

Schedule of Additional Comments: Nature Conservation (Natural England)

Nature Conservation Chapter Section	Comment	Response
	<p>Marline Valley Woods SSSI:</p>	
<p>12.5.91 to 12.5.92</p>	<p>Shading</p> <p>Natural England consider that the effect of the bridge over the southern tip of Marline Valley Woods SSSI is of sufficient impact to be considered land take as the habitat below the bridge will be permanently shaded and significantly altered. We note that shade tolerant planting will be used but this is considered to be of limited use for linking habitat and is unlikely to enhance the interest features of the site as these are due to its microclimate.</p> <p>We do not consider that the effects of shading on wider areas of Marline Valley Woods have been fully assessed. We welcome the lichen survey in Appendix I.4 of the addendum but this does not address the impacts of shading as no contour maps have been supplied with estimated areas of shading, what the potential effects are likely to be and how this will be mitigated.</p> <p>Natural England cannot find details regarding the mitigation for the loss of woodland within the SSSI. We would generally expect mitigation to include woodland planting adjacent to the designated site.</p>	<p>The area of concern, where the proposed road will pass over the London to Hastings railway line, is the tip of Marline Woods SSSI. This area is recorded as being NVC community W24, which is described as Bramble – Yorkshire Fog underscrub. Species of this vegetation community are relatively resilient to shade. The height of the bridge will also mean that the effect of oblique shading on the retained areas of the SSSI adjacent to the bridge will be minimal. Planting will include shade tolerant species which is in keeping with NVC W24.</p>
<p>12.5.45 to 12.5.47</p>	<p>Run off</p> <p>There is likely to be a significant increase in run off from the existing Queensway road onto Marline Valley Woods due to the expected increase in traffic feeding through from the new link road. Natural England would expect the existing drainage measures to be upgraded or an assurance that the existing measures have sufficient capacity to deal with the increased levels of pollution. We would recommend that</p>	<p>There will not be significant increases in runoff from the existing Queensway road onto Marline Valley Woods as a result of the scheme; drainage will not be altered for this road. Issues in relation to potential additional pollution contained in runoff have not been modelled as the drainage system has not been checked for capacity or for the suitability of the pollution control measures. This query is in addition the original Regulation 19 issues raised in Natural England's letter dated</p>

	<p>this is made a condition of planning.</p>	<p>31st July 2007.</p> <p>Additional detail for drainage mitigation and adequacy has however been added to the addendum. In addition, this information is present within Chapter 9 of the ES. The drainage design has been developed to EA flooding standards.</p>
<p>12.5.27 to 12.5.43</p>	<p>Air Quality</p> <p>Section 12.5.32 of the addendum states that the area to be affected by the significant increase in NOx is marginal. Natural England would disagree with this; the areas to be affected are on the margins of Marline Valley Woods but are not marginal in terms of importance. This area includes neutral meadow which is mentioned on the SSSI citation and is particularly vulnerable to increased deposition.</p> <p>The nature of the science of air quality is such that there is uncertainty in the value of the critical load so a range is given rather than a value. Natural England would normally expect exceedance when the lower range is exceeded rather than the upper range as has been used in this instance. Page 11 of Appendix G of the Addendum show that the critical load is predicted to be 3.3% for Combe Haven and 5.4% for Marline Valley Woods. As 1% or more of exceedance is considered to be significant, this is a significant issue that has not been adequately addressed.</p>	<p>The Air Quality assessment and impact on Designated Sites has been re-assessed following NE and EA requests, and new DMRB guidance (May 07), which was published after the ES. A report titled "Assessment of Air Quality Effects on Designated Sites" (Appendix G.1 of the Addendum to the ES), has been produced. This assessment does not alter the significance of impact as "potentially significant" as detailed in the ES. Further assessment of this significance on the designated sites has been added to the Nature Conservation chapter. The threshold critical load that has been used in the Air Quality Assessment is the upper limit. If the precautionary principle is applied and the lower limits are used, then the exceedences remain the same for the same locations, but the % that the critical load is being exceeded by is greater, both with the Scheme and without the Scheme. The lower critical load is used within the Ecology assessment. If the "1%" significance threshold is applied (as required for EA IPPC Environmental Assessment for Designated Sites, but not for road schemes; there are no significance thresholds within the DMRB), then the likely impacts at the locations of Marline Woods and Combe Haven SSSI need to be assessed, with additional detail on the likely impact as a result of this % change at these locations. This work is currently being undertaken, based on the site designation information, NVC communities present and from the Lower Plants of Marline Woods survey.</p>
<p>Coombe Haven SSSI:</p> <p>Noise and visual effects</p> <p>Natural England can find no evidence that the impact of noise and visual disturbance to birds on the SSSI has been addressed. The</p>		<p>The impact of noise on bird populations has been addressed for both the construction and operation stage of the scheme in the revised addendum. To date, accurate ornithological surveys have been completed along the route of the proposed Scheme (2006 and 2007 survey seasons). These surveys have</p>

<p>12.5.81 to 12.5.88</p>	<p>addendum acknowledges that noise disturbance is likely to result in displacement but the northern edge of the SSSI is currently subject to less ongoing disturbance and may be seen as a refuge against the more disturbed southern side of the SSSI. Therefore noise and visual disturbance within the northern part of the site is significant</p> <p>Chapter 11 of the ES assesses the impacts on noise on humans but the details appear irrelevant to the SSSI. The mitigation proposed for noise during the constructional stage is for works to take place outside of the bird breeding season but this does not mitigate for the impact on wintering birds within the SSSI. Natural England requires that specific mitigation is proposed for both construction and operational impacts on the SSSI.</p>	<p>informed mitigation. In addition, bird surveys are currently being undertaken for the 2008 season. Breeding bird surveys were undertaken on the 17th April 2008 and 8th May 2008 by an experienced ornithologist. The purpose of the survey was to detect and identify all breeding birds within 100m of the Scheme footprint.</p> <p>The preliminary findings (May 2008) suggest that the study area contains common and widespread breeding birds indicative of open countryside and urban environments. In addition, a further two surveys are planned for June 2008, with the objective of recording all late migrant species. These surveys will include a single evening survey to record crepuscular and nocturnal birds.</p> <p>Section 12.5.82 details that A phased construction programme that includes specific working restrictions will be required in order to avoid short-term displacement impacts to over-wintering birds identified within the Coombe Haven SSSI (as identified in paragraph 12.3.130 of the ES).</p>
<p>12.5.45 to 12.5.49 and Water Quality Chapter</p>	<p>Run off</p> <p>Given the significance of the downstream aquatic and wetland biology and sensitivity, particularly dragonflies; Natural England would expect the applicant to demonstrate that water quality will be maintained in terms of chemistry and lack of pollutants. We can find no evidence to suggest that there has been an attempt to model or predict water quality or monitoring of existing water quality despite the number of watercourses the road will pass directly over which flow into the SSSI.</p> <p>The leaching of salt into watercourses still remains a concern as section 12.5.43 states that "the high dilution capacity and treatment of flows provided by the proposed drainage mitigation (Section 9.5 of the ES)...". We are not aware of any drainage mitigation that would remove salt from solution in order to mitigate for this.</p>	<p>The Water Framework Directive identifies Combe Haven, Watermill Stream and Powdermill Stream as at High Risk (Highly Modified Water Bodies). This has been included in the ES in Chapter 9 of the ES. In addition, Chapter 9 of the ES and ES Addendum assesses Water Quality and Drainage impacts as a result of the Scheme.</p> <p>Additional information regarding the leaching of salt into watercourses is to be added following consultation with Drainage specialists and Natural England.</p>

	<p>There is no confirmation as to the placing and frequency of sediment traps, spillage tanks and petrol interceptors and the location of the detention ponds (this relates to both SSSI sites).</p>	<p>Precise locations of the placing and frequency of sediment traps, spillage tanks and petrol interceptors and the location of the detention ponds is shown on the Preliminary Drainage Design Figures. This query is in addition to the original Regulation 19 issues raised in Natural England's letter dated 31st July 2007.</p>
<p>12.5.86 to 12.5.89</p>	<p>Location, nature and feasibility of mitigation proposals.</p> <p>In particular, Natural England has previously raised the issue of securing land for mitigation. This was also included in the minutes of the meeting dated 12 June 2006 with some potential actions to address this. The original ES raised queries as enhancement works will require the co-operation of a number of landowners but no further information has been provided as to the feasibility of this.</p>	<p>This has been addressed in the revised Nature Conservation chapter, to provide a strategy for securing funding for management and monitoring of habitats following NE's concerns: Section 12.5.90: To secure funding for the management and monitoring of habitats, there are areas within the Scheme which could use some degree of agricultural land resources as a means of meeting the wildlife management requirements. It would be the intention of the Highway Authority to retain ownership of all of this land and charge a rent for its agricultural use. This income would then be "ring fenced" for wildlife and landscape management of those areas which cannot be managed through agricultural uses. It would be the Highway Authority's intention to maximise income from land or property in its ownership, where this is compatible with the objectives of the Scheme or mitigation measures.</p>
<p>12.5.26</p>	<p>Several of the points raised in our previous letter dated 31 July 2007 have not yet been addressed. These points referred to statements made by the applicant in sections 12.4.9, 12.4.10 and 12.4.12 expressing uncertainty over the feasibility of the proposed mitigation as follows:</p> <ul style="list-style-type: none"> • Whether the areas would be sufficiently large enough to retain significant biodiversity; • Whether the whole of the borrow pit in the Powdermill Valley is sufficiently shallow; • Uncertainty over whether the measures proposed would fully compensate or mitigate the impact on the actual and potential biodiversity of the floodplain. 	<p>For the fragmentations of habitats, we refer to the revised Environmental Design Figures, contained in Appendix J.3 Figures (Additional Habitat Continuity Plans, 13.23 to 13.23K). Additional text to support these Figures has been added. Reference has also been made to the ongoing survey works that will inform protected species licensing and the Ecological Masterplan (Section 12.5.26). This work is being carried out by EPR consultants and is separate to the Planning Application. Surveys are currently being undertaken which will fully ascertain the extent and nature of this mitigation; additional specific species mitigation measures will be incorporated in to a mitigation strategy for the Scheme. A detailed ecological Master Plan is in production. Outline mitigation for protected species would include the measures described in Table 12.1.</p>

<p>12.5.61 to 12.5.71</p>	<p>Dormice</p> <p>As discussed in previous meetings, our concerns regarding dormice relate specifically to the potential for small populations south of the road that may be isolated from wider habitat by the proposed road scheme in combination with waterways. We are satisfied in principle with the proposals to mitigation for this by providing habitat connectivity alongside waterways and other underpasses and in respect of shrub and tree planting close to these areas as detailed in section 12.5.64 of the addendum. We are however concerned that the finer detail for this has not yet been provided as dormice isolation is a particular issue with this development. We would require assurances that this will be submitted and adhered to.</p>	<p>The Dormouse Strategy has been developed following additional consultation with NE and by employing a Dormouse specialist (Dr. Paul Chanin). For the finer details on dormouse mitigation, we refer to Section 13.5.70 and the Environmental Design, which details dormouse underpass locations, planting and scrub planting extensions. Additional information to inform the Ecological Masterplan is also being collated through the ongoing surveys (which will inform the licensing and Ecological Masterplan), and further detail will be available through the Design and Access Statement Addendum to be published alongside the Addendum to the ES.</p>
<p>12.5.72 to 12.5.76</p>	<p>Great Crested Newts</p> <p>We are pleased that the surveys are being updated and are unable to fully comment on the mitigation proposals until the results of these surveys become available.</p>	<p>Additional surveys to inform the licence process and Ecological Masterplan are currently being undertaken. Best Practice methodology has been referenced in the Addendum to the ES.</p>
<p>12.5.77 to 12.5.80</p>	<p>Reptiles</p> <p>We are satisfied in principle with the reptile translocation methodology as long as this is undertaken in accordance with the HGBI guidelines but are concerned that the location of the reptile receptor sites has still not been finalised. Please note that selection of suitable receptor sites would generally require surveys to ensure that the areas do not already contain a high population of reptiles. We look forward to the results of the updated surveys so we may comment further.</p>	<p>Best practice methodology (HGBI) has been referenced and will be adhered to. Surveys to inform licences and the Ecological Masterplan are also ongoing. Additional text with regards to the translocation sites has been added: Selection of receptor sites local to the proposed Scheme have been identified so that animals may colonise the road embankments once complete. Suitable areas under consideration include: the grassland along the disused Crowhurst, Sidley and Bexhill Branch railway line; the upper reaches of the Combe Haven Valley and areas of grassland to the east and south of Decoy Farm Pond. All potential receptor would be surveyed to identify existing reptile populations. Receptor sites will be protected during the proposed Scheme construction.</p>

<p>12.5.50 to 12.5.60</p>	<p>Bats</p> <p>We note that further survey work is being undertaken during 2008 in order to survey those buildings where access was previously denied. One of the buildings that could not be accessed previously was "The Kennels" but this has not been mentioned in the addendum as one that is due to be surveyed. If an impact is likely on this building then a survey will be required in order to determine any suitable mitigation.</p> <p>We would like to reiterate that Natural England consider that the use of bat boxes to mitigate for a brown long eared bat maternity roost is not acceptable and is not in accordance with the Bat Mitigation guidelines (English Nature 2004). Mitigation for a roost of this type would require like for like replacement roost with good linkages to surrounding foraging habitat.</p> <p>We note that it is proposed to survey those trees with high potential for bats before felling but would like the applicant to be aware that if roosts are found then a licence may be required from Natural England. In order to take account of bats at an early stage, we would recommend that these surveys are undertaken in advance so that time is allowed to obtain any necessary licences</p> <p>We welcome the proposals to provide cavities within some of the bridges, adjacent planting to guide bats to these areas and to provide mature planting adjacent to where commuting lines have been severed.</p>	<p>Further surveys are currently being undertaken to inform the licence process and Ecological Masterplan. Additional detail following these surveys, with reference to the Kennels and Brown Long Eared bats at NE's request will be added once a summary report for surveys has been complete (due 21.07.08). Potential sites for a replacement roost will then be discussed to mitigate for the potential loss of brown Long Eared Bat roost.</p>
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12.5.22 to 12.5.26	<p>Inadequate consideration of, and mitigation and compensation for, ecological impacts.</p> <p>The Environmental Statement (ES) concludes that the overall impact of the scheme on nature conservation and biodiversity interest would be 'slight adverse and therefore not significant'. However, the ES identifies several significant deficiencies in the identification and mitigation of impacts. It recognises that the route will result in the loss and disruption of ecologically valuable and UK Biodiversity Action Plan habitat including floodplain grassland and fen, ditches and streams, hedgerows with wet ditches, ancient woodland associated with ghylls, plus their various associated wildlife species. We do not consider that adequate mitigation has been proposed.</p>	<p>The extent of the mitigation proposed has been discussed through consultation meetings with NE and EN and CA before them. They jointly set the standard with EA and County Ecologist. There may be a misunderstanding in that all the extent of the planning application area will be acquired as a part of the Scheme to meet the standards which they help to set.</p> <p>Reference is made to the Schedule of Wildlife Areas within the Design and Access Statement and amended in the Addendum Design and Access Statement for the extent of habitat loss and replacement as a result of the Scheme and mitigation to address this loss, which is developed through these documents. This Schedule identifies that there will be a biodiversity net gain due to the compulsory purchase of land which will then be managed for improved biodiversity value for BAP habitats.</p>
12.5.81 to 12.5.88 and 12.5.45 to 12.5.49 and 12.5.27 to 12.5.44	<p>Unknown impacts</p> <p>In several areas the impacts are considered to be unknown and therefore not addressed. For example, the scheme identifies that there would be a risk that increased noise and vehicle emissions may have some influence upon habitats. Although noise impacts have been acknowledged, the lack of understanding regarding noise impacts means that they have not been taken into account or mitigated for. It is suggested that there are 'potential impacts from the discharge of road drainage, leachates from construction materials and alteration of air quality and the chemical environment near the road'. There will be significant increases in nitric acid deposition within areas adjacent to the road, including two SSSIs, but there is 'some uncertainty as to the effect</p>	<p>Additional information for these "unknown" impacts has been included in the revised draft at EA's request. Impacts of noise have been revisited, particularly with regards to the impacts and mitigation for breeding birds (Sections 12.5.81 to 12.5.88).</p> <p>Section 12.5.45 to 12.5.49 details methods to address potential impacts from the discharge of road drainage and leachates from construction materials. A CEMP would be developed so as to manage those elements of construction works that have potential to cause adverse effects on the water environment, and these measures will be agreed with the EA and other statutory consultees. A temporary site drainage system would be developed to implement the appropriate mitigation</p>

<p>measures detailed in the CEMP.</p> <p>Section 12.5.27 to 12.5.44 details the impacts from vehicle emissions. The Air Quality assessment and impact on Designated Sites has been re-assessed following new DMRB guidance (May 07), which was published after the ES. A report titled "Assessment of Air Quality Effects on Designated Sites" (Appendix G.1 of the Addendum to the ES), has been produced. This assessment does not alter the significance of impact as "potentially significant" as detailed in the ES. Further assessment of this significance on the designated sites will be added to the Nature Conservation chapter, based on the site designation information, NVC communities present and from the Lower Plants of Marline Woods survey.</p>	<p>of this on habitats and species'. Without being fully understood and investigated, the impacts cannot be mitigated adequately.</p>	
<p>The statement 'leaching of salt into watercourses may have a significant impact on riverine species' has been removed from the draft. Additional information with regards to the drainage mitigation which has the specific aim of ensuring that the significance of impact from salt spray is considered to be minor adverse without mitigation and neutral with mitigation (Section 9.7.15 of the ES) has been included in the revised Nature Conservation chapter.</p>	<p>Though it is stated that impacts of leachate and salt spray are unlikely to have significant impacts on the habitats and species of the SSSIs, it is stated that 'leaching of salt into watercourses may have a significant impact on riverine species'. The addendum states (12.5.27) that the exact levels of salt leachate would be required in order to assess the impact. As a potential impact has been identified, it should be demonstrated that this impact will be avoided in the first instance, with mitigation if any impacts cannot be avoided. This has not yet been done.</p>	<p>12.5.48 to 12.5.49</p>
<p>The extent of the mitigation proposed has been discussed through consultation meetings with NE and EN and CA before them. They jointly set the standard with EA and County Ecologist. There may be a misunderstanding in that all the extent of the planning application area will be acquired as a part of the scheme to meet the standards which they help to set. Reference is made to the Schedule of Wildlife Areas within the Design and Access Statement and amended in the Addendum Design and Access Statement for the extent of habitat loss and replacement as a result of the Scheme and mitigation to address this loss, which is developed through these documents. This Schedule identifies that there will be a biodiversity net gain due to the compulsory purchase of land</p>	<p>The scheme does not mitigate adequately for disturbance of habitats and acknowledges that there will be an ongoing effect upon wildlife, particularly that the scheme will 'create noise and visual disturbance arising from vehicles and users of the greenway'.</p> <p>The replacement of lost habitats with a 2:1 ratio, as mitigation, 'assumes that the whole of the borrow pit in the Powdermill Valley would be sufficiently shallow to enable wet reedbeds and similar habitats to be created'. Furthermore the ES recognises that there is no reliable information on whether the areas proposed for habitat re-creation would be significantly large to retain significant biodiversity in the long term, and states that 'there is some uncertainty over whether the measures proposed would fully compensate or mitigate the impact on the actual and potential biodiversity of the floodplain'. Thus the actual extent of mitigation and the likely effectiveness of proposed</p>	<p>12.5.22 to 12.5.26</p>

	<p>habitat re-creation is unknown. It must be clearly demonstrated that compensatory habitat creation will be on a like-for-like basis, since creation of, for example, open water ponds/lakes cannot be considered as compensation for wet grassland and ditch habitats.</p>	<p>which will then be managed for improved biodiversity value for BAP habitats. Chapter 13, Section 13.5.32 of the Addendum to the ES gives additional information about the resources to be allocated for management measures. The time period to which the commitment would apply is 7 years.</p>
<p>12.5.90</p>	<p>Compensatory habitats for those being lost must not be created on existing ecologically valuable habitats. Furthermore, the feasibility of mitigation options must be demonstrated. According to the ES part of the mitigation strategy may involve working with landowners to improve water levels and habitats in the valley. This is not confirmed and therefore cannot be considered as part of the currently proposed mitigation.</p>	<p>Section 12.5.90 details how funding will be secured and the feasibility of the management and monitoring of habitats. To secure funding for the management and monitoring of habitats, there are areas within the Scheme which could use some degree of agricultural land resources as a means of meeting the wildlife management requirements. It would be the intention of the Highway Authority to retain ownership of all of this land and charge a rent for its agricultural use. This income would then be "ring fenced" for wildlife and landscape management of those areas which cannot be managed through agricultural uses. It would be the Highway Authority's intention to maximise income from land or property in its ownership, where this is compatible with the objectives of the Scheme or mitigation measures.</p> <p>The statement "According to the ES part of the mitigation strategy may involve working with landowners to improve water levels and habitats in the valley. This is not confirmed and therefore cannot be considered as part of the currently proposed mitigation" is accurate. This mitigation is considered as aspirational mitigation. The Scheme mitigation strategy is not reliant on such mitigation.</p>
<p>12.5.22 to 12.5.26</p>	<p>The ES confirms that there would be actual and potential indirect impacts on the SSSIs, including impacts from increased noise levels and from visual disturbance, and that 'the route would sever the SSSI from floodplain grassland and fen'. This has not been adequately addressed. Furthermore the scheme does not take into account the medium-term loss in habitats until newly created habitats are established. The length of ditch re-creation, for example, does not appear to be on a 2 for 1 replacement ratio as stated and is therefore inadequate, and the overall impacts are likely to result in a deterioration of the ecological quality of watercourse habitats, contrary to the</p>	<p>Section 12.5.22 to 12.5.26 of the revised text details the medium-term loss in habitats until newly created habitats are established. Additional information has been added, to address indirect impacts. Section 12.5.12 states that: "Indirect impacts from noise at the construction and operational stage in Scheme development are likely to be on breeding birds. Mitigation would include noise fencing and natural screening. The impact significance is not altered from minor adverse, as stated within Chapter 12 Nature Conservation of the ES". Additional information to address the impacts of noise, particularly on</p>

	<p>requirements of the Water Framework Directive.</p>	<p>wintering birds and with reference to local records will also be included once additional data has been received.</p>
<p>12.5.16 to 12.5.21</p>	<p>Habitat severance</p> <p>The ES recognises that the value of some habitats in the area will be significantly degraded by severance from other complementary areas. It states that the proposed road will 'create a barrier between habitats, possibly isolating smaller areas of habitat to the extent that they would be unable to support viable populations of some species of biodiversity significance' and 'sever habitat links, particularly the network of hedges, copses and ditches, and specific links for badgers, bats and common dormice'.</p> <p>However, the mitigation strategy focuses on mitigation and compensation of impacts on individual species and habitat types. It fails to address the significance of severance of ecologically valuable and priority UK BAP habitats, causing disruption of ecological networks, and habitat isolation and fragmentation.</p> <p>The scheme will result in severance of both existing and newly created wetlands, and watercourses, from the Combe Haven SSSI and other wetland habitats. This will prevent migration and transfer of species and reduce the suitability of severed areas for wildlife. On this large scale the scheme will alter the ecological function of the whole valley.</p> <p>With the currently proposed road design the impacts of severance can not be unmitigatable.</p>	<p>The revised Addendum to the ES gives additional assessment to address the issues of habitat fragmentation in Sections 12.5.16 to 12.5.21. Reference to the revised Environmental Design Figures, contained in Appendix J.3 Figures (Additional Habitat Continuity Plans, 13.23 to 13.23K), has also been made through the text, and additional text to support these Figures has been added. Reference has also been made to the ongoing survey works that will inform protected species licensing and the Ecological Masterplan (Section 12.5.26). This work is being carried out by EPR consultants and is separate to the Planning Application. Surveys are currently being undertaken which will fully ascertain the extent and nature of this mitigation; additional specific species mitigation measures will be incorporated in to a mitigation strategy for the Scheme. A detailed ecological Master Plan is in production. Outline mitigation for protected species would include the measures described in Table 12.1.</p>
<p>12.5.19 and 12.5.20</p>	<p>The watercourse crossings, which have the potential to lessen the impacts of severance by providing wildlife corridors, are inadequate for a road scheme of this size. The clear span crossings are inadequate in size and the impacts of culverts including loss of bankside habitat and disruption of watercourse continuity, have not been addressed. Furthermore the road will restrict the creation of necessary wetland habitats and strengthening of ecological networks in the future.</p>	<p>The Addendum addresses the issue of severance caused and severance relieved by the watercourse crossings. Section 12.5.19 and 12.5.20 state that: There are five river crossings proposed within the Combe Haven valley, one over the Combe Haven itself, two over the Powdermill Stream, one over the Watermill Stream and a final crossing over the Decoy Stream. The bridges would have set-backs from the watercourse bank tops to the base of the structure of 2m. Therefore there would be a ledge of 2m between the watercourse and the bridge that</p>

<p>12.5.16 to 12.5.21</p>	<p>Species isolation</p> <p>This has not been adequately considered by the ES, even though it states that the road 'may be a barrier to the free movement of wildlife between the land north of the road and the land to the south'. Of particular concern to the Agency, although the ES acknowledges that otters have previously been recorded in the vicinity of the scheme, and that it is possible water voles are still present in the valley, impacts of the scheme on these species have not been fully considered. No specific mitigation measures have been proposed, and specifically the restrictive effects of the proposed road on potential future re-colonisation of the valley by these species, has not been addressed.</p> <p>Failure to address requirements of PPS9 & other planning policy.</p> <p>This is a large scale development and ecological enhancements must be an intrinsic part of the plans. This is in keeping with PPS1 'Delivering sustainable development', PPS9 'Biodiversity and Geological Conservation' and the South East Plan. Policy NRM4 of the South East Plan seeks to avoid a net loss of biodiversity and to actively pursue opportunities to achieve a net gain of biodiversity across the region. PPS1 states that planning authorities should seek to enhance the environment as part of development proposals. PPS9 describes how planning decisions should maintain, enhance, restore, and add to biodiversity interests, and recognises that development proposals provide opportunities for including beneficial biodiversity features as part of good design.</p> <p>Furthermore, PPS9 recognises the need to protect, strengthen and integrate networks of natural habitats within development.</p> <p>Fragmentation and isolation of habitats should be avoided.</p>	<p>could be utilised by dispersing animals. Beneath these bridges it is not anticipated that there would be any significant vegetation cover and therefore fragmentation of grazing marsh habitat would occur, with the exception of species carried by the watercourses. However, it would be possible for species of greater mobility to travel beneath these bridges and it is not anticipated that a barrier would be created to the movement of mammals such as badger, otter, water vole and water shrew.</p> <p>Section 12.5.20 states that species of greater mobility, such as birds and otter and plants with wind dispersed seeds should not be subject to significant levels of fragmentation. Less mobile species such as molluscs may experience fragmentation of populations. However, areas of land isolated to the south and north of the Scheme are considered to be sufficiently large in area to maintain viable populations of these less mobile species.</p>
<p>12.5.22 to 12.5.26</p>	<p>The requirements of PPS1 and PPS9 have been developed and reported through the Design and Access Statement and the Design and Access Statement Addendum. The requirements are thus made through the Scheme design and the extent of the mitigation proposed, such as the 2:1 habitat replacement that has been developed through consultation with EA and NE and extent of habitat management proposed. Additional details on the management and provision of BAP habitats has also been added. This will detail the approach to increasing BAP habitats, land management and sensitive planting.</p>	<p>The requirements of PPS1 and PPS9 have been developed and reported through the Design and Access Statement and the Design and Access Statement Addendum. The requirements are thus made through the Scheme design and the extent of the mitigation proposed, such as the 2:1 habitat replacement that has been developed through consultation with EA and NE and extent of habitat management proposed. Additional details on the management and provision of BAP habitats has also been added. This will detail the approach to increasing BAP habitats, land management and sensitive planting.</p>

	<p>The proposal does not provide adequate mitigation and compensation for ecological impacts and it fails to address the planning requirement for provision of ecological enhancements above and beyond that mitigation and compensation.</p> <p>Overall the current submission does not address our objections to the scheme. These objections may be overcome given some careful consideration to the road scheme design and the specific mitigation and enhancement measures that are proposed.</p> <p>This should include:-</p> <ul style="list-style-type: none"> • Consideration and improvement to the design of the clear span bridges to provide a greater width on either side of the watercourse. This in itself might help to minimise the requirements of mitigation and enhancement for the watercourses; • Studies to assess and prove the mitigation options are feasible and workable; & • Consideration of further mitigation and enhancement options (these may already be under discussion). 	<p>The issue of habitat severance was the subject of a number of discussions with the SEBs during the scheme development stage, both through the SEBs liaison group and specific meetings for the purpose. Agreement was reached between the design team, EA, NE (previously EN) and the County Ecologist about the appropriate design for the river crossings. It was agreed that free span structures should be used in preference to culverts, in order to strike a reasonable balance between minimising landscape effects and impact upon wildlife. Agreement was also reached over both vertical and horizontal clearance for wildlife and water movements through the structures. It was agreed that a 2m wide strip of land would be allowed on both sides of the water courses, beneath the bridges between the top edge of the watercourse bank and the bridge structure. One of the drivers for this measure was the need to retain options for water voles to re-colonise the valley from the north and it was accepted that free span structures built to this standard would present no obstruction to the passage of such creatures. Throughout these deliberations the size of the road Scheme has remained constant.</p> <p>Works to inform the protected species licensing and Ecological Masterplan are ongoing. Results from these will further inform mitigation and further demonstrate the feasibility of mitigation options.</p>
<p>Flood Risk</p> <p>Within section 9.2.2 of the Addendum to the Environmental Statement it is noted that reference is made to a revised Flood Risk Assessment. Unfortunately the Agency has yet to be consulted on this revised document and as such we are unable to comment on the flood risk or drainage at this time.</p>		<p>FRA issued to EA: 02.07.08</p>