CFA9, Central Chilterns

3 Overview of the amendments

3.1.1 Table 2 provides a summary of the amendments in the Central Chilterns community forum area (CFA9) and Figure 3 shows the locations.





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Table 2: Summary of amendments in the Central Chilterns Area (CFA9)

CFA	Amendment	Description of the original scheme	Description of the revised scheme
9	Additional land required for construction and maintenance access near No Man's Wood AP1-009-002	The provision of a temporary access track from the A413 for the construction of a balancing pond (for railway drainage) and for the creation of an area of woodland habitat.	The revised scheme will alter the alignment of this access track to the north of the Marylebone to Aylesbury Line. It will provide temporary construction access and permanent maintenance access to the balancing pond and the area of woodland habitat.

4 Additional land required for construction and maintenance access near No Man's Wood (AP1-009-002)

4.1 Overview of amendment

- 4.1.1 The Bill provides for an access track from the A413 for construction of a balancing pond (for railway drainage) and for the creation of an area of woodland habitat. Part of the route of this access track was from the A413 via an existing private access to a property to the south of No Man's Wood (refer to main ES map CT-05-032-L1 in main ES Volume 2, CFA9 Map Book). The remaining length of this track was a new access following the route of an existing equestrian route between No Man's Wood, which is partly designated as ancient woodland, New Firs and John's Plantation.
- 4.1.2 Since submission of the Bill, HS2 Ltd has identified the need for a permanent access to the balancing pond and woodland planting area for maintenance purposes. A revised route for this new access track has been identified parallel and adjacent to the Marylebone to Aylesbury Line (refer to AP map CT-05-032-L1 and CT-06-032-L1 in the AP ES Volume 2, Map Book Part 1). The revised route will reduce disruption to the property to the south of No Man's Wood, the adjacent Valley View Sporting Gun Club and to the ancient woodland of No Man's Wood. The existing access between the A413 and the Marylebone to Aylesbury Line is not of a sufficient standard and width for the construction and maintenance vehicles that will use it. For the revised scheme it will therefore be improved and widened to 3.5m with 1.5m verges on each side and a 1.5m passing bay. The new section of access track parallel to the Marylebone to Aylesbury Line will be of a similar width and construction, also with a 1.5m passing bay.
- 4.1.3 The estimated duration of construction is six months, which is the same as for the original scheme. A 15m-wide strip of land is required for the construction of the works, as in the original scheme. Traffic access from the A413 to the residential property and the shooting club close to the revised access track will be maintained during construction and operation. The land required for the revised route of this widened access track is outside the original limits of the Bill, hence the need for this amendment. The sections of the original access track that are no longer required will be removed from the Bill. Overall an additional area of approximately 1.1 ha will be required for the amendment.
- 4.1.4 The revised new access track is not considered to make changes that require a reassessment of the environmental effects or proposed mitigation as set out in the main ES with respect to: air quality; land quality; landscape and visual assessment; socio-economics; sound, noise and vibration; traffic and transport; and water resources and flood risk assessment. However there were changes where reassessment was considered to be required in respect of: agriculture, forestry and soils; community; cultural heritage; and ecology.

4.2 Agriculture, forestry and soils

Scope, assumptions and limitations

4.2.1 The assessment scope, key assumptions and limitations for agriculture, forestry and soils are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES. The assessment is based on the permanent requirement for an access track with a total width of 6.5m. The amendment will require the permanent use of approximately 0.2ha of agricultural land including the earthworks required, which is more than that required for the original scheme, although along a revised alignment. The access track would also permanently require 0.4ha of woodland from John's Plantation.

Environmental baseline

Existing baseline

- 4.2.2 The area of land affected by the amendment has soil in the Coombe 1 and Frome associations, as described in the main ES (see Volume 2, Central Chilterns (CFA Report 9), Section 3). Coombe 1 soils are well drained (Wetness Class I (WC))⁴ and comprise silty clay loam or clay loam soils overlying chalk. Coombe 1 soils can be very shallow and are variably chalky. Frome soils are also characterised by silty clay loam to silty clay topsoils but are poorly drained (WC IV). The quality of agricultural land affected in this location is assessed as Subgrade 3a, variably due to droughtiness and soil wetness limitations.
- 4.2.3 No details are recorded in the main ES of the holding that will be affected. However, information provided by the landowner since publication of the main ES suggests that the land forms part of a 20ha mainly wooded holding where some limited livestock grazing is undertaken. Farm diversification in the form of a shooting club is also undertaken on the land, as discussed in Section 4.3, Community. The holding is considered to be of medium sensitivity to change, based on the criteria set out in the main ES.

Effects arising during construction

- 4.2.4 The area of agricultural land required for the original scheme is as reported in the main ES. Of the total of 0.2ha of additional land required permanently, approximately 0.1ha of land is classified as Subgrade 3a and thus best and most versatile agricultural land (Grades 1, 2 and 3a). However, the area required does not alter the assessment of effect reported in the main ES (i.e. major/ moderate adverse).
- 4.2.5 The construction of the access track will permanently require approximately 0.3ha from a holding of 20ha. This represents less than 5% of the holding and is an impact of negligible magnitude. The realigned access track will also have less impact on the holding than the previous alignment, since it will be located adjacent to the Marylebone to Aylesbury Line. The magnitude of impact is considered to be negligible such that the effect on the holding is negligible and not significant.

⁴ The Wetness Class of a soil is classified according to the depth and duration of waterlogging in the soil profile and has six bands.

- 4.2.6 The access track would also permanently require 0.4ha of woodland from John's Plantation. The loss of such a small area of woodland does not alter the assessment of effects on forestry reported in the main ES.
- 4.2.7 The activities at the shooting club will need to be carefully monitored during construction (with appropriate liaison as described in the draft Code of Construction Practice (CoCP) refer to Volume 5: Appendix CT-003-000 of the main ES) to ensure safe working for all parties.

Effects arising from operation

4.2.8 No additional effects to agriculture, forestry and soil receptors are predicted to arise from operation of the revised scheme.

Mitigation and residual effects

4.2.9 No additional mitigation measures are required. The amendment will not result in additional residual effects on agriculture, forestry or soils.

4.3 Community

Scope, assumptions and limitations

4.3.1 The assessment scope, key assumptions and limitations for community are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.

Environmental baseline

Existing baseline

4.3.2 The baseline community information for Central Chilterns is described in the main ES (Volume 2, CFA Report 9, Section 5). Valley View Sporting Gun Club was not identified. The Club opened in 1985 and is located off the A413 near Great Missenden, immediately south of No Man's Wood. It uses 11ha of new and mature plantations (Francis and John's Plantations) for clay pigeon shooting, with fixtures held every second Sunday between the end of August and the end of May.

Effects arising during construction

4.3.3 Access to the residential property and the shooting club will not be restricted during construction and the club will not experience any in-combination effects. Therefore, no significant temporary or permanent effects arising from construction of the proposed new access track have been identified.

Effects arising from operation

4.3.4 Access to the residential property and the shooting club will not be restricted during operation and the club will not experience any in-combination effects. Therefore, no significant effects arising from operation of the proposed new access track have been identified.

Mitigation and residual effects

4.3.5 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

4.4 Cultural heritage

Scope, assumptions and limitations

- 4.4.1 The assessment scope, key assumptions and limitations for cultural heritage are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 4.4.2 It has been assumed that topsoil will be removed, as a minimum, for construction of the access track and that all archaeological remains and earthworks within the footprint of the access track will be removed or disturbed.
- 4.4.3 Information on the potential archaeological remains at this location is based on deskbased research (sources including the historic environment record (HER), historic maps and aerial photographs) and non-intrusive surveys comprising LiDAR⁵ and hyperspectral survey.

Environmental baseline

- 4.4.4 The revised scheme will be constructed close to heritage assets assessed as low significance in the main ES. The assets consist of the 18th century turnpike road (asset reference CCoo8), now the A413 and the existing Marylebone to Aylesbury Line (asset reference CCoo5). The connection to the former turnpike road is in the same location for the original and revised schemes, although the access track is wider in the revised scheme. The crossing over the Marylebone to Aylesbury Line is also unchanged from the original scheme.
- 4.4.5 The area of revised access track will be located along the northern side of the Marylebone to Aylesbury Line, which originated in the late 19th century as the Great Central Railway Line. The access track will cross a field and will pass along the edge of a woodland plantation. It will not cross the cutting or any other features associated with the 19th century railway line, or any other heritage assets.

Effects arising during construction

4.4.6 The revised scheme does not change the result of the assessment or proposed mitigation as set out in the main ES with respect to cultural heritage, as it does not encroach onto any of the heritage assets previously identified.

Effects arising from operation

4.4.7 No significant effects arising from operation of the proposed new access track have been identified. The cultural heritage effects arising from operation will therefore be as reported in Volume 2 of the main ES.

Mitigation and residual effects

4.4.8 There will be no change to the mitigation and residual effects reported in Volume 2 of the main ES.

⁵ Light detection and ranging (LiDAR) is a high resolution remote sensing technique to capture 3D data.

4.5 Ecology

Scope, assumptions and limitations

- 4.5.1 The assessment scope for ecology is as set out in Volume 1 of the AP ES. The key assumptions, limitations and the methodology for determining significance of effects are as set out in Volume 1, the SMR (Volume 5: Appendix CT-001-000/1) and the SMR Addendum (Volume 5: Appendix CT-001-000/2) of the main ES.
- 4.5.2 The land required for the amendment is bordered by land already within the limits of the Bill and has been subject to desk-based ecological investigations as well as field survey and assessment for flora and fauna.
- 4.5.3 The ecological baseline of the land required for the amendment has been based on field data collated for the main ES, aerial photography and relevant existing information gathered from national organisations and from regional and local sources including Buckinghamshire and Milton Keynes Environmental Records Centre; Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust; Chilterns Conservation Board; North Bucks Bat Group; Berkshire and South Buckinghamshire Bat Group; and Buckinghamshire Amphibian and Reptile Group.
- 4.5.4 To address any limitations in data, a precautionary baseline has been considered, according to the guidance reported in the main ES Volume 5, Appendix CT-001-000/2. This constitutes a 'reasonable worst case' basis for the subsequent assessment.
- 4.5.5 The precautionary approach to the assessment that has been adopted identifies the likely significant ecological effects of the amendment.

Environmental baseline

4.5.6 A summary of the baseline information relevant to the assessment of the amendment is provided below. For those receptors described in the main ES, further details are provided in Volume 2, CFA9, Section 7.3 and in Volume 5, including Maps EC-01 to EC-12, Ecology Map Book.

Designated sites

- 4.5.7 There are two non-statutory designated local wildlife sites (LWS) between the Marylebone to Aylesbury Line and Hyde Heath Road, located within 500m of the area of the amendment. Mantle's Wood LWS is located approximately 230m east and Hedgemoor and Farthings Wood LWS is approximately 380m north of the amendment. Both LWS are ancient woodlands (with the exception of parts of Hedgemoor Wood) which are assessed in the main ES as being of county/metropolitan value.
- 4.5.8 The Doctor's Meadow Biological Notification Site (BNS) is approximately 250m south of land required for the amendment. This site, crossed by the River Misbourne, is designated for calcareous grassland and contains an area of rough meadow and a disused watercress bed. This BNS is of up to county/metropolitan value.
- 4.5.9 No Man's Wood, an area of approximately 1ha of ancient semi-natural woodland, is located approximately 75m north of the amendment and is of county/metropolitan value.

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4.5.10 There is no other statutory or non-statutory designated nature conservation site or ancient woodland that is within 500m of the land required for this amendment, or otherwise relevant to the assessment. Statutory and non-statutory designated sites are described in the main ES, Volume 2, CFA9, Section 7 and are shown on the main ES Maps EC-01-017 to EC-01-018, Volume 5, Ecology Map Book.

Habitats

- 4.5.11 The land affected by the revised scheme between the A413 and the Marylebone to Aylesbury Line is semi-improved grassland and was assessed as being of local/parish value within the main ES.
- 4.5.12 The Marylebone to Aylesbury Line passes across the land required for the amendment. To the north of the Marylebone to Aylesbury Line the land required for the amendment is located within approximately 1.0ha of improved grassland and John's Plantation, a 2.6ha broadleaved woodland which qualifies as a habitat of principal importance (lowland mixed deciduous woodland). The improved grassland and broadleaved woodland on land required for the amendment are assessed as part of the same resource of improved grassland and broadleaved woodland identified in the main ES as being of no more than local/parish value.
- 4.5.13 Hedgerows are located 200m to the north and 400m to the west of the revised scheme. The main ES reports that all surveyed hedgerows qualified as habitats of principal importance and the hedgerow network is of district/borough value due to the connectivity that it provides between ancient woodlands such as Farthings Wood and Mantle's Wood. Hedgerows on land required for the amendment are part of the same hedgerow network assessed in the main ES.
- 4.5.14 Habitats surrounding the land required for the amendment are described in the main ES, Volume 2, CFA24, Section 7 and are shown on the main ES Maps EC-01-052 to EC-01-054a, Volume 5, Ecology Map Book.

Protected and/or notable species

- 4.5.15 Desk study data on the land required for the amendment and field surveys undertaken on adjacent land, as reported in the main ES, did not record any protected and/or notable species of flora or fauna.
- 4.5.16 As reported in the main ES, the bat assemblage using the woodland and hedgerows around Mantle's Wood for foraging and commuting is of district/borough value. At its closest point, John's Plantation is approximately 200m west of Mantle's Wood and both sites are connected by broadleaved woodland bordering the Marylebone to Aylesbury Line. The proximity and connectivity of John's Plantation with Mantle's Wood, suggests that the same bat assemblage will utilise the land required for the amendment in John's Plantation as commuting and foraging habitat.
- 4.5.17 As stated in the main ES, it is likely that potential populations of reptiles throughout the area would be of up to district/borough value. Grassland habitat suitable to support reptiles is abundant within the section of land required for the amendment to the south of the Marylebone to Aylesbury Line. If present, the reptile populations on land required for the amendment are assessed as part of the reptile populations identified in the main ES.

4.5.18 Locations of species records are illustrated on Maps EC-01 to EC-12, main ES Volume 5, Ecology Map Book.

Effects arising during construction

Avoidance and mitigation measures

- 4.5.19 There are no specific measures included as part of the amendment to avoid or reduce effects to features of ecological value on the land required for the amendment.
- 4.5.20 The assessment assumes implementation of the draft CoCP.

Designated sites

- 4.5.21 The main ES identifies that habitat loss and fragmentation will result in a permanent adverse effect on the integrity of Mantle's Wood LWS that will be significant at the county/metropolitan level. Mantle's Wood LWS is approximately 230m east of the land required for the amendment and no additional significant effects are expected as a result of construction associated with the amendment. The assessment in relation to Mantle's Wood LWS is unchanged by the amendment.
- 4.5.22 The main ES identifies that habitat loss and increased isolation arising from the original scheme will result in a permanent adverse effect on the integrity of the Hedgemoor and Farthings Wood LWS and these effects will be significant at the county/metropolitan level. The amendment will not result in any additional impacts on this site which is approximately 380m from land required for the amendment. The assessment in relation to the Hedgemoor and Farthings Wood LWS is unchanged by the amendment.
- 4.5.23 The main ES confirms that ancient woodland in Mantle's Wood and Farthing's Wood cannot be replaced and habitat loss and fragmentation will result in a permanent adverse effect on the conservation status of areas of ancient woodland that will be significant at county/metropolitan level. As part of the original scheme the access track bordered No Man's Wood. This amendment relocates the access track approximately 75m south of No Man's Wood (ancient woodland). Any change in noise or air pollution associated with the revised scheme will be highly localised and temporary and there will be no effect on the conservation status of this area of woodland.
- 4.5.24 The amendment will not result in an impact on the Doctor's Meadow BNS. This site is 250m south of the land required for the amendment and is separated by the existing highway network.

Habitats

4.5.25 The main ES reports that loss of important hedgerow habitat will result in a permanent adverse effect on the conservation status of the hedgerow network that will be significant at the district/borough level. The extent of loss of hedgerow habitat caused by vegetation clearance on land required for the amendment will not change the level at which the effect on the conservation status of the hedgerow network is significant. The assessment in relation to the hedgerow network is therefore unchanged by the amendment.

- 4.5.26 The main ES concludes that it is unlikely that any other effects on habitat receptors, such as John's Plantation, at more than the local/parish level will occur. Loss of up to o.4ha of deciduous woodland within John's Plantation to the north of the Marylebone to Aylesbury Line associated with the construction of the revised access track will not result in additional adverse effects to those reported in the main ES, significant at the local/parish level.
- 4.5.27 The main ES concludes that it is unlikely that any other effects on habitat receptors, such as grassland, will occur at more than the local/parish level. The amendment will result in the loss of up to 0.3ha of semi-improved grassland within land required for the amendment, to the south of the Marylebone to Aylesbury Line and 0.4ha of improved grassland adjacent to John's Plantation, to the north of the Marylebone to Aylesbury Line. Although construction activities for the revised access track will result in the loss of additional grassland habitat, there will be no change to the adverse effect at the local/parish level, as reported in the main ES.

Species

- 4.5.28 The main ES states that the effects of vegetation clearance on bat commuting and foraging habitat could result in an adverse effect on the bat assemblage of Mantle's Wood that would be significant at the district/borough level. This bat assemblage may utilise habitats within the land required for the amendment for commuting and foraging. Construction activities for the revised access track will result in the loss of up to 0.2ha of suitable habitat in and adjacent to John's Plantation, however woodland edge and verge habitat will be retained along the widened track as a woodland ride. Considering the availability of suitable commuting and foraging habitat within the edge and verge it is unlikely that habitat loss of this extent will change the adverse effect at the district/borough level reported in the main ES.
- 4.5.29 As reported in the main ES, a reduction in the extent of habitat available for foraging and sheltering of common reptile species will result in a permanent adverse effect on the conservation status of reptiles that would be significant at up to the district/borough level. Vegetation clearance as a result of construction activities will remove approximately 0.7ha of grassland habitat within land required for the amendment. Considering the availability of suitable reptile habitat within the wider landscape, habitat loss of this extent is unlikely to result in any change to the effect identified in the main ES.

Mitigation and residual effects

Other mitigation measures

- 4.5.30 No additional or different mitigation is required for the amendment.
- 4.5.31 Mitigation for the additional habitat loss of approximately 0.4ha at John's Plantation will be provided as part of the area of woodland habitat creation, contiguous with John's Plantation, within the land required for construction of the original scheme. As reported in the main ES, 16ha of woodland will be created immediately south of the Chiltern tunnel north portal to link the fragmented southern and western parts of Mantle's Wood LWS with the remaining parts of Hedgemoor and Farthings Wood LWS. The new planting will connect to existing woodland, including John's Plantation, to the south. This area of mitigation woodland is based on a precautionary estimate

and is sufficient in extent to compensate for the loss of additional habitat from John's Plantation resulting from the amendment.

Residual effects

4.5.32 The amendment will result in no change in the residual likely significant effects reported in the main ES.

Effects arising from operation

Avoidance and mitigation measures

4.5.33 There are no specific measures included as part of the amendment to avoid or reduce impacts to features of ecological value in the area required for the amendment.

Assessment of impacts and effects

4.5.34 The main ES reports that it is unlikely that any operational effects on receptors relevant to this amendment will occur at more than the local/parish level. Access to the balancing pond by HGVs on land required for the amendment will result in no additional significant operational effects and will not change the effects reported in the main ES.

Mitigation and residual effects

Other mitigation measures

4.5.35 No additional or different mitigation is required for the amendment.

Residual effects

4.5.36 The amendment will result in no change in the residual likely significant effects reported in the main ES.

4.6 Summary

The use of the additional land for construction and maintenance access within John's Plantation and areas of grassland does not change the significance of the environmental effects or proposed mitigation as set out in the main ES (Volume 2, CFA report 9, Central Chilterns).