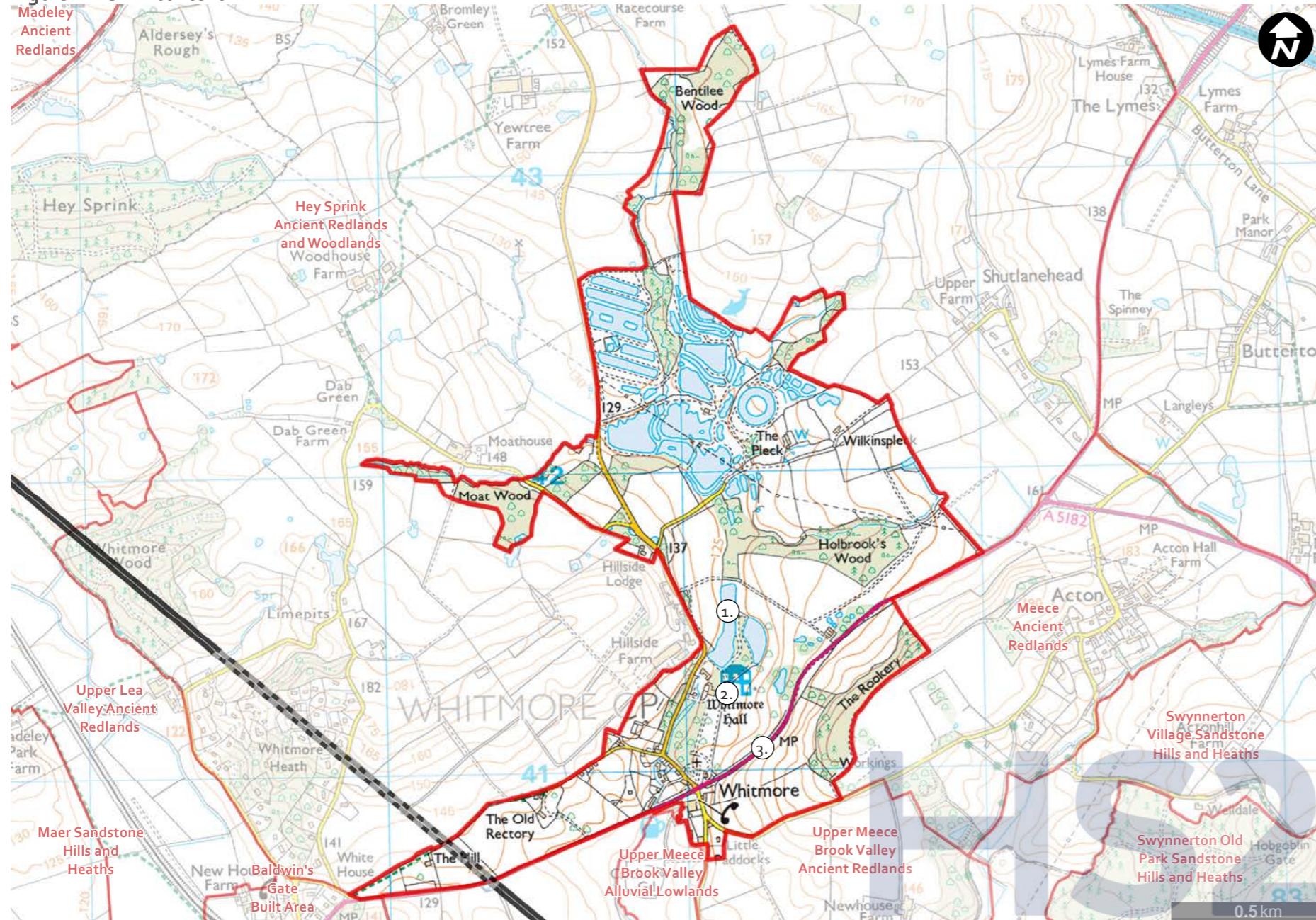
Year 60: The main ES reported a moderate adverse significant effect as the mature mitigation planting would achieve more screening and greater integration of Meece Brook viaduct and Meece embankment within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Whitmore Hall Valley Ancient Redlands LCA

Landscape character baseline description

Whitmore Hall Valley Ancient Redlands LCA covers an area of rolling lowland valley characterised by the historic estate, wooded parkland, gardens and lakes at Whitmore Hall (1), a late 17th century Grade I listed Carolean style manor house (2). The A53 Newcastle Road (3) forms the boundary of the LCA to the south and a small PRoW network connects the valley to Whitmore Heath. Ancient woodland (3) and mature parkland trees are a characteristic of both this LCA and the adjacent Meece Ancient Redlands LCA and Hey Sprink Ancient Woodlands and Redlands LCA. Cudmore Fishery is set within a parkland, woods and meadow and is one of the largest commercial fisheries in the country. Away from the fishery and A53 Newcastle Road, the landscape is generally undisturbed, tranquil and secluded. The area through which the AP2 revised scheme will pass includes two detached properties known as The Hill and the Old Rectory, both of which are set in open fields with mature hedgerows and hedgerow trees.

Figure 1: LCA in context



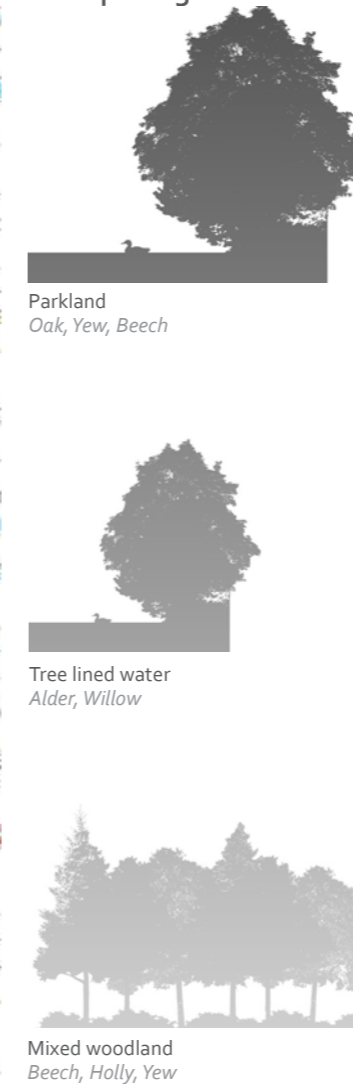
Key plan



Key

- North
- AP2 revised scheme
- LCA boundary
- Lake and grounds of Whitmore Hall
- Whitmore Hall
- A53 Newcastle Road

Principal vegetation



Principal vegetation key

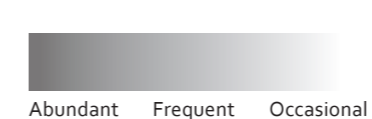


Figure 2: Parish Church of Saint Mary and All Saints



Key value characteristics - Scenic qualities and historic landscape: The value derives from its scenic quality, intact parkland, historic estate associations and village architecture. Ancient woodland and mature parkland trees are valued landscape characteristics.

Figure 3: Whitmore Hall grounds, from Three Mile Lane

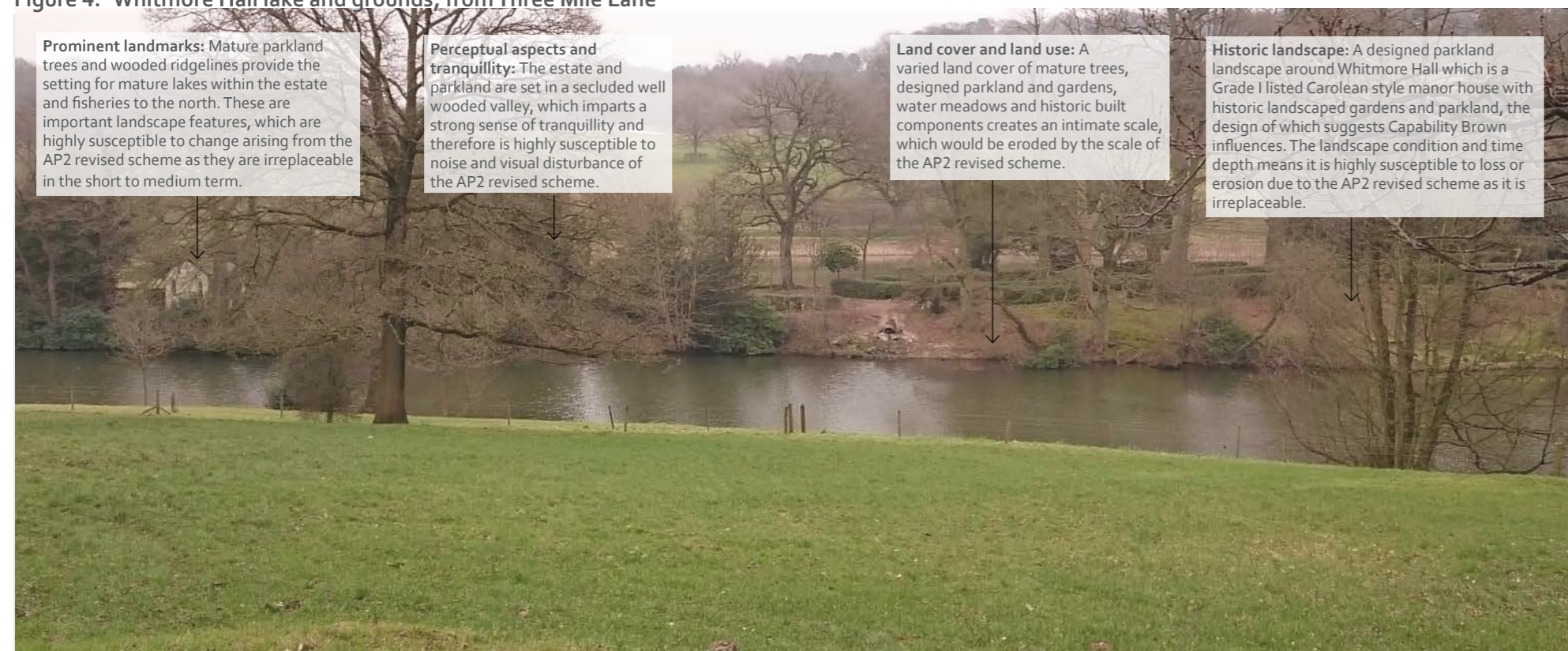


Key value characteristics - Perception of the landscape: A historic, well managed and intact parkland landscape of meadows and woodland which is enhanced by views to wooded skylines, and the presence of the picturesque Parish Church. Overall this is a very tranquil area with few discordant features.

Whitmore Hall Valley Ancient Redlands LCA

Key susceptibility characteristics in relation to the AP2 revised scheme

Figure 4: Whitmore Hall lake and grounds, from Three Mile Lane



Landscape character assessment

Description of overall landscape value: The value of this landscape is derived from its rolling landform, scenic quality, intact parkland, historic associations and recreational value. Whitmore Hall is surrounded by historic landscaped gardens, with Cudmore Fishery to the north. The estate and fishery are a well used recreational resource of local, regional and national interest. The nearby ancient woodlands of Pleck Wood, Moat Wood, and Holbrook Wood are also of habitat and wildlife value. Overall, given the above, the value of the landscape is medium-high.

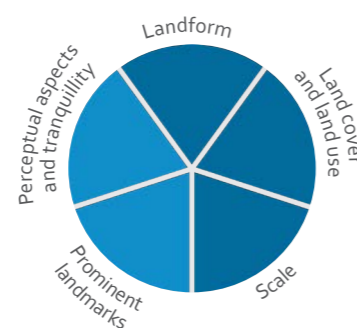
Description of overall landscape susceptibility: The historic parkland of the hall and village and well designed grounds of the fishery, form an intact well managed landscape in which ancient woodland and parkland trees are a key characteristic. Most of the estate affords a sense of seclusion and tranquillity. There are few discordant features other than some noise from the A53 Newcastle Road toward the southern boundary of the LCA. Given that many of the key landscape characteristics are not replaceable in the short to medium term, the susceptibility of the landscape is medium-high.

Description of overall landscape sensitivity: A valley landscape of historic parkland and estate with well preserved intact landscape features. Away from the commercial Cudmore fishery and A53 Newcastle Road, the estate is generally undisturbed, tranquil and secluded. The landscaped gardens and parkland, the latter with its varied terrain, extensive meadows and wooded skylines, contribute to the highly scenic quality of the landscape. Overall, given the above, the sensitivity of the landscape to change arising from the AP2 revised scheme is medium-high.

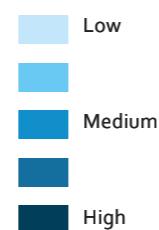
Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction: The main ES reported a minor adverse non-significant effect from construction activity associated with the A53 Newcastle Road overbridge, Whitmore Heath tunnel and southern porous portal of Whitmore Heath tunnel. The pattern of arable fields and pastures would be lost and/ or temporarily disrupted and the scenic quality of the rural landscape would be reduced through the introduction of uncharacteristic features. Disturbance would be extended through night time lighting of the tunnel boring works. However, only a small part of the LCA would be affected by the construction activity. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will remove construction works from this LCA and the landscape will remain unchanged from the current baseline described in the main ES. The amendment will therefore remove this effect.

Year 1: The main ES reported a minor adverse non-significant effect due to the presence of the A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel. These large new structures would locally change the landform and field pattern and give rise to a locally significant effect. However, most of the LCA would be unaffected. The amendment (AP2-004-002) will remove the A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel from this LCA and the landscape will remain unchanged from the current baseline described in the main ES. The amendment will therefore remove this effect.

Year 15: The main ES reported a minor adverse non-significant effect due to the presence of the A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel. Maturing mitigation planting would achieve some screening and integration of these structures, but intermittent noise from moving vehicles on the A53 Newcastle Road overbridge would locally affect the tranquillity of the landscape at the western end of the LCA. The amendment will remove the A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel from this LCA and the landscape will remain unchanged from the current baseline described in the main ES. The amendment will therefore remove this effect.

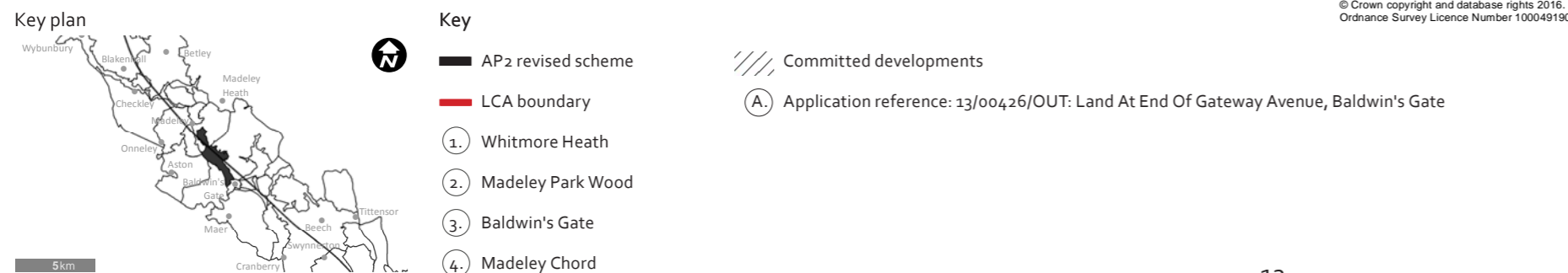
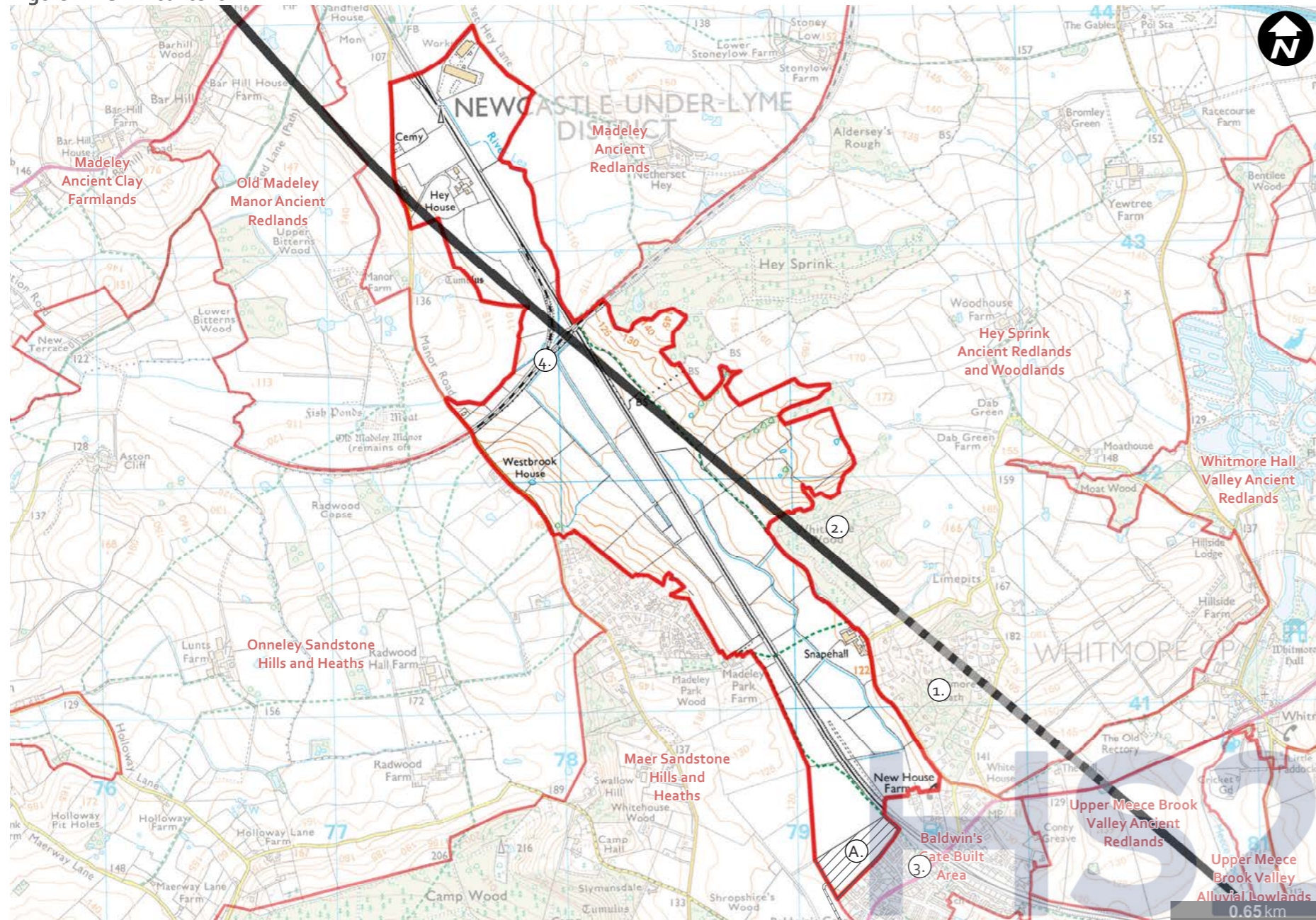
Year 60: The main ES reported a minor adverse non-significant effect due to the presence of the A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel. Mature mitigation planting would achieve some screening and integration of these structures, but intermittent noise from moving vehicles on the A53 Newcastle Road overbridge would locally affect the tranquillity of the landscape at the western end of the LCA. The amendment will remove the A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel from this LCA and the landscape will remain unchanged from the current baseline described in the main ES. The amendment will therefore remove this effect.

Upper Lea Valley Ancient Redlands LCA

Landscape character baseline description

The Upper Lea Valley Ancient Redlands LCA is a broad valley landscape of well managed extensive farmland which forms part of the wider setting of Whitmore Heath (1), Madeley Park Wood (2), Baldwin's Gate (3) and other smaller residential areas. The valley floor includes an area of floodplain grazing and improved pasture. Part of the valley side is included within this LCA and is characterised by sloping pastures with prominent 'shaws' (linear woodland belts). The River Lea itself is not a prominent feature in the landscape. The WCML runs along the valley floor mainly at grade with the valley sides as a backdrop. The out of use Stoke to Market Drayton Railway (also known as the Silverdale line of the Stoke to Market Drayton Railway) and Madeley Chord (4), is a distinctive landscape feature which bisects the valley near Hey Sprink. A small PRow network and the regionally promoted Newcastle Way connect into the wider area.

Figure 1: LCA in context



Principal vegetation

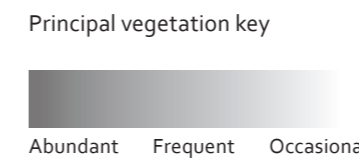


Figure 2: Whitmore Wood from east of Madeley Park Wood



Key value characteristics - Natural landscape: Broad valley landscape of well managed farmland and areas of floodplain pasture. The edges of woodland in adjacent LCAs are sinuous and irregular in form and provide enclosure and variety to the otherwise open and simple land cover pattern. Woodland and hedgerows help integrate nearby settlement edges into the wider landscape.

Figure 3: Hey Sprink and Whitmore Wood from Manor Road

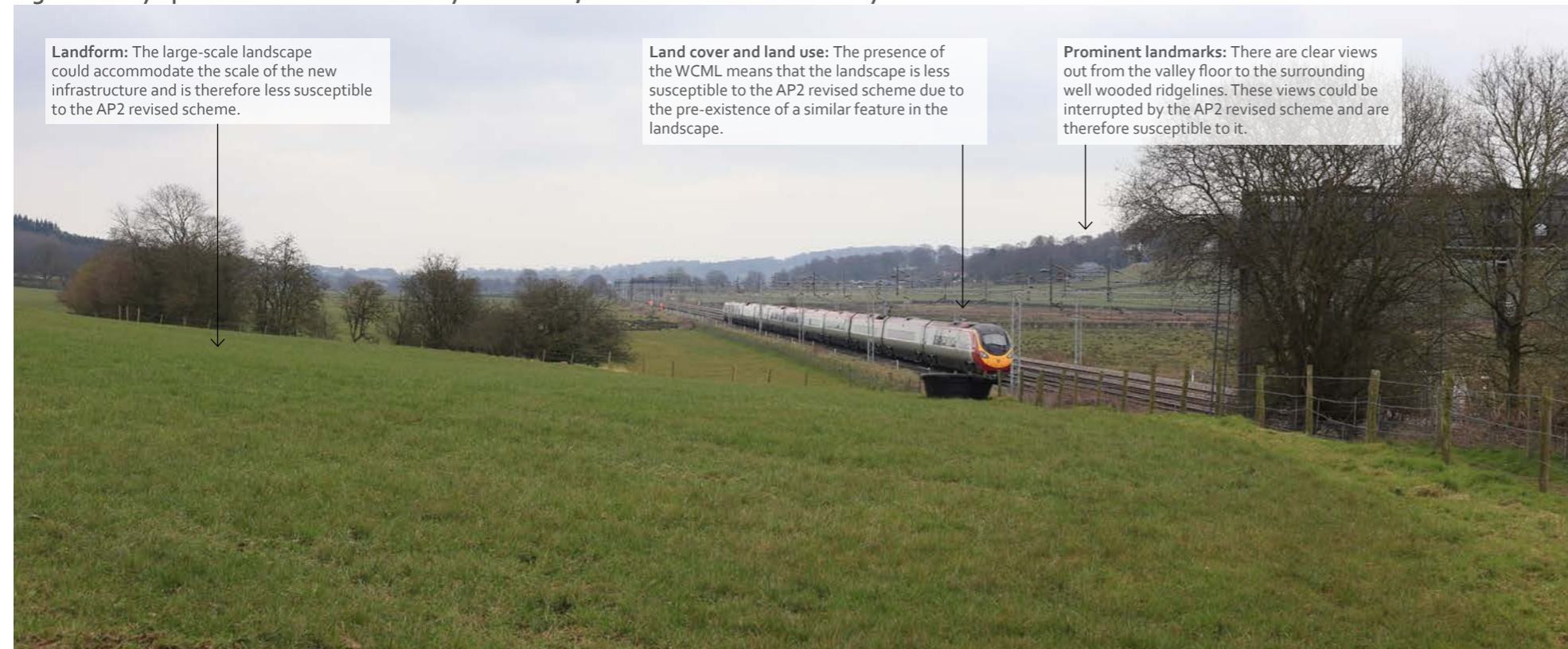


Key value characteristics - Perception of the landscape: Due to the absence of roads, this is a relatively tranquil rural landscape. The WCML runs along the flat valley floor but is well accommodated within the landscape and other than intermittent disturbance from moving trains is not a particularly noticeable feature.

Upper Lea Valley Ancient Redlands LCA

Key susceptibility characteristics in relation to the AP2 revised scheme

Figure 4: Hey Sprink woodland and Madeley Park Wood, from PRoW north of Madeley Chord



Landform: The large-scale landscape could accommodate the scale of the new infrastructure and is therefore less susceptible to the AP2 revised scheme.

Land cover and land use: The presence of the WCML means that the landscape is less susceptible to the AP2 revised scheme due to the pre-existence of a similar feature in the landscape.

Prominent landmarks: There are clear views out from the valley floor to the surrounding well wooded ridgelines. These views could be interrupted by the AP2 revised scheme and are therefore susceptible to it.

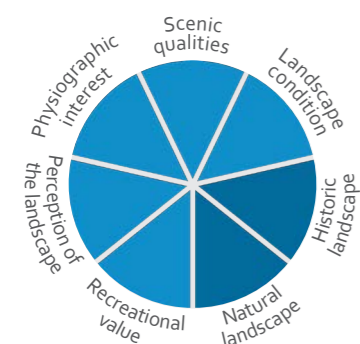
Landscape character assessment

Description of overall landscape value: This is a large-scale extensively farmed agricultural landscape which has some natural features but few historic or recreational features. Its value derives from its role in providing a rural and relatively tranquil setting for the elevated settlement of Whitmore Heath, Madeley Park Wood and other nearby residential areas. A consented extension of 113 dwellings to the north-west edge of Baldwin's Gate (construction of which is assumed to be underway by 2020) will change the character of a small part of this LCA from rural farmland to residential, but will not affect the value of the wider landscape in the LCA which, given the above, is medium.

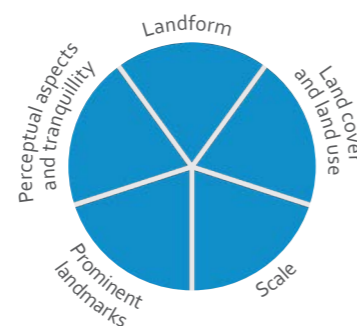
Description of overall landscape susceptibility: The susceptibility of this area is reduced due to the extensive farming practices in the valley and the presence of the WCML. The latter, although reasonably well accommodated within the landscape, reduces the sense of tranquillity. The consented development may locally affect the susceptibility of the landscape but it will not change the susceptibility of the wider LCA, which given the above, is medium.

Description of overall landscape sensitivity: A large-scale farming landscape defined by the wide valley landform, and part of the valley side. It plays an important role in providing the wider setting for nearby more elevated residential areas including Whitmore Heath and Madeley Park Wood. The WCML runs along the valley floor and is reasonably well accommodated within the landscape, although moving trains reduce the sense of tranquillity by introducing noise and visual disturbance. Overall, given the above, the sensitivity of the landscape to change arising from the AP2 revised scheme is medium.

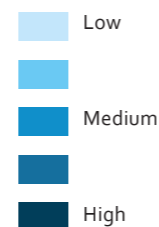
Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction: The main ES reported a major adverse significant effect due to construction activity associated with Stableford North embankment, Meece embankment, Whitmore South cutting, Whitmore Heath tunnel, the southern porous portal of Whitmore Heath tunnel and associated earthworks. These works and the presence of the A53 Newcastle Road transfer node, site haul routes, construction plant and material stockpiles would substantially change the rural character in terms of changes to landform and the pattern of arable fields and pastures. The western part of the LCA which has already been eroded by 20th century agricultural intensification would be particularly affected. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area and consequent reduction in height of Meece Brook viaduct by approximately 2.2m (AP2-004-002) will slightly reduce the effect on landscape character by reducing the overall scale of the works to the viaduct. This improvement will however be minimal given the scale and extent of the wider construction activity within this LCA, which will be extensive. The amendment will therefore not result in a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 1: The main ES reported a major adverse significant effect due to the substantial changes to landform and field pattern caused by the presence of Stableford North embankment, Bent Lane (north) diversion, Meece embankment and the new A53 Newcastle Road overbridge. These engineered landforms would cut across the natural landform and appear incongruous in the rolling landscape. The reduction in height of Meece Brook viaduct by approximately 2.2m (AP2-004-002) will slightly reduce the effect on landscape character compared to the original scheme as the viaduct will be less prominent. This improvement will however be minimal given the size and prominence of Meece Brook viaduct and Meece embankment which will continue to affect the landscape character of the Upper Lea Valley Ancient Redlands LCA. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 15: The main ES reported a moderate adverse significant effect as the maturing mitigation planting would achieve some screening and integration of Meece Brook viaduct and Meece embankment within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

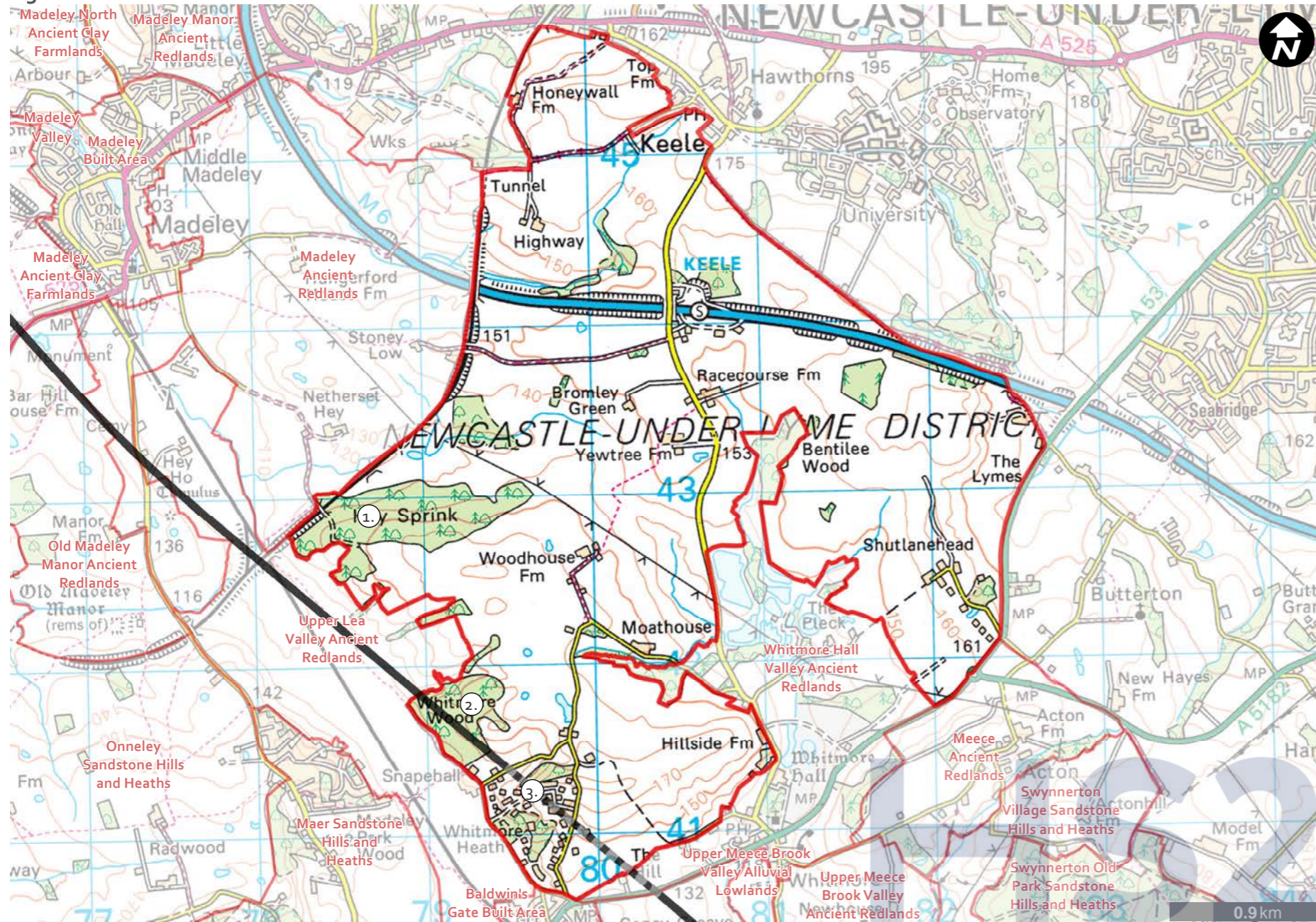
Year 60: The main ES reported a minor adverse non-significant effect as the mature mitigation planting would achieve more screening and greater integration of Meece Brook viaduct and Meece embankment within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Hey Sprink Ancient Redlands and Woodlands LCA

Landscape character baseline description

Hey Sprink Ancient Redlands and Woodlands LCA is located to the north-west of Swynnerton Old Park. The LCA is defined by a rolling plateau edge landform overlain by a small-scale pattern of rectilinear and partly irregular fields, interspersed with some medium and large woodland blocks, including Hey Sprink (1) and Whitmore Wood Ancient Woodlands (2) which contribute to the extensive wooded skylines within this LCA. Farmsteads and residential properties are dispersed through the landscape. The largest settlement is Whitmore Heath (3), where individually designed detached properties with large gardens occupy an elevated wooded situation above the River Lea valley. The WCML to the west and M6 (4) to the north-east are audible in less sheltered areas. The PRoW network runs to the edges of the LCA, but there is limited public access through the woodland.

Figure 1: LCA in context



- Key**
- North
 - AP2 revised scheme
 - LCA boundary
 - 1. Hey Sprink
 - 2. Whitmore Wood
 - 3. Whitmore Heath

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Principal vegetation



Principal vegetation key



Figure 2: Hey Sprink woodland, from Netherset Hey Farm



Key value characteristics - Scenic qualities: A well wooded rural landscape with a dispersed settlement pattern. The large properties and well stocked gardens of Whitmore Heath are accommodated within a wooded landscape setting. Skylines are dominated by woodland (often ancient) with sinuous edges extending up from the valley sides where they link to woodlands, shelterbelts and copses on the higher flatter plateau.

Figure 3: Hey Sprink and Whitmore woodlands



Key value characteristics - Perception of the landscape: A well managed and tranquil landscape which, due to the high levels of tree cover, has a coherent and natural appearance despite the presence of settlement and nearby infrastructure.

Hey Sprink Ancient Redlands and Woodlands LCA

Key susceptibility characteristics in relation to the AP2 revised scheme

Figure 4: Hey Sprink and Whitmore Heath, from Manor Road, north of Madeley Park Wood



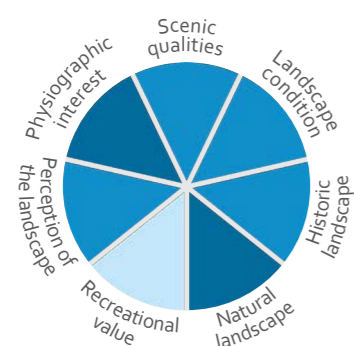
Landscape character assessment

Description of overall landscape value: This is a landscape of high scenic quality derived from the generous tree cover and natural features, rather than the presence of historic sites or recreational assets. The ancient woodland at Hey Sprink Wood and Whitmore Wood supports varied habitats. The scenic and verdant residential settlement of Whitmore Heath is also a valued feature. Overall, given the above, the value of the landscape is medium.

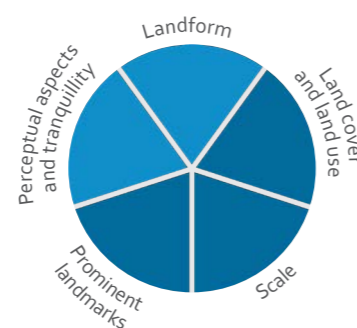
Description of overall landscape susceptibility: This landscape is defined by prominent skyline woodlands which would be physically and visually severed by the AP2 revised scheme. Due to limited access and despite the presence of the WCML, the area is relatively tranquil. Overall, given the above, the susceptibility of the landscape is medium-high.

Description of overall landscape sensitivity: This is a scenic landscape with generally well preserved and intact natural features, but few features of historic or recreational value. Although not visible on the photograph, electricity pylons run north-west to south-east through the plateau, but they are accommodated within the landscape and rarely extend above the skyline. The settlement of Whitmore Heath, although elevated, is unobtrusive within its wooded setting and surrounding traditionally farmed landscape of pastures and woodland, including ancient woodland. Overall, given the above, the sensitivity of the landscape to change arising from the AP2 revised scheme is medium-high.

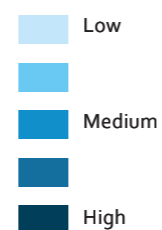
Value



Susceptibility



Value and susceptibility key



Magnitude of change and level of effect

Construction: The main ES reported a moderate adverse significant effect due to construction of Whitmore Heath tunnel and porous portals, tunnel head walls and noise fence barriers. These activities and extensive vegetation removal within Whitmore Wood Ancient Woodland and along Snape Hall Road would substantially alter the character of the western side of the LCA. Disturbance would reduce the tranquillity this area currently experiences and would be extended through night time working and lighting of the tunnel boring works. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will be a slight improvement on the original scheme as it will replace construction of Whitmore Wood overbridge, by construction of Whitmore Wood underbridge. The overall reduction in construction activity will be localised and will not affect the wider LCA which will continue to be influenced by construction of the elements of the scheme listed above. The amendment will therefore not result in a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 1: The main ES reported a moderate adverse significant effect due to the presence of Whitmore Heath tunnel porous portals, Whitmore North cutting, Whitmore Wood retaining wall and noise fence barriers. The introduction of engineered landforms and large uncharacteristic structures would erode the character of the farmland due to the changes to the landform and field pattern, and consequent reduction in scenic quality. Whitmore North cutting would sever Whitmore Wood, which is a valued characteristic of this LCA. The closure of Snape Hall Road and associated vegetation loss would alter landscape character along the north-western edge of Whitmore Heath. The amendment (AP2-004-002) will reduce the prominence of noise barriers as they will be located adjacent to the track. Whitmore Wood underbridge will be less noticeable than the overbridge proposed in the original scheme. The wider landscape of the LCA will however continue to be influenced by the elements of the scheme listed above. The amendment will therefore not result in a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 15: The main ES reported a minor adverse non-significant effect as the maturing mitigation planting would achieve some screening and integration of the engineered landforms and infrastructure within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. It will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

Year 60: The main ES reported a minor adverse non-significant effect as the mature mitigation planting would achieve some screening and greater integration of the engineered landforms and infrastructure within the rural landscape. The amendment will benefit from a similar degree of screening and landscape integration. It will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.

2.2 Assessment matrices

Landscape assessment matrix

2.2.1 Table 1 summarises the assessment of significance for all of the LCA identified in the Whitmore Heath to Madeley area potentially affected by AP2 amendments. These are ordered from south to north along the route of the AP2 revised scheme. The assessment of significant effects is presented in Volume 2, Section 5.

Table 1: Landscape assessment matrix summarising the assessment of significance for all of the LCAs identified as affected by AP2 amendments.

Landscape character area	Construction	Operation year 1 (2027)	Operation year 15 (2042)	Operation year 60 (2087)
Upper Meece Brook Valley Alluvial Lowlands	Major adverse	Major adverse	Moderate adverse	Moderate adverse
Upper Meece Brook Valley Ancient Redlands	Major adverse	Major adverse	Moderate adverse	Moderate adverse
Whitmore Hall Valley Ancient Redlands	Negligible	Negligible	Negligible	Negligible
Upper Lea Valley Ancient Redlands	Major adverse	Major adverse	Moderate adverse	Minor adverse
Hey Sprink Ancient Redlands and Woodlands	Moderate adverse	Moderate adverse	Minor adverse	Minor adverse

2.3 Visual assessment

Introduction

2.3.1 The viewpoints are shown on Maps LV-07-221b-R1 to LV-07-224 and LV-08-221b-R1 to LV-08-224 (SES2 and AP2 ES Volume 5: Landscape and Visual Map Book).

Visual receptors

020.03.010	View north-east from farmland near water treatment works
020.03.011	View north-east from farmland close to WCML
020.02.016	View south-west from Rectory Lane
020.02.021	View east from the A53 Newcastle Road near The Hill
020.03.022	View north from junction of farmland near Baldwin's Gate
021.02.005	View east from farmland near Snape Hall Farm
021.02.007	View north-east from farmland east of Madeley Park Farm
021.02.008	View north-east from edge of Madeley Park Wood
021.03.013	View north-east from Manor Road
021.02.014	View south-west of A51 Nantwich Road
022.02.001	View north-east from Manor Road
022.02.004	View south-east from Manor Road, near Manor Cottages
022.02.012	View south from the A525 Bar Hill Road
022.03.024	View south-west from Madeley Parish Cemetery

Viewpoint 020.03.010: View north-east from farmland near water treatment works

This viewpoint is representative of views experienced by recreational receptors using Chapel and Hill Chorlton Footpath 5.

Winter view (baseline)

Date taken: 03/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380404.377, 339875.729.

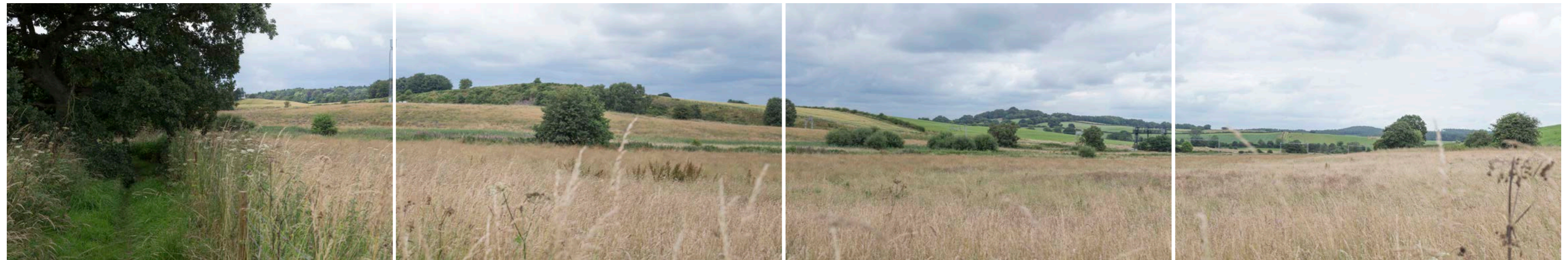
Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 21/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380404.377, 339875.729.

Figure 2: Summer baseline view



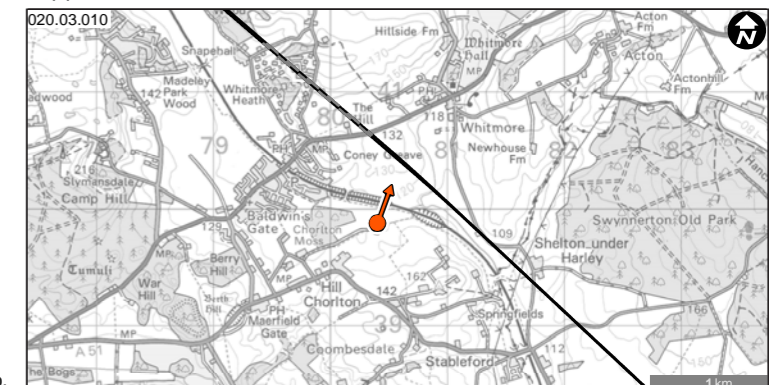
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Recreational receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 020.03.010: View north-east from farmland near water treatment works

Table 1: Visual baseline description

Winter	Summer
<p>This viewpoint is located close to the Severn Trent Whitmore Borehole Facility in an area of wet grassland and foreground pastures alongside Meece Brook within the large-scale, open and gently undulating farmland of the Meece Brook valley. Occasional mature hedgerow trees and copses add visual interest to the landscape. The land rises to localised high points which restrict views of a well-wooded ridgeline in the distance. The mixed woodlands of Swynnerton Old Park (ancient woodland and conifer plantation) are visible on the skyline.</p>	<p>As winter, because this is an open view and the occasional trees and shrubs in full foliage have little effect other than masking and filtering some views. The overhead line equipment of the WCML and moving trains are visible in the middle distance.</p>

Table 2: Future baseline description

Construction (2020)	Operation (2027)
<p>There are no committed developments which would change the baseline.</p>	<p>There are no committed developments which would change the baseline.</p>

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a moderate adverse significant effect due to construction activity associated with Meece Brook viaduct, Meece embankment, Whitmore South cutting and associated earthworks, which would appear as engineered landforms within the gently undulating farmland of Meece Brook valley. The works and presence of material stockpiles and a transfer node adjacent to the A53 Newcastle Road would introduce incongruous new elements into middle and long distance views across the large-scale pastures and grassland of the valley and interrupt views towards the wooded skyline of Swynnerton Old Park on the distant horizon. Construction of the A53 Newcastle Road temporary diversion and A53 Newcastle Road overbridge and embankments would also be visible in the distance. Cranes for construction of Meece Brook viaduct would affect skyline views. Although the construction activity would be extensive, it would only affect part of the view from this viewpoint, which would reduce its overall effect. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will result in Meece Brook viaduct being reduced in height by 2.2m, with a consequent reduction in the height of Meece embankment by up to 3.3m. This will slightly reduce the prominence of the construction activity in the view. This improvement in the view will, however, be minimal given the scale and extent of the wider construction activity within the view. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Moderate adverse (significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	<p>The main ES reported a moderate adverse significant effect due to the prominence of Meece Brook viaduct and Meece embankment, overhead line equipment and moving trains. Whilst the lower parts of these features would in places be screened by new landscape earthworks, the upper parts and particularly Meece Brook viaduct, would be very noticeable. The new A53 Newcastle Road overbridge would also be distantly visible. The new features, combined with changes to the valley's landform, foreshortening of views and loss of existing landscape features, including hedgerows, trees and field boundaries, would add to the effects of the WCML and change the rural outlook across the Meece Brook valley. The amendment (AP2-004-002) will result in Meece Brook viaduct being reduced in height by 2.2m, with a consequent reduction in the height of the Meece embankment by up to 3.3m. Both the viaduct and the embankment will therefore be slightly less prominent in the view compared to the original scheme. Newcastle Road overbridge will also be removed which will improve distant views. Overall compared to the original scheme there will be a slight improvement in the view, although the outlook will still be very different from that currently experienced and the sense of severance and reduction in scenic quality will remain. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.</p>	Moderate adverse (significant)
Operation year 1 Summer	<p>The main ES reported no change to the year 1 winter assessment as there is little intervening vegetation to provide additional summer screening. The amendment will experience a similar level of screening in summer. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Moderate adverse (significant)
Operation year 15 Summer	<p>The main ES reported a minor adverse non-significant effect as the maturing mitigation planting along Meece embankment would partially screen views and integrate the viaduct into the wider visual context. At year 15, the amendment will be similarly screened and integrated by the maturing mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Minor adverse (non-significant)
Operation year 60 Summer	<p>The main ES reported a negligible non-significant effect as the mature mitigation planting along Meece embankment would screen and integrate the viaduct into the wider visual context. At year 60, the amendment will be similarly screened and integrated by the mature mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Negligible (non-significant)

Viewpoint 020.03.011: View north-east from farmland close to WCML

This viewpoint is representative of views experienced by recreational receptors using Chapel and Hill Chorlton Footpath 2.

Winter view (baseline)

Date taken: 01/02/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380784.821, 339913.477.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 21/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380784.821, 339913.477.

Figure 2: Summer baseline view



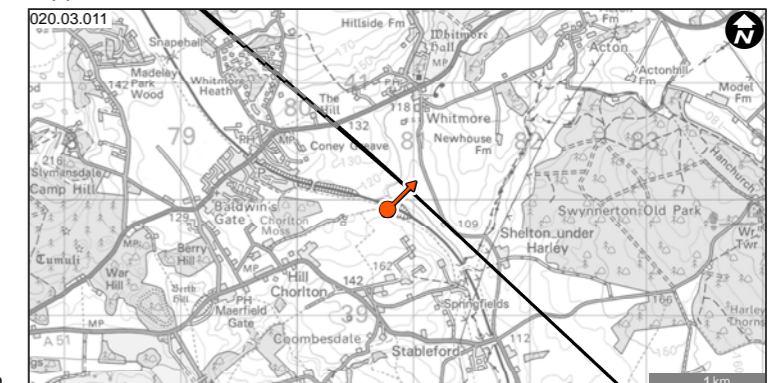
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Recreational receptors are of high sensitivity.

Key plan (arrow shows direction of view)



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Viewpoint 020.03.011: View north-east from farmland close to WCML

Table 1: Visual baseline description

Winter	Summer
<p>This viewpoint is located close to the boundary between the large-scale open and gently undulating farmland of Meece Brook valley to the north and the small-scale rolling pastoral farmland to the west. The foreground comprises large, open and rolling arable fields with the WCML in shallow cutting. The middle distance view beyond the WCML is of the flat valley floor. Intermittent trees mark the course of Meece Brook and new ponds have been created alongside it. Beyond the valley floor the landscape rises up to a ridgeline. On the far side of the valley the field pattern becomes stronger with robust hedgerows. In long distance views, the landscape rises and fields with trees and woodland cover much of the horizon.</p>	<p>As winter, because this is an open view and the vegetation in full foliage has little effect other than masking and filtering some long distance views. The overhead line equipment of the WCML remains visible in the foreground.</p>

Table 2: Future baseline description

Construction (2020)	Operation (2027)
<p>There are no committed developments which would change the baseline.</p>	<p>There are no committed developments which would change the baseline.</p>

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a major adverse significant effect due to construction activity associated with Meece Brook viaduct and Meece embankment, Bent Lane (North) diversion and the presence of Stableford North embankment satellite compound. This large-scale construction activity would introduce prominent and incongruous elements into close and middle distance views across the flat valley floor farmland towards the hedged fields on the eastern side of Meece Brook valley. It would also interrupt the relatively open views towards Swynnerton Old Park and the Hanchurch Hills. Cranes used for construction of the Meece Brook viaduct would be prominent skyline features. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area and consequent reduction in the height of Meece Brook viaduct by approximately 2.2m (AP2-004-002), will slightly reduce the effect in the view. This improvement will however be minimal given the scale of the wider construction activity within the view. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
	Permanent effect during operation	Level of effect
Operation Year 1 Winter	<p>The main ES reported a major adverse significant effect. This was due to the prominence of Meece Brook viaduct and Meece embankment, the overhead line equipment and moving trains. Whilst the lower parts of these features would in places be screened by new landscape earthworks, the upper sections, and particularly Meece Brook viaduct, would be prominent within the landscape and substantially change the outlook across the Meece Brook valley. Bent Lane (North) diversion, would also be a noticeable feature as it would cut into the eastern side of the valley. The new features in the view, combined with changes to the valley's landform, visual severance and loss of existing landscape features, including hedgerows, trees and field boundaries, would add to the effects of the WCML, which is currently relatively unobtrusive as it crosses the valley floor, and would substantially change the rural outlook across Meece Brook Valley. The amendment (AP2-004-002) will result in Meece Brook viaduct being reduced in height by 2.2m, with a consequent reduction in the height of the Meece embankment by up to 3.3m. Both the viaduct and the embankment will be slightly less prominent in the view which will improve the outlook from this viewpoint compared to the original scheme, but the view will still be very different from that currently experienced and the sense of severance and reduction in scenic quality will remain. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
Operation year 1 Summer	<p>The main ES reported no change to the year 1 winter assessment as there is little intervening vegetation to provide additional summer screening. The amendment will experience a similar level of summer screening. The amendment will therefore not give rise to any new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
Operation year 15 Summer	<p>The main ES reported a major adverse significant effect. This was despite Meece embankment and Bent Lane (North) diversion becoming less noticeable as the mitigation planting on the embankments starts to mature and provides some screening and integration of the new features within the wider visual context. Meece Brook viaduct would remain prominent and there would be ongoing severance of views across the valley floor from the large Meece embankment. The amendment and consequent reduction in the height of Meece Brook viaduct will slightly improve the outlook from this viewpoint compared to the original scheme, but the view will still be very different from that currently experienced and the sense of visual severance and reduction in scenic quality will remain. The amendment will therefore give rise to a different significant effect, however this will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
Operation year 60 Summer	<p>The main ES reported a major adverse significant effect due to the continuing prominence of Meece Brook viaduct. The amendment and consequent reduction in the height of Meece Brook viaduct will slightly improve the outlook from this viewpoint compared to the original scheme, but the view will still be very different from that currently experienced and the sense of visual severance and reduction in scenic quality will remain. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)

Viewpoint 020.02.016: View south-west from Rectory Lane

This viewpoint is representative of views experienced by residential receptors on Rectory Lane and recreational receptors using Whitmore Footpaths 3 and 4.

Winter view (baseline)

Date taken: 03/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380426.478, 340911.374.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 26/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380426.478, 340911.374.

Figure 2: Summer baseline view



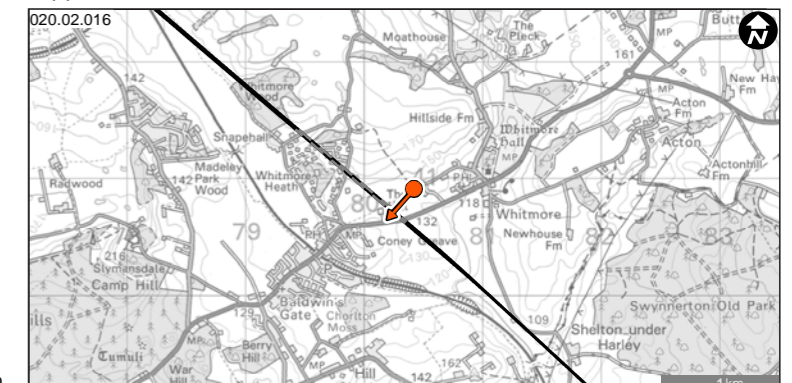
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 020.02.016: View south-west from Rectory Lane

Table 1: Visual baseline description

Winter	Summer
<p>This viewpoint is located on the boundary of an area of small to medium-scale rolling pastures with robust hedgerows and many mature trees and an area of lower lying, rectilinear arable fields with intermittent hedgerows and few trees. The foreground comprises the view beyond Rectory Lane, which is bounded on either side by overgrown hedges and trees. Gaps in the hedgerow afford views of gently rolling, sloping pastures with mature hedgerow and field trees. These continue into the middle distance, where a residential property is visible. The A53 Newcastle Road runs in shallow cutting, bounded by hedgerows either side, which mostly obscure views of moving cars, although the tops of moving lorries are noticeable. An avenue of mature trees follows a farm access track on the crest of a ridge leading to the A53 Newcastle Road. Long distance views comprise rolling farmland with woodland belts, pastures and hedgerows merging into distant wooded ridgelines.</p>	<p>As winter, but foreground hedge and trees along Rectory Lane are in full leaf and obscure many mid-ground and distant views. Views from residences on Rectory Lane are filtered due to intervening vegetation in full leaf but views from the upper floors are more open and expansive.</p>

Table 2: Future baseline description

Construction (2020)	Operation (2027)
<p>There are no committed developments which would change the baseline.</p>	<p>There are no committed developments which would change the baseline.</p>

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a major adverse significant effect due to construction activity associated with the A53 Newcastle Road temporary diversion, new A53 Newcastle Road overbridge and southern porous portal of Whitmore Heath tunnel, which would be visible in close and middle distance views. The associated earthworks would be extensive and complex, with large-scale excavation and movement of material, as well as prominent landform changes that would appear incongruous in the small to medium-scale rolling farmland. The presence of Whitmore Heath tunnel satellite compound would also affect the quality of the view. The intervening landform and vegetation would provide some filtering of the view but the combined effects of the works would substantially change the rural outlook across small to medium-scale pastures with hedgerows and mature field trees. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will relocate the construction activity approximately 180m to the south and remove all construction activity associated with A53 Newcastle Road overbridge which will no longer be required. As a result, construction activity will now be visible in the distance and will include removal of the avenue of mature trees on the ridgeline, affecting a small portion of the view. The amendment will therefore reduce the level of significance of the effects reported in the main ES from major adverse significant to minor adverse non-significant.</p>	<p>Minor adverse (non-significant)</p>
	Permanent effect during operation	Level of effect
Operation year 1 Winter	<p>The main ES reported a moderate adverse significant effect due to the A53 Newcastle Road overbridge and views of moving vehicles at elevation. The presence of the new overbridge and associated road embankments, changes to the Meece Brook valley landform and loss of landscape features, including hedgerows, trees and fields would change the outlook, particularly in winter when views are more open. The amendment (AP2-004-002) will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. As a result the view will remain largely unchanged from the existing baseline described in the main ES. The amendment will therefore remove the moderate adverse significant effect reported in the main ES.</p>	<p>Negligible (non-significant)</p>
Operation year 1 Summer	<p>The main ES reported a change to the year 1 winter assessment to minor adverse non-significant due to the screening of construction activity by intervening vegetation in full leaf. The amendment will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. The amendment will therefore remove the minor adverse non-significant effect reported in the main ES.</p>	<p>Negligible (non-significant)</p>
Operation year 15 Summer	<p>The main ES reported a negligible non-significant effect as the maturing mitigation planting around the A53 Newcastle Road overbridge would filter views and provide some integration of the operational railway within the surrounding landscape. The amendment will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	<p>Negligible (non-significant)</p>
Operation year 60 Summer	<p>The main ES reported a negligible adverse non-significant effect due to the mature mitigation planting around the A53 Newcastle Road overbridge filtering views and achieve greater integration of the operational railway within the surrounding landscape. The amendment will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	<p>Negligible (non-significant)</p>

Viewpoint 020.02.021: View east from the A53 Newcastle Road near The Hill

This viewpoint is representative of views experienced by residential receptors at The Hill and transport receptors using the A53 Newcastle Road.

Winter view (baseline)

Date taken: 03/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380162.212, 340618.229.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 26/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380162.212, 340618.229.

Figure 2: Summer baseline view



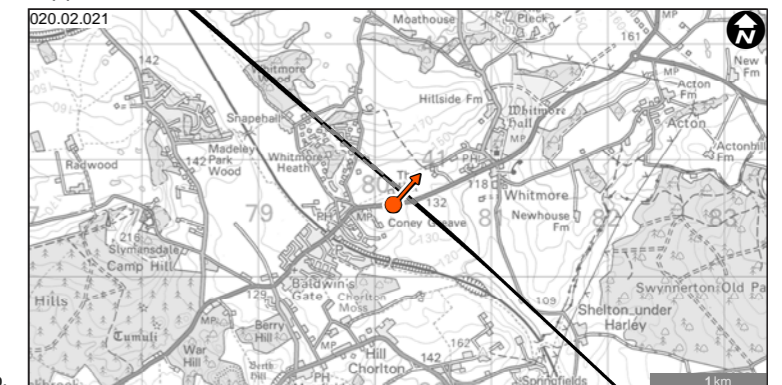
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 020.02.021: View east from the A53 Newcastle Road near The Hill

Table 1: Visual baseline description

Winter	Summer	Night time
This viewpoint is located in an area of mainly open and gently rolling arable fields and pastures with localised areas of higher ground. The foreground comprises the A53 Newcastle Road which is bounded by hedgerows and mature trees whilst the middle distance views comprise large and open arable fields and pastures with localised areas of high ground. On the crest of the high ground to the left is a prominent tree avenue which highlights a field access track leading from the A53 Newcastle Road. In the background view is a concentration of trees around Whitmore. The rising landform screens distant views to the east whilst two localised areas of high ground frame views to the south.	Summer views are more screened by the dense foliage on the trees and hedgerows along the A53 Newcastle Road. Background and skyline views are completely screened.	There is some light spill from The Hill and properties along the A53 Newcastle Road and Rectory Lane. There is also intermittent lighting from moving vehicles. Distant sky glow from Baldwin's Gate to the west and Whitmore Heath to the north is apparent.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	The main ES reported a major adverse significant effect due to construction activity associated with the A53 Newcastle Road temporary diversion and new overbridge and the southern porous portal of Whitmore Heath tunnel which would be visible in close and middle distance views. The associated earthworks would be extensive and complex, with large-scale excavation and movement of material, as well as prominent landform changes that would appear incongruous in the gently rolling farmland with localised areas of higher ground. The presence of Whitmore Heath tunnel satellite compound would also affect the quality of the view. The combined effects of the works would substantially change the rural outlook from his location. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will relocate the construction activity approximately 180m to the south and remove all construction activity associated with the A53 Newcastle Road overbridge which will no longer be required. As a result the view will remain largely unchanged from the existing baseline landscape described in the main ES. The amendment will therefore remove the major adverse significant effect reported in the main ES.	Negligible (non-significant)
Construction (at night)	The main ES reported a moderate adverse significant effect arising from night-time lighting of the tunnel boring works, which would intensify the existing light spill from vehicles on the A53 Newcastle Road and properties including The Hill and those along the A53 Newcastle Road and Rectory Lane. By extending the southern end of Whitmore tunnel approximately 180m to the south, the effect of night-time lighting of the tunnel boring works will be reduced. The amendment will therefore reduce the level of significance of the effects reported in the main ES from moderate adverse significant to minor adverse non-significant.	Minor adverse (non-significant)

	Permanent effect during operation	Level of effect
Operation year 1 Winter	The main ES reported a major adverse significant effect due to the proximity of the southern porous portal of the Whitmore Heath tunnel and the A53 Newcastle Road overbridge. Receptors would be unlikely to have views of the southern porous portal due to its location in cutting, but they would have views of the fencing around the top of the portal. They would also have views of moving vehicles at elevation. The presence of the new overbridge, and associated road embankments, and loss of landscape features, including the road landscape, hedgerows and mature trees would substantially change the outlook. The amendment (AP2-004-002) will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. As a result the view will remain largely unchanged from the existing baseline described in the main ES. The amendment will therefore remove the major adverse significant effect reported in the main ES.	Negligible (non-significant)
Operation year 1 Summer	The main ES reported a major adverse significant effect. This was due to the removal of the existing roadside vegetation described in the baseline as part of the realignment of the A53 Newcastle Road, which means there would be little vegetation to provide additional screening of views. The amendment will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. As a result the view will remain largely unchanged from the existing baseline described in the main ES. The amendment will therefore remove the major adverse significant effect reported in the main ES.	Negligible (non-significant)
Operation year 15 Summer	The main ES reported a minor adverse non-significant effect as the maturing mitigation planting around the porous portal and Whitmore South cutting would screen views and integrate the new features within the wider visual context. The amendment will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. As a result the view will remain largely unchanged from the existing baseline described in the main ES. The amendment will therefore remove the minor adverse non-significant effect reported in the main ES.	Negligible (non-significant)
Operation year 60 Summer	The main ES reported a minor adverse non-significant effect as the mature mitigation planting around the porous portal and Whitmore South cutting would screen views and integrate the new features within the wider visual context. The amendment will relocate the southern porous portal of the Whitmore tunnel and associated infrastructure approximately 180m to the south and remove the requirement for the A53 Newcastle Road overbridge. As a result the view will remain largely unchanged from the existing baseline described in the main ES. The amendment will therefore remove the minor adverse non-significant effect reported in the main ES.	Negligible (non-significant)

Viewpoint 020.03.022: View north from junction of farmland near Baldwin's Gate

This viewpoint is representative of views experienced by recreational receptors using Chapel and Hill Chorlton Footpaths 6, 2 and 21.

Winter view (baseline)

Date taken: 03/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380557.081, 339818.150.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 21/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 380557.081, 339818.150.

Figure 2: Summer baseline view



Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Recreational receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 020.03.022: View north from junction of farmland near Baldwin's Gate

Table 1: Visual baseline description

Winter	Summer
This viewpoint is located in an area of small-scale rolling pastoral farmland which overlooks the large-scale open and gently undulating farmland of Meece Brook valley. The foreground comprises wet grassland and foreground pastures which slope down to Meece Brook. Fields are enclosed by post and wire fencing with occasional trees. The WCML crosses the middle distance at grade and in exposed sandstone cutting. The overhead line equipment is visible. In long distance views, arable fields and pastures rise steeply to the north and east to localised areas of high ground emphasised by hedgerow trees and woodland. To the north-east the gently undulating arable fields and pastures become smaller in size and are bounded by hedgerows with mature hedgerow trees. The landform here steadily rises to a wooded ridgeline. Skyline views are restricted by intervening landform and vegetation, but a telecommunications mast is a prominent feature.	As winter, because this is an open view and the vegetation in full foliage has little effect other than masking and filtering some background views. The overhead line equipment of the WCML remains visible in the mid-ground view as the rail line crosses the Meece Brook valley at grade or in the exposed sandstone cutting.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	The main ES reported a moderate adverse significant effect due to construction activity associated with Meece Brook viaduct, Meece embankment, Whitmore South cutting and associated earthworks which would be engineered landforms within the gently undulating farmland of Meece Brook valley. The works and presence of material stockpiles and a transfer node adjacent to the A53 Newcastle Road would introduce incongruous new elements into slightly elevated middle and long distance views across the large-scale pastures and wet grassland of the valley. They would also interrupt distant views towards the wooded skyline of Swynnerton Old Park on the distant horizon. Construction of the A53 Newcastle Road temporary diversion and A53 Newcastle Road overbridge and embankments would also be visible in the distance. Cranes for construction of Meece Brook viaduct would affect skyline views. Although the construction activity would be extensive, it would only affect part of the view from this viewpoint, which would reduce its overall effect. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area and consequent reduction in the height of Meece Brook viaduct by approximately 2.2m (AP2-004-002), will slightly reduce the effects of the construction activity at this viewpoint. This improvement will, however, be minimal given the scale and proximity of the wider construction activity. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)
	Permanent effect during operation	Level of effect
Operation Year 1 Winter	The main ES reported a moderate adverse significant effect due to the prominence of Meece Brook viaduct and Meece embankment, overhead line equipment and moving trains. Whilst the lower parts of these features would in places be screened by new landscape earthworks, the upper parts and particularly Meece Brook viaduct, would be very noticeable. The new A53 Newcastle Road overbridge would also be distantly visible. The new features in the view, combined with changes to the valley's landform, foreshortening of views and loss of existing landscape features, including hedgerows, trees and field boundaries, would add to the effects of the WCML and change the rural outlook across the Meece Brook valley. However, due to the intervening distance only part of the view would be affected. The amendment and consequent reduction in height of Meece Brook viaduct by 2.2m and Meece embankment by up to 3.3m (AP2-004-002), will mean that both the viaduct and embankment will be slightly less prominent in the view compared to the original scheme. The Newcastle Road overbridge will also be removed which will improve distant views. Overall compared to the original scheme there will be a slight improvement in the view, although the view will still be very different from that currently experienced and the sense of severance and reduction in scenic quality will remain. The amendment will therefore give rise to a different significant effect, however this will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)
Operation year 1 Summer	The main ES reported no change to the year 1 winter assessment as there is little intervening vegetation to provide additional summer screening. The amendment will experience a similar level of screening in summer. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)
Operation year 15 Summer	The main ES reported a minor adverse non-significant effect as the maturing mitigation planting along Meece embankment would partially screen views and integrate the viaduct into the wider visual context. By year 15, the amendment will be similarly screened and integrated by the maturing mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Minor adverse (non-significant)
Operation year 60 Summer	The main ES reported a minor adverse non-significant effect as the maturing mitigation planting along Meece embankment would partially screen views and integrate the viaduct into the wider visual context. By year 60, the amendment will be similarly screened and integrated by the maturing mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Minor adverse (non-significant)

Viewpoint 021.02.005: View east from farmland near Snape Hall Farm

This viewpoint is representative of views of the Upper Lea valley experienced by residential receptors of Snape Hall Farm and recreational receptors using the Whitmore Footpath 5.

Winter view (baseline)

Date taken: 10/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 379034.837, 341315.850.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 26/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 379034.837, 341315.850.

Figure 2: Summer baseline view



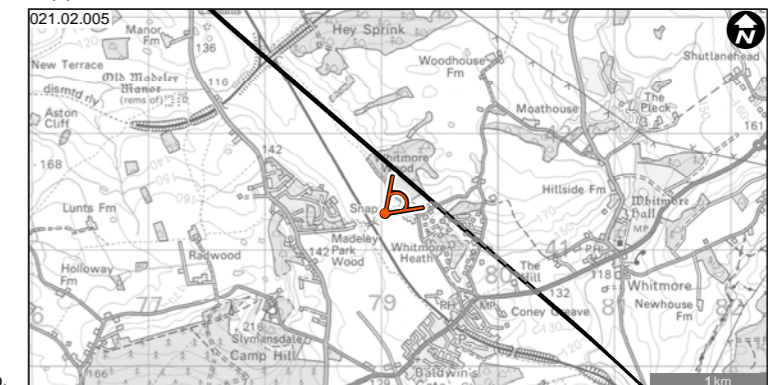
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential and recreational receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 021.02.005: View east from farmland near Snape Hall Farm

Table 1: Visual baseline description

Winter	Summer	Night time
This viewpoint is located in the low lying, flat and open pastures and floodplain grazing marsh of the River Lea valley. Foreground views comprise open pasture bounded by robust hedgerows. Snape Hall Farm comprises several large-scale farm sheds, a silo and tall concrete fencing. The brick chimney of the farmhouse is just visible above the large sheds. Whitmore Wood Ancient Woodland is prominent on the valley side in the middle distance views. The well-treed residential area of Whitmore Heath is also visible. A gap between the woodland blocks reveals longer distance views of residential properties and smaller groups of mature trees. There are no distant skyline views due to the elevated, well-wooded landform.	As winter, but middle and long distance views are more screened by intervening vegetation in full leaf. Snape Hall farm remains a prominent feature.	There is light spill from properties in Madeley Park Wood (behind this viewpoint) and multiple light sources amidst the trees at Whitmore Heath. Distant sky glow from Baldwin's Gate to the south-east and Madeley to the north is also apparent.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a major adverse significant effect due to the complex and extensive construction activity associated with various elements of the original scheme, including the northern porous portal of Whitmore Heath tunnel, a pumping station, tunnel portal building, Whitmore North cutting, Whitmore Wood retaining wall, Whitmore Wood overbridge and associated earthworks. A barn at Snape Hall Farm would be demolished. These works, the presence of construction equipment, material stockpiles and movement of construction vehicles would substantially alter the key characteristics of the view. Works and cranes associated with the River Lea viaduct and Lea South embankment would also be distantly visible. Levelling for the Whitmore North cutting satellite compound would intensify the changes to the landform in this area. The extensive excavation and movement of material, alterations to the landform and tree removal within Whitmore Wood would be prominent. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) includes realigning the operational railway approximately 10m closer to the viewpoint and replacing Whitmore Wood overbridge with Whitmore underbridge. Overall, the effect on the view will be slightly reduced compared to the original scheme, mainly through the removal of construction activity associated with Whitmore Wood overbridge. Construction of other components of the scheme listed above will continue to affect the view as described in the main ES. The amendment will therefore give rise to a different significant effect, however this will not change the level of significance of the effect reported in the main ES.</p> <p>The view of the AP2 revised scheme from viewpoint 021.02.005 during construction (summer) is illustrated on the photomontage shown in figure LV-01-608 (see the SES2 and AP2 ES Volume 2 CA4 Map Book).</p>	Major adverse (significant)
Construction (at night)	The main ES reported a minor adverse non-significant effect at night from the lighting associated with tunnel boring works in the middle distance. The controls on light spill set out in the draft CoCP would limit the change these new light sources introduce to the wider view. Night-time effects will be similar for the amendment and will not change the minor adverse non-significant effect reported in the main ES.	Minor adverse (non-significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	<p>The main ES reported a major adverse significant effect due to the prominence of various elements of the original scheme, including the northern porous portal of Whitmore Heath tunnel, a pumping station, tunnel portal building, Whitmore North cutting, Whitmore Wood retaining wall, Whitmore Wood overbridge, noise fence barriers and overhead line equipment. To the north, the upper parts of the overhead line equipment and moving trains would be visible above a noise fence barrier situated on the Lea South embankment and River Lea viaduct. The new structures and landform would be prominent landscape features and, combined with the loss of hedgerows, mature trees and a section of Whitmore Wood, would substantially change the rural outlook across the River Lea valley. The amendment (AP2-004-002) includes a number of proposals which together affect this viewpoint. These include realigning the operational railway approximately 10m closer to the viewpoint and replacing Whitmore Wood overbridge with the Whitmore underbridge. Overall, the effect on the view will be slightly reduced compared to the original scheme, mainly through the removal of Whitmore Wood overbridge. Other components of the scheme listed above will continue to affect the view as described in the main ES. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.</p> <p>The view of the AP2 revised scheme from viewpoint 021.02.005 during year 1 operation (winter) is illustrated on the photomontage shown in figure LV-01-552 (see the SES2 and AP2 ES Volume 2 CA4 Map Book).</p>	Major adverse (significant)
Operation year 1 Summer	The main ES reported no change to the year 1 winter assessment as there is little intervening vegetation to provide additional summer screening. The amendment will similarly result in no change to the year 1 winter operational effect. The view of the AP2 revised scheme from viewpoint 021.02.005 during year 1 operation (summer) is illustrated on the photomontage shown in figure LV-01-552 (see the SES2 and AP2 ES Volume 2 CA4 Map Book).	Major adverse (significant)
Operation year 15 Summer	<p>The main ES reported a moderate adverse significant effect as the maturing mitigation planting along the eastern side of the River Lea valley would partially screen the elements of the original scheme listed above and help integrate them into the surrounding landscape. At year 15, the amendment will be similarly screened and integrated into the surrounding landscape by the maturing mitigation planting. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.</p> <p>The view of the AP2 revised scheme from viewpoint 021.02.005 during year 15 operation (summer) is illustrated on the photomontage shown in figure LV-01-666 (see the SES2 and AP2 ES Volume 2 CA4 Map Book).</p>	Moderate adverse (significant)
Operation year 60 Summer	The main ES reported a minor adverse non-significant effect as the mature mitigation planting along the eastern side of the River Lea valley would partially screen the elements of the original scheme listed above and help integrate them into the surrounding landscape. At year 60, the amendment will be similarly screened and integrated by the mature mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Minor adverse (non-significant)

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Viewpoint 021.02.005: View east from farmland near Snape Hall Farm

This viewpoint is representative of views of the Upper Lea valley experienced by residential receptors of Snape Hall Farm and recreational receptors using the Whitmore Footpath 5.

Current baseline - Winter view

Date taken: 10/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 379034.837, 341315.850.



Winter Verifiable Photomontage - Peak construction phase (2023)

Date taken: 10/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 379034.837, 341315.850.



The viewpoint has been taken approximately 334 metres away from the AP2 revised scheme. Viewpoint location shown on Map LV-07-223.

This verifiable photomontage provides an illustration of how the AP2 revised scheme may look during the peak construction phase to help inform the visual impact assessment. The construction methods and siting of construction activities of the AP2 revised scheme may be subject to change in response to consultation and ongoing design. The extent of land required temporarily to construct the scheme will not extend beyond that shown in the photomontage. Changes in the construction of the AP2 revised scheme will not result in any significant adverse change in the environmental effects detailed in the photomontages of the AP2 revised scheme.

At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet for a viewing distance of 500mm. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (See the main ES, SMR Addendum Volume 5: Appendix CT-001-002).



Figure Number	LV-01-608
Figure Name	Verifiable Photomontage Peak Construction Phase - Winter Viewpoint 021.02.005
Community Area 4: Whitmore Heath to Madeley SES2 and AP2 ES	

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Doc Number: C861-ARP-EV-REP-000-124794

Date: 12/12/18

Viewpoint 021.02.005: View east from farmland near Snape Hall Farm

This viewpoint is representative of views of the Upper Lea valley experienced by residential receptors of Snape Hall Farm and recreational receptors using the Whitmore Footpath 5.

Current baseline - Winter view

Date taken: 10/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 379034.837, 341315.850.



Winter Verifiable Photomontage - Operation Year 1 (2027)

Date taken: 10/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 379034.837, 341315.850.



The viewpoint has been taken approximately 334 metres away from the AP2 revised scheme. Viewpoint location shown on Map LV-08-223.

This verifiable photomontage provides an illustration of how the AP2 revised scheme may look in 2027 (opening year) to help inform the visual impact assessment. The design of the AP2 revised scheme may be subject to design development in response to consultation. Development of detail design after Hybrid Bill submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the AP2 revised scheme into the landscape. At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet for a viewing distance of 500mm. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (See the main ES, SMR Addendum Volume 5: Appendix CT-001-002).

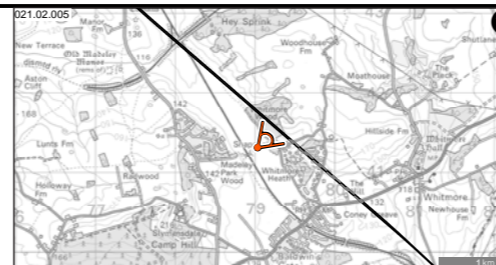


Figure Number	LV-01-552
Figure Name	Verifiable Photomontage Operation Year 1 (2027) - Winter Viewpoint 021.02.005
Community Area 4: Whitmore Heath to Madeley SES2 and AP2 ES	

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Doc Number: C861-ARP-EV-REP-000-124794 **Date: 12/12/18**

Viewpoint 021.02.005: View east from farmland near Snape Hall Farm

This viewpoint is representative of views of the Upper Lea valley experienced by residential receptors of Snape Hall Farm and recreational receptors using the Whitmore Footpath 5.

Current baseline - Summer view

Date taken: 23/08/2016. Time taken: 14:25. Camera: Sony a7RII, Zeiss Loxia 50mm f/2.0 lens (stitched panorama). Co-ordinates: 379034.836, 341315.887. Elevation: 115.357 Metres AOD.



Summer Verifiable Photomontage - Operation year 15 (2042)

Date taken: 23/08/2016. Time taken: 14:25. Camera: Sony a7RII, Zeiss Loxia 50mm f/2.0 lens (stitched panorama). Co-ordinates: 379034.836, 341315.887. Elevation: 115.357 Metres AOD.



The viewpoint has been taken approximately 334 metres away from the AP2 revised scheme. Viewpoint location shown on Map LV-08-223.

This verifiable photomontage provides an illustration of how the AP2 revised scheme may look in 2042 (15 years after opening) to help inform the visual impact assessment. The design of the AP2 revised scheme may be subject to design development in response to consultation. Development of detail design after Hybrid Bill submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as semi-mature trees which have put on 15 years of growth to illustrate how the AP2 revised scheme will further integrate into the landscape over time.

At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet for a viewing distance of 500mm. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (See the main ES, SMR Addendum Volume 5: Appendix CT-001-002).

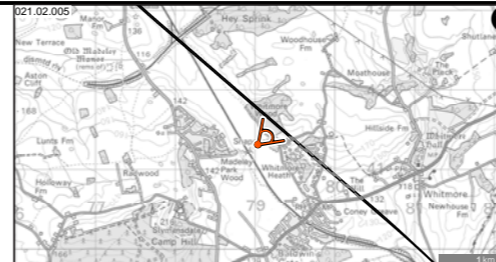


Figure Number	LV-01-666
Figure Name	Verifiable Photomontage Operation Year 15 (2042) - Summer Viewpoint 021.02.005
Community Area 4: Whitmore Heath to Madeley SES2 and AP2 ES	

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Date: 12/12/18

Viewpoint 021.02.007: View north-east from farmland east of Madeley Park Farm

This viewpoint is representative of views experienced by residential receptors on the edge of Madeley Park Wood and recreational receptors using the Whitmore Footpath 5.

Winter view (baseline)

Date taken: 02/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 378765.205, 341261.353.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 26/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 378765.205, 341261.353.

Figure 2: Summer baseline view



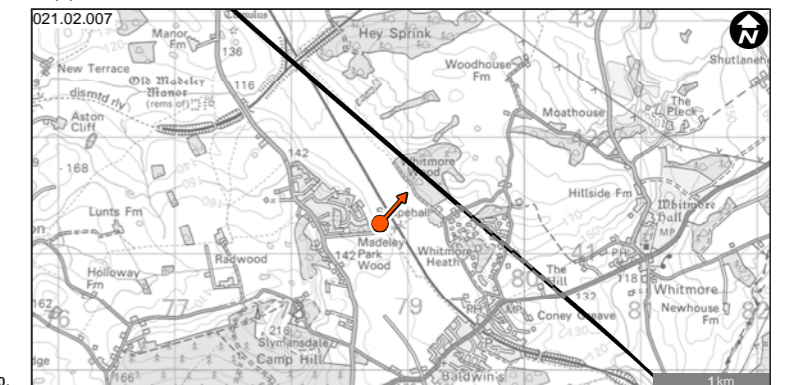
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential and recreational receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 021.02.007: View north-east from farmland east of Madeley Park Farm

Table 1: Visual baseline description

Winter	Summer	Night time
This viewpoint is located on the edge of the low lying, flat and open pastures and floodplain grazing marsh of the River Lea valley. The foreground comprises a gently sloping pasture bounded by post and wire fencing with fragmented hedgerows. Dilapidated farm buildings are just out of view to the right of the photograph. In the mid-ground, pasture with wet grassland is present along the valley floor alongside the WCML and its overhead line equipment and pedestrian overbridge. In the background, beyond the WCML, hedged pastures on the opposite valley side rise up to Whitmore Wood Ancient Woodland. Snape Hall Farm is prominent beyond the WCML, whilst several large properties can be seen within the woodland at Whitmore Heath. Whitmore Wood on the upper valley side forms the skyline.	As winter, although the foreground tree in full leaf partly obscures some mid-ground and background views, including Whitmore Heath properties to the south-east of the view. The overhead line equipment of the WCML remains visible. The screening effect of the foreground trees is very localised and both the residential receptors and recreational receptors represented by this viewpoint have mostly open panoramic summer views.	There is light spill from properties in Madeley Park Wood in the background, highlighted by multiple light sources amidst the trees at Whitmore Heath. Distant sky glow from Baldwin's Gate to the southeast and Madeley to the north is apparent.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	The main ES reported a major adverse significant effect due to the complex and extensive construction activity associated with various elements of the original scheme, including the northern porous portal of Whitmore Heath tunnel, a pumping station, tunnel portal building, Whitmore North cutting, Whitmore Wood retaining wall, Whitmore Wood overbridge and associated earthworks. A barn at Snape Hall Farm would be demolished. These works, the presence of construction equipment, material stockpiles and movement of construction vehicles would substantially alter the key characteristics of the view. Works and cranes associated with River Lea viaduct and Lea South embankment would also be distantly visible. Levelling for Whitmore North cutting satellite compound, extensive excavation and movement of material, alterations to the landform and tree removal within Whitmore Wood would be prominent. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) includes realignment of the operational railway approximately 10m closer to the viewpoint and replacement of Whitmore Wood overbridge by Whitmore Wood underbridge. Overall, the effect of construction on the view will be slightly reduced compared to the original scheme, mainly through the removal of construction associated with Whitmore Wood overbridge. Construction of other components of the amendment listed above will continue to affect the view as described in the main ES. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Construction (at night)	The main ES reported a minor adverse non-significant effect at night from the lighting associated with tunnel boring works in the middle distance. The controls on light spill set out in the draft CoCP would limit the change these new light sources introduce to the wider view. Night-time effects will be similar for the amendment and will not change the level of significance reported in the main ES.	Minor adverse (non-significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	The main ES reported a major adverse significant effect due to the prominence of various elements of the original scheme, including the northern porous portal of the Whitmore Heath tunnel, a pumping station, tunnel portal building, Whitmore North cutting, Whitmore Wood retaining wall, Whitmore Wood overbridge, noise fence barriers and the overhead line equipment. To the north, the upper parts of the overhead line equipment and moving trains would be visible above a noise fence barrier situated on the top of Lea South embankment and River Lea viaduct. The orientation of Whitmore Wood overbridge would conflict with the existing field pattern. The new structures and landform would be prominent landscape features and, combined with the loss of hedgerows, mature trees and a section of Whitmore Wood, would substantially change the rural outlook across the River Lea valley. The amendment (AP2-004-002) includes a number of proposals which together affect this viewpoint. These include realigning the operational railway approximately 10m closer to the viewpoint and replacing Whitmore Wood overbridge with the Whitmore underbridge. Overall, views will be slightly improved compared to the original scheme, mainly through removal of Whitmore Wood overbridge. Other components of the amendment scheme listed above will continue to affect the view as described in the main ES. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Operation year 1 Summer	The main ES reported no change to the year 1 winter assessment as there is little intervening vegetation to provide additional summer screening. The amendment will similarly result in no change to the year 1 winter operational effect.	Major adverse (significant)
Operation year 15 Summer	The main ES reported a moderate adverse significant effect as the maturing mitigation planting along the eastern side of the River Lea valley would partially screen the elements of the original scheme listed above and help integrate them into the surrounding landscape. By year 15, the amended scheme will be similarly screened and integrated into the surrounding landscape by the maturing mitigation planting. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)
Operation year 60 Summer	The main ES reported a minor adverse non-significant effect as the mature mitigation planting along the eastern side of the River Lea valley would partially screen the elements of the original scheme listed above and help integrate them into the surrounding landscape. By year 60, the amendment will be similarly screened and integrated by the mature mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Minor adverse (non-significant)

Viewpoint 021.02.008: View north-east from edge of Madeley Park Wood

This viewpoint is representative of views experienced by residential receptors within Madeley Park Wood and recreational receptors using Whitmore Footpath 5.

Winter view (baseline)

Date taken: 02/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 378653.363, 341245.844.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 26/07/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 378653.363, 341245.844.

Figure 2: Summer baseline view



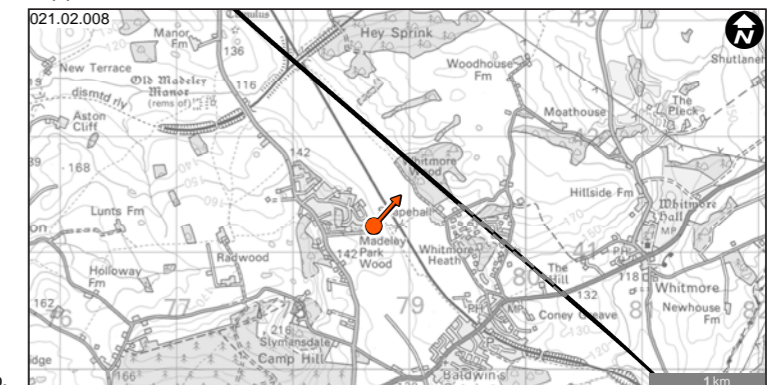
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential and recreational receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 021.02.008: View north-east from edge of Madeley Park Wood

Table 1: Visual baseline description

Winter	Summer	Night time
This viewpoint is located on the edge of the low lying, flat and open pastures and floodplain grazing marsh of the River Lea valley. The foreground comprises gently sloping pastures with some large dilapidated brick and corrugated metal farm sheds. The WCML crosses the middle distance and runs along the valley floor in the middle distance. Both the overhead line equipment and moving trains are visible. Wet grassland is apparent alongside the railway in the lowest part of the valley. Beyond the WCML in the background, the rising valley sides comprise pastures bounded by robust hedgerows, above which is Whitmore Wood Ancient Woodland which screens more distant skyline views.	The occasional tree in full leaf partially obscures some views, but the overhead line equipment of the WCML remains visible in the northern part of the view.	The light spill from properties in Madeley Park Wood (behind this viewpoint) and multiple light sources amidst the trees at Whitmore Heath. There is also distant sky glow from Baldwin's Gate to the south-east and Madeley to the north.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	The main ES reported a major adverse significant effect. This was due to the complex and extensive construction activity associated with various elements of the original scheme, including the northern porous portal of Whitmore Heath tunnel, a pumping station, tunnel portal building, Whitmore North cutting, Whitmore Wood retaining wall, Whitmore Wood overbridge and associated earthworks. This and the presence of construction equipment, material stockpiles and movement of construction vehicles, would substantially alter the key characteristics of the view. Works and cranes associated with River Lea viaduct and Lea South embankment would also be distantly visible. Levelling for Whitmore North cutting satellite compound would intensify the changes to the landform in this area. The works would change the current rural outlook across the valley floor. The extensive excavation and movement of material, alterations to the landform and tree removal within Whitmore Wood would be prominent. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) includes realignment of the operational railway some 10m closer to the viewpoint and replacement of Whitmore Wood overbridge by Whitmore Wood underbridge. Overall, the effect on the view will be slightly reduced compared to the original scheme, mainly through the removal of construction associated with the Whitmore Wood overbridge. Construction of other components of the amendment listed above will continue to affect the view as described in the main ES. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Construction (at night)	The main ES reported a minor adverse non-significant effect at night from the lighting associated with tunnel boring works in the middle distance. The controls on light spill set out in the draft CoCP would limit the change these new light sources introduce to the wider view. Night-time effects will be similar for the amendment and will not change the level of significance reported in the main ES.	Minor adverse (non-significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	The main ES reported a major adverse significant effect. This was due to the prominence of various elements of the original scheme, including the northern porous portal of Whitmore Heath tunnel, a pumping station, tunnel portal building, Whitmore North cutting, Whitmore Wood retaining wall, Whitmore Wood overbridge, noise fence barriers and overhead line equipment. To the north, the upper parts of the overhead line equipment and moving trains would be visible above a noise fence barrier situated on the top of Lea South embankment and River Lea viaduct. The orientation of Whitmore Wood overbridge would conflict with the existing field pattern. The new structures and landform would be prominent landscape features and, combined with the loss of hedgerows, mature trees and a section of Whitmore Wood, would substantially change the rural outlook across the River Lea valley. The amendment (AP2-004-002) includes a number of proposals which together affect this viewpoint. These include realigning the operational railway approximately 10m closer to the viewpoint and replacing Whitmore Wood overbridge with the Whitmore Wood underbridge. Overall, the effect on the view will be slightly reduced compared to the original scheme, mainly through the removal of Whitmore Wood overbridge. Other components of the amendment listed above will continue to affect the view as described in the main ES. The amendment will therefore give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Operation year 1 Summer	The main ES reported no change to the year 1 winter assessment as there is little intervening vegetation to provide additional summer screening. The amendment will similarly result in no change to the year 1 winter operational effect.	Major adverse (significant)
Operation year 15 Summer	The main ES reported a moderate adverse significant effect as the maturing mitigation planting along the eastern side of the River Lea valley would partially screen the elements of the original scheme listed above and help integrate them into the surrounding landscape. By year 15, the amendment will be similarly screened and integrated by the maturing mitigation planting. The amendment will therefore give rise to a different significant effect. However, this will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)
Operation year 60 Summer	The main ES reported a minor adverse non-significant effect as the mature mitigation planting along the eastern side of the River Lea valley would partially screen the elements of the original scheme listed above and help integrate them into the surrounding landscape. By year 60, the amendment will be similarly screened and integrated by the mature mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Minor adverse (non-significant)

Viewpoint 021.03.013: View north-east from Manor Road

This viewpoint is representative of views experienced by recreational receptors using Whitmore Footpaths 19, 20 and 21 and transport receptors using Manor Road.

Winter view (baseline)

Date taken: 02/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377951.390, 341812.565.

Figure 1: Winter baseline view



Summer view (baseline)

It has not been possible to capture summer photography.

Figure 2: Summer baseline view

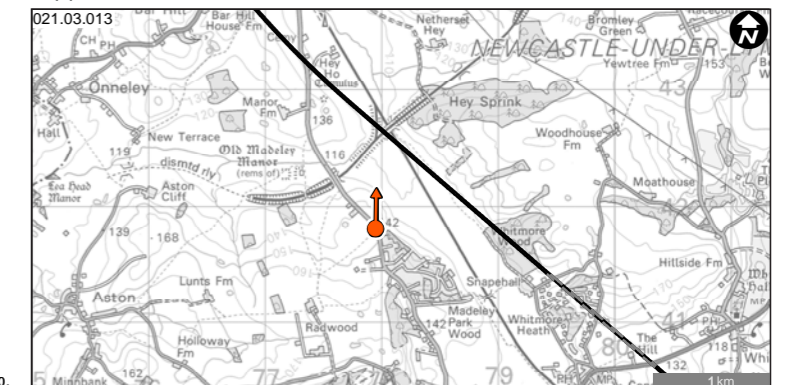
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Recreational receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 021.03.013: View north-east from Manor Road

Table 1: Visual baseline description

Winter	Summer
This viewpoint is located in an area of large, open undulating pastures bounded by robust hedgerows with occasional trees and copses, which form the western side of the River Lea valley. The foreground comprises a gappy roadside hedgerow beyond which are rolling pastures which slope down towards the WCML, which runs along the valley floor. Further pastures are also visible on the far side of the valley, gently rising up to prominent hanging and ridgetop woodland (Hey Sprink Wood). Individual mature trees, hedgerows and shaws (linear tree belts) form field boundaries on the far valley side. Distant skyline views are screened by intervening landform and roadside vegetation on Manor Road.	As winter, although the occasional tree in full leaf partially obscures some views, but the WCML and its associated overhead line equipment remains visible running along the valley floor.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	The main ES reported a major adverse significant effect due to construction activity associated with the Lea South embankment, River Lea viaduct and Whitmore North auto-transformer station. This activity, and the associated earthworks and presence of material stockpiles would introduce uncharacteristic activity into middle distance rural views across the open farmland of the River Lea valley, where it would be seen alongside the WCML. Views of the shaws and Hey Sprink woodland on the opposite valley side would be interrupted and the rural outlook substantially changed. Cranes used for constructing River Lea viaduct would be prominent skyline features. The construction, although not seen at close range would be seen across the full width of the view. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will realign Lea South embankment and the River Lea viaduct approximately 10m to the south-west, which will require the relocation of Whitmore North auto-transformer station to the south-east. In turn the landscape earthworks and landscape mitigation planting will be reconfigured to accommodate the revised HS2 main line alignment and earthworks. These changes will lead to a slight rearrangement of the construction works within the view, but the effects on the view will be insubstantial given the scale of the wider effects experienced in this location. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	The main ES reported a major adverse significant effect due to the prominence of the original scheme as it crosses the River Lea valley on Lea South embankment and River Lea viaduct, albeit that it would be seen in the context of the WCML. The overhead line equipment and moving trains would be visible above the noise fence barriers and Whitmore North auto-transformer station would be prominent in the open, middle distance views from this viewpoint. The presence of these prominent new skyline features, combined with extensive loss of vegetation, including mature trees and scrub along the former rail lines which cross the valley floor, would substantially change the outlook and obscure some views of Hey Sprink Wood and the shaws on the opposite valley side. The amendment (AP2-004-002) will realign Lea South embankment and River Lea viaduct approximately 10m to the south-west, which will require the relocation of Whitmore North auto-transformer station to the south-east. In turn the landscape earthworks and landscape mitigation planting will be reconfigured to accommodate the revised HS2 main line alignment and earthworks. These changes will lead to a slight rearrangement of these components of the original scheme within the view, but the effects on the view will be minimal given the scale of the wider effects experienced in this location, in particular the prominence of Meece Brook viaduct. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Operation year 1 Summer	The main ES reported no change to the year 1 winter assessment as Lea South embankment and River Lea viaduct would remain prominent despite additional filtering of the view by vegetation in full leaf. The amendment will benefit from a similar degree of screening but as with the original scheme, Lea South embankment and the River Lea viaduct will continue to affect the view. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Operation year 15 Summer	The main ES reported a moderate adverse significant effect as the maturing mitigation planting on the embankment slopes would achieve more screening and greater integration of the Lea South embankment, operational railway and River Lea viaduct into the wider visual context. The amendment will benefit from a similar degree of screening and landscape integration. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)
Operation year 60 Summer	The main ES reported a moderate adverse significant effect. This was because, although the mature mitigation planting would substantially screen the Lea South embankment, the River Lea viaduct would remain a prominent feature. By year 60, the Lea South embankment and operational railway will be similarly screened and integrated by the mature mitigation planting, but the River Lea viaduct will remain prominent. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.	Moderate adverse (significant)

Viewpoint 021.02.014: View south-west from A51 Nantwich Road

This viewpoint is representative of views experienced by residences along the A51 Nantwich Road.

Winter view (baseline)

It has not been possible to capture winter photography.

Figure 1: Winter baseline view

Summer view (baseline)

Date taken: 21/08/2018. Camera: Canon EOS 6D, 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377242,338794.

Figure 2: Summer baseline view



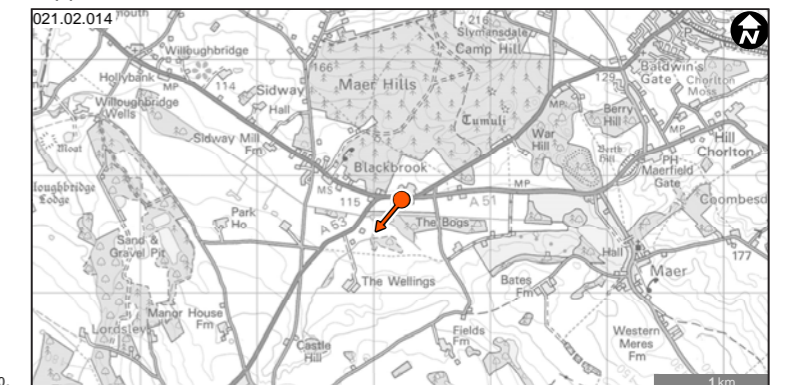
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 021.02.014: View south-west from Nantwich Road

Table 1: Visual baseline description

Winter	Summer
Residents of properties along the A51 Nantwich Road have slightly elevated south-westerly views across the A51 Nantwich Road towards the car park of a public house and an open arable field bounded by low hedgerows. Woodland within The Bogs Local Wildlife Site (LWS) which bounds the far side of this field foreshortens longer views, although looking along the A51 Nantwich Road there are views of gently rolling fields rising up to a low wooded horizon in the distance. The A53 Newcastle Road is also present within the view but its presence is only marked by moving traffic. Street lighting, telegraph poles and road signs as well as moving vehicles create visual clutter within the view.	As winter, although some boundary trees in full leaf between the elevated properties and the A51 Nantwich Road will partially filter views.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>This new viewpoint is located in an area unaffected by the original scheme.</p> <p>Residents of properties along the north side of the A51 Nantwich Road will have slightly elevated, close distance south-westerly views towards construction activity associated with the permanent diversion of a section of the A53 Newcastle Road and stopping up of the existing A51/ A53 junction (AP2-004-003). There will be an alteration to the key characteristics of close and middle distance views, with the removal of a section of roadside hedgerow and several mature trees along the edge of the woodland within The Bogs LWS. Construction activity, including the presence of construction equipment, the A51/A53 Junction Modifications satellite compound and movement of materials will substantially change the outlook from the properties on the north side of the A51 Nantwich Road. The amendment will therefore give rise to a medium magnitude of change and a new moderate adverse significant effect, not reported in the main ES.</p>	Moderate adverse (significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	Residents of properties along the north side of the A51 Nantwich Road will have slightly elevated, close distance south-westerly views along the new section of road corridor (AP2-004-003). The permanent loss of several mature trees from the corner of woodland within The Bogs LWS will be noticeable. Hedgerow planting to either side of the new section of road will be immature and provide little screening at year 1. The presence of the new section of road will substantially change the views experienced by residents. Street lighting along the new section of road will introduce additional night-time effects. The amendment will therefore give rise to a medium magnitude of change and a new moderate adverse significant effect, not reported in the main ES.	Moderate adverse (significant)
Operation year 1 Summer	Intermittent roadside trees along the north side of the A51 Nantwich Road will provide some additional screening of the road corridor when in full leaf, but the diversion of a section of the A53 Newcastle Road will remain prominent in close distance views. The amendment will therefore give rise to a medium magnitude of change and a new moderate adverse significant effect, not reported in the main ES.	Moderate adverse (significant)
Operation year 15 Summer	The maturing hedgerow mitigation will provide some integration of the diverted section of the A53 Newcastle Road within the surrounding landscape. The amendment will therefore give rise to a low magnitude of change and a new minor adverse non-significant effect, not reported in the main ES.	Minor adverse (non-significant)
Operation year 60 Summer	The mature mitigation planting will provide further integration of the diverted section of the A53 Newcastle Road within the surrounding landscape, however the changes to the view will remain discernible. The amendment will therefore give rise to a low magnitude of change and a new minor adverse non-significant effect, not reported in the main ES.	Minor adverse (non-significant)

Viewpoint 022.02.001: View north-east from Manor Road

This viewpoint is representative of views experienced by nearby residential and transport receptors along Manor Road.

Winter view (baseline)

Date taken: 01/02/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377854.391, 341940.887.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 01/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377854.391, 341940.887.

Figure 2: Summer baseline view



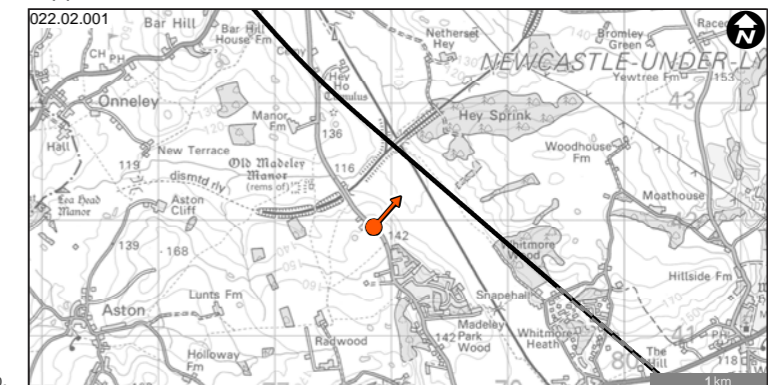
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential receptors of high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 022.02.001: View north-east from Manor Road

Table 1: Visual baseline description

Winter	Summer
<p>This viewpoint is located in an area of large, open undulating pastures bounded by robust hedgerows with occasional trees and copses, which slope down towards the River Lea valley. Foreground views through the roadside field gate comprise pastures and wet grassland which continue into the mid-ground, sloping away from the viewpoint towards the WCML, which runs on low embankment along the valley floor. The overhead line equipment of the WCML and moving trains are prominent. On the opposite valley side, pastures bounded by robust hedges and shaws (linear woodland belts), copses and occasional field trees rise up to the elevated pastures and prominent hanging and ridgetop woodland (Hey Sprink and Whitmore Wood Ancient Woodland). To the left of the view in the background, are woodlands around Madeley Heath. This vegetation encloses and partially obscures buildings within the settlement.</p>	<p>As winter, although the vegetation in full leaf partially obscures some mid-ground and background views. The overhead line equipment of the WCML and moving trains remain present in the view.</p>

Table 2: Future baseline description

Construction (2020)	Operation (2027)
<p>There are no committed developments which would change the baseline.</p>	<p>There are no committed developments which would change the baseline.</p>

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a major adverse significant effect due to construction activity associated with Lea South embankment, River Lea viaduct and Whitmore North auto-transformer station, albeit that this activity would be seen in the context of the WCML. This activity, and the associated earthworks and presence of material stockpiles would introduce uncharacteristic new features into middle distance rural views across the open farmland of the River Lea valley, where it would be seen alongside the WCML. View of the shaws and Hey Sprink woodland on the opposite valley side would be interrupted and rural outlook substantially changed. Cranes used for constructing the River Lea viaduct would be prominent skyline features. The construction, although not seen at close range would be visible across the full width of the view. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will realign Lea South embankment and the River Lea viaduct approximately 10m to the south-west, which will require the relocation of Whitmore North auto-transformer station to the south-east. In turn the landscape earthworks and landscape mitigation planting will be reconfigured to accommodate the revised HS2 main line alignment and earthworks. These changes will lead to a slight rearrangement of the construction works within the view, but the effects on the view will be insubstantial given the scale of the wider effects experienced in this location. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	<p>The main ES reported a major adverse significant effect due to the prominence of the original scheme as it crosses the River Lea valley on Lea South embankment and River Lea viaduct, albeit that it would be seen in the context of the WCML. The overhead line equipment and moving trains would be visible above the noise fence barriers and Whitmore North auto-transformer station would be prominent in the open, middle distance views. The presence of these prominent new skyline features, combined with extensive loss of vegetation, including mature trees and scrub along the former rail lines which cross the valley floor, would substantially change the outlook and obscure some views of Hey Sprink Wood and the shaws on the opposite valley side. The amendment (AP2-004-002) will realign River Lea viaduct approximately 10m to the south-west, which will require the relocation of Whitmore North auto-transformer station to the south-east. In turn the landscape earthworks and landscape mitigation planting will be reconfigured to accommodate the revised HS2 main line alignment. These changes will lead to a slight rearrangement of these components of the original scheme within the view, but the effects on the view will be minimal given the scale and extent of the wider scheme elements in this location, including Meece Brook viaduct. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
Operation year 1 Summer	<p>The main ES reported no change to the year 1 winter assessment as Lea South embankment and River Lea viaduct will remain prominent despite additional filtering of the view by vegetation in full leaf. The amendment will benefit from a similar degree of screening but as with the original scheme, Lea South embankment and the River Lea viaduct will continue to affect the view. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Major adverse (significant)
Operation year 15 Summer	<p>The main ES reported a moderate adverse significant effect as the maturing mitigation planting on the embankment slopes would achieve more screening and greater integration of the Lea South embankment, operational railway and River Lea viaduct into the surrounding landscape. By year 15, the amendment will benefit from a similar degree of screening and landscape integration by the maturing mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Moderate adverse (significant)
Operation year 60 Summer	<p>The main ES reported a moderate adverse significant effect as, although the mature mitigation planting will substantially screen the Lea South embankment, the River Lea viaduct will remain prominent in the view. By year 15, the amendment will benefit from a similar degree of screening and landscape integration by the mature mitigation planting. The amendment will therefore not give rise to a new or different significant effect and will not change the level of significance of the effect reported in the main ES.</p>	Moderate adverse (significant)

Viewpoint 022.02.004: View south-east from Manor Road near Manor Cottages

This viewpoint is representative of views experienced by residential receptors at Manor Cottages and Manor Farm, and transport receptors using Manor Road.

Winter view (baseline)

Date taken: 01/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377365.592, 342840.585.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 03/08/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377365.592, 342840.585.

Figure 2: Summer baseline view



Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential receptors with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 022.02.004: View south-east from Manor Road near Manor Cottages

Table 1: Visual baseline description

Winter	Summer
<p>This viewpoint is located in an area of large open and gently undulating pastures bounded mainly by post and wire fencing with intermittent sections of hedgerow and copses of trees, typically associated with field ponds. Foreground views comprise a large sloping pasture with a field pond next to a small copse of mature trees. The WCML and its associated overhead line equipment is visible running along the valley floor where there are marshy pastures bounded by hedgerows, with few trees. Beyond the WCML in the background, the valley sides are well-wooded with many large blocks of mature woodland visible across the view. A large farm complex is visible with scattered properties present amongst the mature tree cover. There are longer distance skyline views of rolling farmland.</p>	<p>As winter, but foliage on the hedgerows and trees around the pond, in the foreground hedgerow and in the mid-ground will help to screen and filter some views.</p>

Table 2: Future baseline description

Construction (2020)	Operation (2027)
<p>There are no committed developments which would change the baseline.</p>	<p>Not applicable.</p>

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a major adverse effect due to construction activity associated with River Lea viaduct, Lea North embankment, Manor Road realignment and overbridge, and the presence of the River Lea viaduct satellite compound and material stockpiles, in close and middle distance views. Cranes used for construction of River Lea viaduct would be visible on the skyline. On the opposite side of the valley, excavation and restoration of the borrow pit west of Netherset Hey Farm would occupy much of the distant view. The current outlook across rolling pastures and arable fields, towards the WCML in the River Lea valley and the vegetated embankments of the out-of-use Stoke to Market Drayton Railway and Madeley Chord, would be replaced by views of large scale construction. Distant skyline views towards Hey Sprink Wood and the spire of All Saints Church and buildings in Madeley, would be interrupted. The amendment to change the HS2 maintenance access (AP2-004-006) will realign the shared accommodation access track, and bring construction activity slightly closer to the viewpoint, making it more noticeable in the view and slightly increasing its overall effect. The amendment will therefore give rise to a different significant effect, however it will not change the level of significance of the effect reported in the main ES.</p>	<p>Major adverse (significant)</p>
	Permanent effect during operation	Level of effect
Operation year 1 Winter	<p>There is no operational assessment for AP2-004-006.</p>	<p>Not applicable</p>
Operation year 1 Summer	<p>There is no operational assessment for AP2-004-006.</p>	<p>Not applicable</p>
Operation year 15 Summer	<p>There is no operational assessment for AP2-004-006.</p>	<p>Not applicable</p>
Operation year 60 Summer	<p>There is no operational assessment for AP2-004-006.</p>	<p>Not applicable</p>

Viewpoint 022.02.012: View south from the A525 Bar Hill Road

This viewpoint is representative of views experienced by residential receptors on Bar Hill Road (close to property No 52) and transport receptors using the A525 Bar Hill Road.

Winter view (baseline)

Date taken: 01/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 376884.264, 344126.462.

Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 02/08/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 376884.264, 344126.462.

Figure 2: Summer baseline view



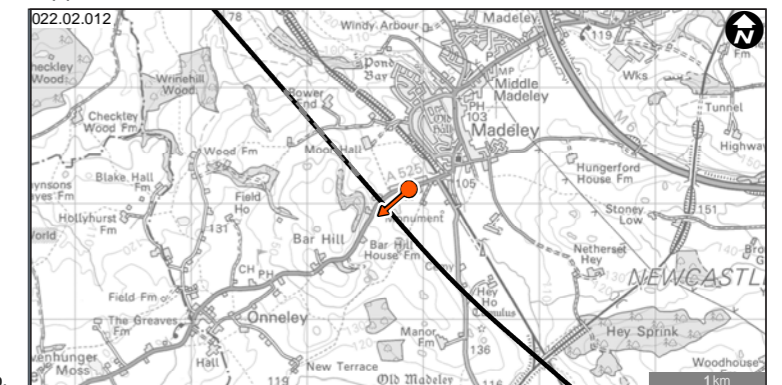
Value of the Viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Residential receptors with high sensitivity.

Key plan (arrow shows direction of view)



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Viewpoint 022.02.012: View south from the A525 Bar Hill Road

Table 1: Visual baseline description

Winter	Summer
<p>This viewpoint is located on the A525 Bar Hill Road, which is bounded by robust roadside hedgerows. To the south of the road are medium to large-scale, mainly flat pastures with some former field boundary trees and occasional copses associated with field ponds. The foreground comprises an undulating pasture with occasional mature trees and a small pond in the middle of the field, marked by a copse of trees. The pasture continues into the middle distance where the landform becomes more hilly with linear tree belts. There is little other built development in the view apart from a farmhouse and some large farm sheds. To the right of the view the middle distance skyline is dominated by Barhill Wood Ancient Woodland. Long distance views are contained by the intervening landform and vegetation.</p>	<p>As winter, but the trees and hedgerows in full leaf obscure mid-ground and background views.</p>

Table 2: Future baseline description

Construction (2020)	Operation (2027)
<p>There are no committed developments which would change the baseline.</p>	<p>Not applicable.</p>

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	<p>The main ES reported a major adverse significant effect. This is because residents of properties on Bar Hill Road and users of the A525 Bar Hill Road would be surrounded by extensive and complex construction activity associated with the southern porous portal of Madeley tunnel, A525 Bar Hill Road realignment and overbridge and Madeley Bridleway 1 accommodation green overbridge. Views of hedged pastures either side of A525 Bar Hill Road would be replaced by large-scale construction. The landform changes would be prominent as would tree removal in Barhill Wood Ancient Woodland. The amendment to provide a power supply to Madeley tunnel (AP2-004-007) will introduce new construction activity into the view, however, the effect will be minimal as it will be seen alongside the wider construction works in this location, which will be extensive. The amendment will therefore not give rise to a new or different significant effect and will not change the significance of the effect reported in the main ES.</p>	<p>Major adverse (significant)</p>
	Permanent effect during operation	Level of effect
Operation year 1 Winter	<p>There is no operational assessment for AP2-004-007.</p>	<p>Not applicable</p>
Operation year 1 Summer	<p>There is no operational assessment for AP2-004-007.</p>	<p>Not applicable</p>
Operation year 15 Summer	<p>There is no operational assessment for AP2-004-007.</p>	<p>Not applicable</p>
Operation year 60 Summer	<p>There is no operational assessment for AP2-004-007.</p>	<p>Not applicable</p>

Viewpoint 022.03.024: View south-west from Madeley Parish Cemetery

This viewpoint is representative of views experienced by visitors to Madeley Cemetery.

Winter view (baseline)

Date taken: 01/03/2016. Camera: Canon EOS 6D, Canon EF 50mm lens (stitched panorama). Approximate GPS Co-ordinates ref. 377328.362, 343452.474.

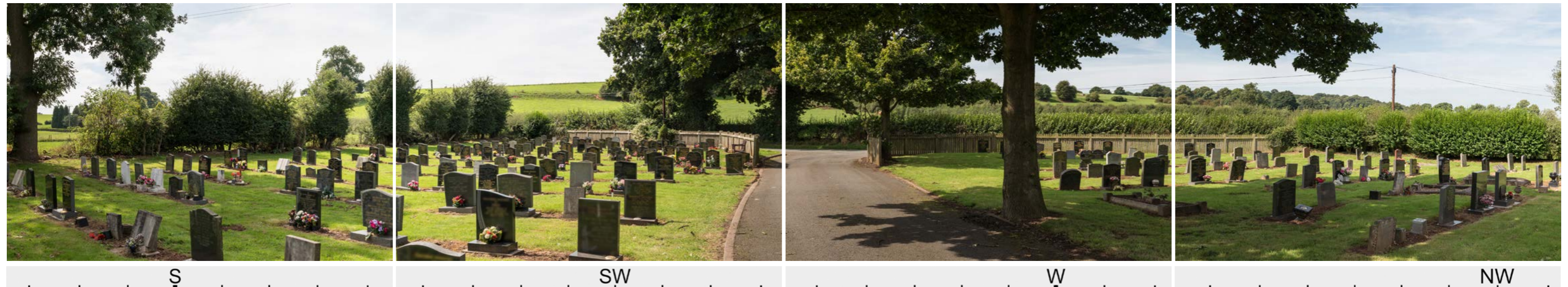
Figure 1: Winter baseline view



Summer view (baseline)

Date taken: 23/08/2016. Time taken: 12:18. Camera: Sony a7RII, Zeiss Loxia 50mm f/2.0 lens (stitched panorama). Co-ordinates: 377328.362, 343452.474. Elevation: 109.756 metres AOD.

Figure 2: Summer baseline view



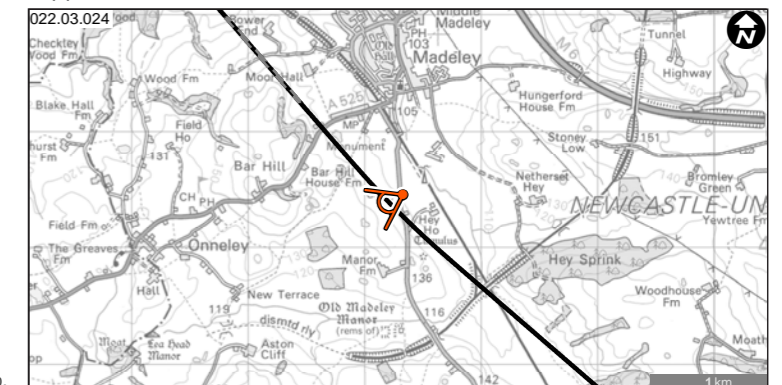
Value of the viewpoint:

This viewpoint is not recognised in any designation or literature.

Sensitivity of the receptor:

Recreational receptors and visitors to the cemetery with high sensitivity.

Key plan (arrow shows direction of view)



Viewpoint 022.03.024: View south-west from Madeley Parish Cemetery

Table 1: Visual baseline description

Winter	Summer
This viewpoint is located within a small cemetery in an area of large open and flat or gently undulating arable fields and pastures bounded by gappy hedgerows with mature field and hedgerow trees. The foreground comprises the cemetery landscape with tarmac footpaths and some ornamental trees and shrubs. To the west, in the middle distance, the cemetery is bounded by timber fencing which screens views of Manor Road beyond. Hedgerows filter views out across the pasture to the south-west. Beyond Manor Road, in the middle distance, the landform rises sharply to form a low hill comprising open pasture with occasional mature trees. This landform restricts more distant skyline views.	As winter, but the trees and hedgerows in full leaf in the mid-ground obscure and filter some views of the hillside in the mid-ground.

Table 2: Future baseline description

Construction (2020)	Operation (2027)
There are no committed developments which would change the baseline.	There are no committed developments which would change the baseline.

Table 3: Visual impact assessment

	Temporary effect during construction	Level of effect
Construction	The main ES reported a major adverse effect due to the open and close distance views of construction activity associated with Lea North embankment and Manor Road overbridge. Hey House Lodge to the south-west would be demolished, whilst to the east, the excavation and working of a borrow pit west of Netherset Hey Farm means that the cemetery would largely be surrounded by construction works. The rural outlook and tranquil setting of the cemetery would completely change due to the scale of the construction which would include extensive earthworks and movement of excavated material. Loss of hedgerow field boundaries and trees would open up more middle distance views of construction and add to the overall effect. The amendment to change the vertical and horizontal alignment in the Whitmore Heath to Madeley area (AP2-004-002) will result in minor changes to the alignment of Manor Road and Manor Road overbridge. Manor Road will increase in height by approximately 1m and the embankment footprint will widen by up to 5m. The amendment will bring construction of Manor Road overbridge and Lea North embankment slightly closer to this viewpoint and further increase the effect on visitors to the cemetery compared to the original scheme. This will give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
	Permanent effect during operation	Level of effect
Operation year 1 Winter	The main ES reported a major adverse effect due to the prominence of Manor Road overbridge and Lea North embankment, together with views of the overhead line equipment, moving trains and moving vehicles, which would be partially visible above the noise fence barrier. The prominent new infrastructure combined with foreshortening of rural views and loss of vegetation, including hedgerows and mature trees, would substantially change the views out from the cemetery and disturb the sense of tranquillity currently experienced. The amendment (AP2-004-002) will result in minor changes to the alignment of Manor Road and Manor Road overbridge. Manor Road will increase in height by approximately 1m and Lea North embankment footprint will widen by up to 5m. The amendment will bring the Manor Road overbridge and associated embankments slightly closer to the viewpoint and further increase their prominence compared to the original scheme. This will give rise to a different significant effect, however, this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Operation year 1 Summer	The main ES reported no change to the year 1 winter assessment as Lea North embankment and particularly the Manor Road overbridge and Lea North embankment would remain prominent features despite additional filtering of the view by vegetation in full leaf. The amendment will bring the Manor Road overbridge and associated embankments slightly closer to the viewpoint and further increase their prominence compared to the original scheme even with the additional filtering of the view by vegetation in full leaf. The amendment will therefore give rise to a different significant effect, however this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)
Operation year 15 Summer	The main ES reported a major adverse significant effect as, despite the presence of maturing mitigation planting along the edge of the cemetery, Manor Road overbridge and Lea North embankment would remain prominent features, introducing visual disturbance and affecting the tranquillity of the cemetery. The amendment will bring the Manor Road overbridge and Lea North embankment slightly closer to the viewpoint and further increase their prominence compared to the original scheme. This amendment will therefore give rise to a different significant effect. However, this will not change the level of significance of the effect reported in the main ES. The view of the AP2 revised scheme from viewpoint 022.03.024 during year 15 operation (summer) is illustrated on the photomontage shown in figure LV-01-645 (see the SES2 and AP2 ES Volume 2 CA4 Map Book).	Major adverse (significant)
Operation year 60 Summer	The main ES reported a major adverse significant effect as despite the presence of mature planting along the edge of the cemetery, Manor Road overbridge and Lea North embankment would remain prominent features, introducing visual disturbance and affecting the tranquillity of the cemetery. The amendment will bring the Manor Road overbridge and Lea North embankment slightly closer to the viewpoint and further increase their prominence. This amendment will therefore give rise to a different significant effect, however this will not change the level of significance of the effect reported in the main ES.	Major adverse (significant)

Viewpoint 022.03.024: View south-west from Madeley Parish Cemetery

This viewpoint is representative of views experienced by visitors to Madeley Cemetery.

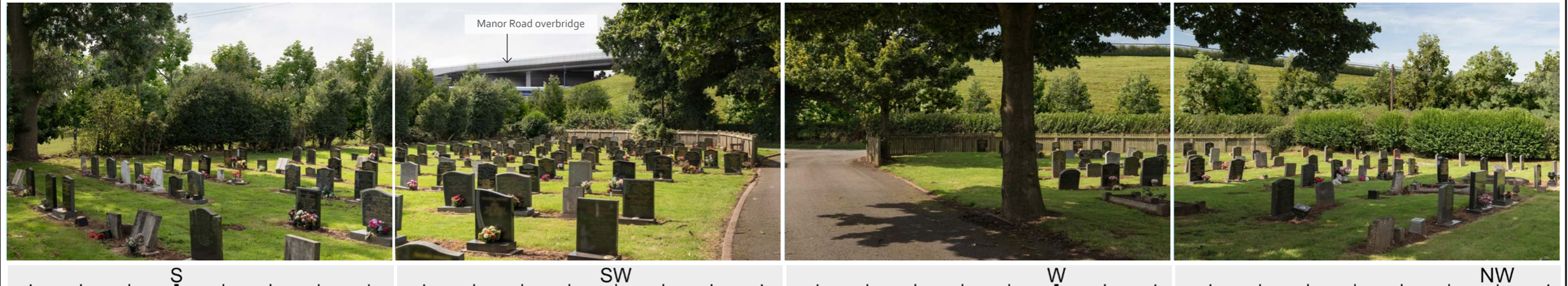
Current baseline - Summer view

Date taken: 23/08/2016. Time taken: 12:18. Camera: Sony a7RII, Zeiss Loxia 50mm f/2.0 lens (stitched panorama). Co-ordinates: 377328.362, 343452.474. Elevation: 109.756 Metres AOD.



Summer Verifiable Photomontage - Operation year 15 (2042)

Date taken: 23/08/2016. Time taken: 12:18. Camera: Sony a7RII, Zeiss Loxia 50mm f/2.0 lens (stitched panorama). Co-ordinates: 377328.362, 343452.474. Elevation: 109.756 Metres AOD.



The viewpoint has been taken approximately 126 metres away from the AP2 revised scheme. Viewpoint location shown on Map LV-08-224.

This verifiable photomontage provides an illustration of how the AP2 revised scheme may look in 2042 (15 years after opening) to help inform the visual impact assessment. The design of the AP2 revised scheme may be subject to design development in response to consultation. Development of detail design after Hybrid Bill submission will not result in any significant adverse change in the environmental effects reported in the assessment. Where new planting is proposed, it has been shown as semi-mature trees which have put on 15 years of growth to illustrate how the AP2 revised scheme will further integrate into the landscape over time.

At this scale the images do not lend themselves to direct comparison out in the field. Therefore, for viewing in the field, it is recommended that each image from the panoramic photomontage is printed individually, onto an A3 landscape sheet for a viewing distance of 500mm. For further details on the selection of photomontage locations, verifiable methodology and presentation refer to the Landscape and visual assessment Technical Note - Approach to verifiable photomontages (See the main ES, SMR Addendum Volume 5: Appendix CT-001-002).



Figure Number	LV-01-645
Figure Name	Verifiable Photomontage Operation Year 15 (2042) - Summer Viewpoint 022.03.024
Community Area 4: Whitmore Heath to Madeley SES2 and AP2 ES	

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Doc Number: C861-ARP-EV-REP-000-124794 **Date: 12/12/18**

2.4 Assessment matrices

Visual assessment matrix

2.4.1 Table 2 summarises the assessment of significance for all the representative viewpoints identified in the Whitmore Heath to Madeley area potentially affected by AP2 amendments. These are ordered numerically along the route of the AP2 revised scheme. The assessment of significant effects is presented in Volume 2, Section 5. The night-time assessment has only been undertaken for residential, hotel and healthcare receptors with a view of proposed continuous lighting during either construction or operation. In most cases, in urban areas, additional lighting is not considered to give rise to significant effects due to the widespread presence of street lighting, lightspill from adjacent buildings and skyglow. Where there is no direct foreground visibility of additional lighting, no further assessment has been undertaken.

Table 2: Visual assessment matrix summarising the assessment of significance for all of the viewpoints identified as affected by AP2 amendments.

Viewpoints		Construction	Operation year 1 (2027)		Operation year 15 (2042) summer	Operation year 60 (2087) summer
		Winter	Winter	Summer		
020.03.010	View north-east from farmland near water treatment works	Moderate adverse	Moderate adverse	Moderate adverse	Minor adverse	Negligible
020.03.011	View north-east from farmland close to WCML	Major adverse	Major adverse	Major adverse	Major adverse	Major adverse
020.02.016	View south-west from Rectory Lane	Minor adverse	Negligible	Negligible	Negligible	Negligible
020.02.021	View east from the A53 Newcastle Road near The Hill	Negligible	Negligible	Negligible	Negligible	Negligible
020.03.022	View north from junction of farmland near Baldwin's Gate	Moderate adverse	Moderate adverse	Moderate adverse	Minor adverse	Minor adverse
021.02.005	View east from farmland near Snape Hall Farm	Major adverse	Major adverse	Major adverse	Moderate adverse	Minor adverse
021.02.007	View north-east from farmland east of Madeley Park Farm	Major adverse	Major adverse	Major adverse	Moderate adverse	Minor adverse
021.02.008	View north-east from edge of Madeley Park Wood	Major adverse	Major adverse	Major adverse	Moderate adverse	Minor adverse
021.03.013	View north-east from Manor Road	Major adverse	Major adverse	Major adverse	Moderate adverse	Moderate adverse
021.02.014	View south-west of A51 Nantwich Road	Moderate adverse	Moderate adverse	Moderate adverse	Minor adverse	Minor adverse
022.02.001	View north-east from Manor Road	Major adverse	Major adverse	Major adverse	Moderate adverse	Moderate adverse
022.02.004	View south-east from Manor Road, near Manor Cottages	Major adverse	N/A	N/A	N/A	N/A
022.02.012	View south from the A525 Bar Hill Road	Major adverse	N/A	N/A	N/A	N/A
022.03.024	View south-west from Madeley Parish Cemetery	Major adverse	Major adverse	Major adverse	Major adverse	Major adverse

References

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HS2 Ltd (2017), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Environmental Statement, Scope and Methodology Report, Volume 5: Appendix CT-001-001*. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627187/E23_EIA_SMR_CT-001-001_WEB.pdf.

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