

# **A12 Chelmsford to A120 widening scheme**

**TR010060**

## **9.36 Applicant's Comments on Braintree District Council's Local Impact Report**

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**A12 Chelmsford to A120 widening scheme**  
Development Consent Order 202[ ]

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**Applicant's Comments on Braintree District Council's Local Impact Report**

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# 1 Introduction

- 1.1.1 The Development Consent Order (DCO) application for the A12 Chelmsford to A120 widening scheme (the proposed scheme) was submitted by National Highways to the Secretary of State for Transport via the Planning Inspectorate on 15 August 2022 and accepted for Examination on 12 September 2022.
- 1.1.2 The purpose of this document is to set out the Applicant's comments on the Local Impact Report (LIR) received by Braintree District Council (BDC) [REP2-041], one of the proposed scheme host authorities.
- 1.1.3 BDC's LIR [REP2-041] was published on the Planning Inspectorate website on 15 February 2023.
- 1.1.4 The Applicant has responded to each of the sections in the LIR in the table below.
- 1.1.5 The Applicant has responded to section headings found in the BDC LIR [REP2-041], grouping section headings where relevant. The section headings can be found on the right-hand side of the table below.

## 2 Comments on Braintree District Council's Local Impact Report

<b>A. Terms of Reference</b>	<b>1. Introduction</b>
<p>The Applicant notes the Local Authority comments on the developments that are within or near the Order Limits. The Applicant notes that application 17/00679/OUT has been approved under Appeal on the 10 January 2023. This application is outside the Applicant's Order limits but will interface with some temporary works (under plot ref 12/19C on our Land Plans [AS-009]).</p> <p>The Applicant also notes the allocation correction on Land at Feering which is 795 not 750 dwellings, this error does not affect the results of our assessment as set out in the Environmental Statement .</p> <p>The Applicant has engaged with each of the planning applications mentioned by the Local Authority and is working collaboratively to minimise disruption to both schemes and the local community.</p> <p>The Applicant will continue to monitor the developments surrounding the area of the scheme and comment on the application as appropriate.</p>	
<b>A. Terms of Reference</b>	<b>2. Purpose and Structure of the LIR</b>
<p>The Applicant acknowledges the purpose and structure of the Local Impact Report provided by the Local Planning Authority and agrees with the content of this part of the written representation.</p>	
<b>Statutory Development Plan</b>	
<p>The Applicant notes the local plans and policies adopted. As Braintree Borough Council formally adopted the Braintree District Local Plan 2013 – 2033 on 25th July 2022, the policies assessed in Case for the Scheme - Appendix F: Local Planning Policy Accordance Tables [APP-252] are a combination of the emerging now adopted policies and the superseded policies, leaving a number of</p>	

relevant adopted policies not appropriately addressed. It is therefore proposed by the Applicant to provide an updated Case for the Scheme - Appendix F: Local Planning Policy Accordance Table, at Deadline 4, to reflect the adopted policies not yet reflected.

The Applicant's proposed scheme is assessed against the National Policy Statement for National Networks in Appendix A: National Networks National Policy Statement Accordance Table of the Case for the Scheme [APP-250] as the relevant planning policy for the proposed scheme which was submitted as a Development Consent Order under the 2008 Planning Act (2008 Act). The National Planning Policy Framework is a material consideration under the 2008 Act and as such the Applicant has prepared an assessment against the relevant Development Plan policies in the Case for the Scheme - Appendix F: Local Planning Policy Accordance Tables [APP-252].

### **B Assessment of Impacts and Adequacy of Response**

### **Introduction and 3. The Principle of Development**

The Applicant is pleased that the Braintree District Council acknowledges the proposed scheme supports the growth objectives of the adopted Braintree District Local Plan 2033 and is in accordance with the relevant planning policies.

An assessment of the proposed scheme against the relevant planning policies of the Braintree District Local Plan 2033 is provided in Appendix F to the Case for the Scheme [APP-252]. This includes, but is not limited to, policies SP1, SP3, SP6, LPP1 and LPP45 which are specifically referred to by the Braintree District Council in their Local Impact Report. Appendix F confirms that the need for the proposed scheme in the countryside is justified in the Case for the Scheme [APP-249].

### **B Assessment of Impacts and Adequacy of Response**

### **4. Air Quality**

The Applicant acknowledges the following policies:

LPP70, FI1, NE7, Limb A of Air Quality, Limb B, Policy 9 and Policy12.

The air quality assessment was commensurate of the principles included in the above policies. Further description is provided below.

Adopted Local Plan published 25/07/2022. ES Chapter 6 Air Quality was completed before this was published. LPP70 as stated in the Adopted Local Plan is concerned with the protection enhancement and management and monitoring of biodiversity. The target is to protect existing levels of biodiversity, and to increase areas of protection. Ecological impacts were included within the air quality of the ES Chapter 6 Air Quality [APP-073].

F11 Hatfield Peverel Neighbourhood District Plan (December 2019). This policy was not identified as it was concerned with transport and access. However, the reference to the 'unacceptable risk from emissions and all forms of pollution (included air, water and noise) to ensure no deterioration of current standards' is addressed in the ES Chapter 6 Air Quality [APP-073].

Policy NE7 of the Kelvedon Neighbourhood District Plan (adopted July 2022). ES Chapter 6 Air Quality was completed before this was published. 'Where there is potential for significant pollution to derive from new development, proposals should clearly demonstrate the potential risks to the human and natural environment'. This is addressed in the ES Chapter 6 Air Quality [APP-073].

The following policy sources Limb A and Limb B have not been referred to in the ES Chapter 6 Air Quality [APP-073]. However, Limb A of Air Quality, dust and odour requires that mitigation must be in accordance with up-to-date guidance issued by the Institute of Air Quality Management. Construction dust impacts were assessed in accordance with the DMRB LA105 which is appropriate for major road schemes.

Limb B is not pertinent to air quality.

Policy 9a Point IV of the Feering Neighbourhood District Plan (adopted January 2023). ES Chapter 6 Air Quality was completed before this was published. It states 'development should not have a severe detrimental impact on air quality and public health as a result of increased traffic flows and congestion'. No significant effects were identified across the scheme for human health. Beneficial impacts were predicted at the majority of receptors in Feering. The results are shown in ES Chapter 6 Air Quality Appendix 6.5



[APP-104] and Figure 6.9 [APP-213].

Policy 12 on Climate Change and Sustainability. This is addressed in the ES Chapter 15 Climate [APP-082]

The Applicant acknowledges and thanks Braintree District Council for its confirmation that the approach applied for the air quality assessment of the proposed scheme is acceptable.

The Applicant acknowledges BDC's concerns over an assurance that dust mitigation best practice within the emerging EMP is commensurate with the Institute of Air Quality Management (IAQM).

In order to minimise potential emissions of fugitive dust during construction, best practice measures (based upon the construction dust risk potential in accordance with Design Manual for Roads and Bridges (DMRB) LA 105 Air Quality), would be employed to control fugitive dust. The following control measures will be implemented across all construction works where practicable. These measures are based on those outlined by the Institute for Air Quality Management Publication Guidance on the assessment of dust from demolition and construction (Version 1.1) (2014) and referenced in the Dust Management Plan [APP-189].

## **B Assessment of Impacts and Adequacy of Response**

## **5. Cultural Heritage**

The Applicant notes that Braintree District Council (BDC) prefers to defer to Essex County Council, as the host authority for the DCO, in response to archaeological and historic buildings matters and, therefore, BDC have highlighted a number of factual points.

The Applicant duly notes these factual points made by BDC in response to the Cultural Heritage assessment in Chapter 7: Cultural Heritage, of the Environmental Statement [APP-074] and Appendix 7.8: Cultural Heritage Impact Assessment Summary Tables [APP-117].

## **B Assessment of Impacts and Adequacy of Response**

## **6. Landscape and Visual**

## Development Plan Policies

Paragraph 8.4.15 of Chapter 8 Landscape and visual of the Environmental Statement [APP-075] describes how local planning policies relating to landscape have been addressed. 7.1 Case for the scheme Appendix F Local planning policy accordence tables [APP-252] presents how the proposed scheme confirms to local planning policy in further detail.

With regard to Policy HPE1 of Hatfield Peverel Neighbourhood Plan and landscape policies within Feering Neighbourhood Plan, the design principles contained within the Design Principles document [REP2-006] were used to inform the environmental mitigation illustrated on Figure 2.1 of the Environmental Statement [APP-086, APP-087 and APP-088]. Design principles consider conserving and reinforcing landscape character and features and green infrastructure objectives. Relevant to policy HPE5 of Hatfield Peverel Neighbourhood Plan, the proposed scheme has been assessed from representative viewpoints close to important views 5 and 6 within Appendix 8.3 Visual effects schedule of the Environmental Statement [APP-121].

Representative viewpoint 5 (representative view north-east from footpath/cycleway south of A12, east of Hatfield Peverel) is close to important view 5. Although the assessment is from the viewpoint, visual effects from the eastern edge of Hatfield Peverel, including from the approved residential development north-east of Gleneagles Way, have also been considered. The assessment concludes that there would be significant effects during construction and during operation in year 1 for residents because of the proximity of the visual receptors to the proposed scheme, although it would be viewed in the context of existing highway infrastructure, urban environment and associated lighting. However, during operation in year 15, visual effects have not been assessed as significant because of the filtering effect of new and retained vegetation.

Representative viewpoint 33 (representative view east from PRoW 90\_2, Hatfield Peverel) is close to important view 6. The assessment concludes that there would be significant effects during construction because there would be foreground views of the J20b main compound and associated lighting, soil storage areas and movement of construction plant along haul roads which would become the dominant part of the view. The assessment also concludes that there would be significant effects during operation year 1 because, although seen in the context of the existing highway infrastructure, loss of vegetation along the existing A12 would exacerbate views of the highway and traffic flow from the footpath. Junction 21 would encroach within arable fields to the north and

south of the existing A12 with additional lighting and signage and would exacerbate the extent of highway infrastructure in the view. However, during operation in year 15, visual effects have not been assessed as significant because established mitigation planting, including woodland planting of trees and shrubs, intermittent trees and shrubs and hedges with intermittent trees, would help to filter views of junction 21, attenuation ponds and access tracks and restore the character of the view, which is already influenced by the existing A12.

## **Methodology**

The Applicant acknowledges that the independent reviewers, Wynne-Williams Associates (WWA), have found the study area and methodology applied to Chapter 8 Landscape and visual of the Environmental Statement [APP-075] to be appropriate and robust.

Professional judgement has been applied to the overall assessment of landscape sensitivity in line with technical guidance. Where the value and susceptibility of local landscape character areas (LCAs) have both been assessed as medium, the overall sensitivity has also been assessed as medium. Medium sensitivity reflects that there is no national recognition of these landscapes, with the exception of localised heritage assets (including registered parks and gardens and listed buildings) and country parks. Local recognition is evidenced through designation of the Green Wedge and other locally sensitive landscapes such as the Blackwater Valley and conservation areas. Medium sensitivity reflects the overall ability of the landscape to accommodate the nature of the proposed scheme to some extent due to presence of the existing A12 and other existing development within the landscape.

It is recognised that localised areas of landscape are of high value, including registered parks and gardens, the Blackwater Rail Trail Country Park and the proposed country park at Hanson's Bulls Lodge Quarry, north-east of Chelmsford. The localised nature of areas of high value within the wider landscape and the ability of areas of high value to accommodate the nature of the proposed scheme in the context of existing detracting features, such as major infrastructure including the existing A12, has been considered when reaching conclusions on the overall sensitivity of the local LCAs.

## **Landscape Character**

A concise section has been included within Section 8.11 of Chapter 8 Landscape and visual of the Environmental Statement [APP-075] to consider the loss of trees of status in response to the Scoping Opinion, as documented in 4.3.6 of Appendix 5.1 Scoping opinion response table of the Environmental Statement [APP-096]. However, the Applicant agrees that tree loss would have a localised significant effect on landscape character adjacent to the existing A12. The assessment of impacts on landscape components, such as trees and woodland, has been considered within the assessment of impacts on landscape character presented within Appendix 8.2 Landscape effects schedule of the Environmental Statement [APP-120] and Section 8.11 of Chapter 8 Landscape and visual of the Environmental Statement [APP-075].

Landscape and visual effects are assessed in year 15 in line with the Design Manual for Roads and Bridges (DMRB) LA 107 Landscape and Visual Effects, Revision 2 (Highways England, 2020) because that is when mitigation planting would be established. Justification for the magnitude and significance of landscape effects is provided in Appendix 8.2 Landscape effects schedule of the Environmental Statement [APP-120]. Conclusions on the sensitivity of landscape receptors and the magnitude of landscape effect are based on the criteria presented within DMRB LA 107 Landscape and Visual Effects, Revision 2 (Highways England, 2020). Conclusions on the significance of landscape effect have been determined by combining the sensitivity of a receptor and the magnitude of an effect, in accordance with the significance matrix contained within DMRB LA 104 Environmental Assessment and Monitoring (Highways England, 2020), Table 3.8.1. The matrix suggests a range of conclusions for consideration because the assessment of significance is not formulaic and professional judgement has been used to ascertain the overall level of significance of effect. This is in line with GLVIA3 which advises that, 'Professional judgement is a very important part of LVIA. While there is some scope for quantitative measurement of some relatively objective matters ... much of the assessment must rely on qualitative judgements...'. Evidence is provided within the description of effect columns of Appendix 8.2: Landscape effects schedule [APP-120] to support the reporting of a single significance category where there is a choice. With regard to the year 15 assessment of local LCAs A9, A9A, B19 and F1, Table 3.8.1 within DMRB LA 104 Environmental Assessment and Monitoring (Highways England, 2020) specifies that for a receptor of medium sensitivity and where the magnitude of impact is moderate, the significance of effect is also moderate.

### **Visual Amenity**

The viewpoints and photomontage locations were agreed through consultation with Local Planning Authorities and Historic England as described within Section 8.3 of Chapter 8 Landscape and visual of the Environmental Statement [APP-075]. The longer distance illustrative viewpoints in excess of 1km from the Order Limits were identified to demonstrate that visual effects beyond 1km are unlikely to be significant due to distance and intervening screening features in response to the Scoping Opinion, as documented in 4.3.4 of Appendix 5.1 Scoping opinion response table of the Environmental Statement [APP-096]. The assessment from illustrative viewpoint A presented within Appendix 8.3 Visual effects schedule of the Environmental Statement [APP-121] identifies that there would be long distance views towards the proposed scheme, but no significant effects.

The assessment of landscape and visual effects presented within Chapter 8 assumes vegetation loss shown on the Retained and Removed Vegetation Plans [APP-035 and AS-017]. To assume a worst case, all trees at risk of removal have been assumed lost within the assessment (except in relation to the gas main diversion).

The visual impact from residential receptors at representative viewpoint 5 at Year 15 has been assessed as slight adverse. As illustrated on the Environmental Masterplan [APP-086], landscape mitigation south of the A12 on the eastern edge of Hatfield Peverel includes woodland planting of trees and shrubs which would have established by year 15. Views of junction 21 from the eastern edge of Hatfield Peverel would be screened by retained field boundary vegetation and a noise barrier, although filtered views of traffic and lighting would be possible from second storey windows of buildings at the approved residential development north-east of Gleneagles Way. Junction 21 would be perceptible from second storey windows of private properties on the eastern edge of Hatfield Peverel, including from the approved residential development north-east of Gleneagles Way, but not alter the overall balance of features and elements that comprise the existing view, in the context of the existing highway infrastructure, urban environment and associated lighting. The significance of effect would be slight adverse rather than moderate adverse because of the filtering effect of new and retained vegetation.

### **Adequacy of the Application/DCO**

Appended to the first iteration EMP, the Landscape and Ecological Management Plan (LEMP) [APP-193] presents how the landscape and ecological features would be protected during construction, and how landscape and ecological mitigation would be

implemented and maintained.

## **B Assessment of Impacts and Adequacy of Response**

## **Light pollution**

The Applicant notes Braintree Council's concerns about the following areas:

- New lighting effects arising from offline bypasses, new junctions and new local roads
- Night-time effects from temporary working areas including compounds, lay down areas, borrow pits and the temporary car park at Hatfield Peverel station
- Night-time effects on landscape character
- Proposals for lighting on detrunked sections particularly at Rivenhall End

The Environmental Statement Chapter 8 Landscape and Visual [APP-075] assesses the effects of lighting on the landscape and at representative viewpoints during construction and operation. Landscape mitigation presented on Figure 2.1: Environmental Masterplan [APP-086, APP-087, APP-088] seeks to reduce any lighting effects.

Temporary lighting would be provided to ensure safe working conditions and to maintain security within construction compounds and working areas. Best practice measures would be implemented where practicable to ensure temporary lighting is avoided or directed away from heritage assets, residential and/or ecological receptors such as watercourses, woodland, badger setts, bat roosts and important commuting habitats as outlined in the First Iteration Environmental Management Plan – Appendix A: Register of Environmental Actions and Commitments (REAC) [APP-185] LV11.

Braintree District Council state that the following landscape character areas that the landscape assessment should conclude that the magnitude of effect should be moderate adverse and the overall significance to be moderate adverse on the following landscape character areas in year 15 due to significant landscape change at night-time as a result of new lighting installations at offline

bypasses, junctions and local roads.

- A9 - Blackwater River Valley
- A9A - Landscape Sub Area of the Blackwater River Valley
- B19 - Langley Green Farmland Plateau
- F1 - Messing Wooded Farmland

Environmental Statement - Appendix 8.2: Landscape Effects Schedule [APP-120] provides details of the landscape assessment and assesses that all these character areas would experience a moderate adverse magnitude of effect and moderate adverse significance of effect.

Proposed lighting is illustrated on the General Arrangement Plans [A-029, AS-030, APP-011, AS-012 and AS-013].

New lighting would be provided on tie ins between the proposed scheme and detrunked sections. Lighting used would be appropriate for the proposed scheme, and would consist of a mix of 10–12m high columns with LED luminaires on the junctions, and 8m high columns on the side roads. Such LED lighting uses less energy than conventional luminaires, while reducing light spill into adjacent areas. The design has been carried out in accordance with the latest BS 5489 standard (British Standards Institution, 2020) and National Highways' specifications. The design also takes into consideration guidance notes from the Institution of Lighting Professionals, including Guidance Note 01/21 – The Reduction of Obtrusive Light (2021) and Guidance Note 08/18 – Bats and Artificial Lighting in the UK (2018).

## **B Assessment of Impacts and Adequacy of Response**

## **8. Biodiversity and arboriculture**

Policy SP7 of the Local Plan requires all new developments to protect and enhance assets of natural value and to incorporate biodiversity creation and enhancement measures. It also requires an integrated and connected network of green and blue

## infrastructure

The baseline surveys for the proposed scheme have identified the locations of valuable and priority habitats, including important connective habitats (i.e., hedgerows, watercourses and treelines) and the location of protected and notable species. As per Chapter 3 Assessment of Alternatives, the proposed scheme has sought to avoid impacts to these receptors where possible. Where impacts are unavoidable, mitigation has been proposed (Section 9.10 of Chapter 9 Biodiversity [APP-076]) and is secured through the Register of Environmental Actions and Commitments (REAC) [APP-185] within the first interaction Environmental Management Plan [APP-184]. Preconstruction surveys would be undertaken as per commitment BI11 of the REAC [APP-184] to ensure any changes to the baseline are understood ahead of construction.

Enhancement measures are described within Section 9.10 of Chapter 9 Biodiversity of the Environmental Statement [APP-076].

Implementation of the environmental masterplan [APP-086 to APP-088] would result in a corridor of habitat along the proposed scheme, providing connectivity to ecological mitigation areas which form stepping stones of habitat across the landscape. Connectivity of water courses would be maintained and the net gain in ditches and ponds would contribute towards blue infrastructure.

Policy SP2 of the Adopted Local Plan secures financial contributions from relevant developments toward mitigation measures in accordance with the Essex Coast Recreational Disturbance Avoidance and Mitigation Strategy 2018-2023 (RAMS) (although the requirement for such contributions relates only to residential schemes). The Policy does however identify the importance of ensuring the safeguarding of these protected coastal sites.

Policy SP2 relates to residential schemes and the protection of coastal sites and is therefore not considered applicable to the proposed scheme.

Policy LPP63 of the Adopted Local Plan states that development must take available measures to ensure the protection and



enhancement of the natural environment, habitats, biodiversity and geodiversity of the District. All developments are expected, where appropriate, to contribute towards the delivery of new Green Infrastructure to develop a network of multi-functional green spaces and natural features throughout the District.

As stated above, mitigation measures secured through the REAC [APP-185] would ensure the protection of biodiversity receptors. Enhancements measures are described within Section 9.10 of Chapter 9 Biodiversity of the Environmental Statement [APP-076].

Landscape planting has been designed to support green infrastructure objectives, through the use of planting to link to existing field boundary vegetation to provide screening and connectivity of existing wildlife corridors.

A holistic approach has been taken to developing the design objectives and principles (as presented in 7.10 Design Principles document [REP2-006]) through collaborative working between environmental disciplines and engineering specialists. The landscape objectives seek to mitigate adverse landscape and visual effects, including effects on existing green infrastructure, and to contribute to the green infrastructure network (paragraph 8.10.2 of Chapter 8 [APP-075]).

The proposed scheme is delivering a net gain of habitats (as presented in Table 9.23 of Chapter 9 [APP-076]). Once habitats have become established, the array of habitats created would generally be more diverse than the majority of the largely arable habitat present along the existing A12 corridor.

The planting design would use native species of local origin. Green infrastructure objectives (Chelmsford City Council, 2018; Essex County Council, 2020) through the use of planting to link into existing field boundary vegetation to provide screening and integration into the local pattern and character, as well as connection of existing wildlife corridors (paragraph 9.10.14 of Chapter 9 [APP-076]). Ecology mitigation areas have been located in areas with connectivity to existing habitats and these areas will be created in advance of construction where practicable.

Policy LPP64 of the Adopted Local Plan seeks to protect nationally or internationally designations of protected species, priority

species and priority habitat. It states that in relation to sites of national or international designation 'sites designated for their international importance to nature conservation; including Ramsar sites, Special Protection Areas, Special Areas of Conservation, should be protected from development likely to have an adverse effect on their integrity whether they are inside or outside the District. Proposals which are considered to have a likely significant effect on these sites will require an Appropriate Assessment in line with European and domestic legislation'.

Impacts to international and national designated sites are assessed within Section 9.11.1 to 9.11.8, 9.11.15 to 9.11.16 and 9.11.265 to 9.11.272 of Chapter 9 of the Environmental Statement [APP-076]. The assessment concluded that there would be no change in the level of impact on any internationally important receptors, and therefore the significance of effect is neutral (not significant). In addition, the Habitats Regulations Assessment No Significant Effects Report [APP-201] provides a detailed assessment of the potential impacts of the proposed scheme on internationally designated sites. The report concluded no likely significant effects and Natural England have confirmed they are in agreement with the outcome of the assessment.

Effects on priority species and priority habitats are also assessed within Chapter 9 of the Environmental Statement [APP-076] (paragraphs 9.11.64 - 9.11.103, 9.11.194 - 9.11.198, 9.11.230 - 9.11.234, 9.11.306 - 9.11.319, 9.11.340 - 9.11.342, and 9.11.357 - 9.11.359). The residual significance of effects are summarised within Table 9.29 and Table 9.31 and are assessed as not significant.

Proposals which result in a net gain in priority habitat will in principle be supported, subject to other policies in the Development Plan. It goes on to state that 'Where priority habitats are likely to be adversely impacted by the proposal, the developer must demonstrate that adverse impacts will be avoided, and impacts that cannot be avoided are mitigated on-site. Where residual impacts remain, off-site compensation will be required so that there is no net loss in quantity and quality of priority habitat in Braintree District'. It also requires Ecological Surveys to be submitted by Developers to demonstrate that an adequate mitigation plan is in place.

As per Table 9.32 within Section 9.13 of Chapter 9 Biodiversity [APP-076] the proposed scheme would result in a net gain of 25% of habitats, 26% of hedgerows and 156% of rivers.

Effects on priority habitats are detailed within Chapter 9 of the Environmental Statement [APP-076] (paragraphs 9.11.64 - 9.11.103 and 9.11.306 - 9.11.319).

While not technically meeting the definition of Open Mosaic Habitat (OMH), there is some provision for the creation of south facing sandy banks and earth 'cliffs' to mitigate impacts to terrestrial invertebrates, which would increase the value of the habitats provided within the ecological mitigation areas (as described in paragraph 9.10.110 of Chapter 9: Biodiversity [APP-076] and committed to in BI44 in the Register of Environmental Actions and Commitments (REAC), in the first iteration Environmental Management Plan [APP-185]). The Applicant is reviewing the design as part of the detailed design stage to maximise retention of some of the OMH land that is currently shown as being lost.

Policy LPP64 also states that 'proposals resulting in the loss, deterioration or fragmentation of irreplaceable habitats such as ancient woodland or veteran trees will not normally be acceptable unless the need for, and benefits of the development in that location clearly outweigh the loss'.

Paragraph 9.11.53 of Chapter 9 of the Environmental Statement [APP-076] states that the proposed scheme would not directly impact any areas of ancient woodland. The assessment of air quality effects on ecological receptors (Appendix 9.15 of the Environmental Statement [APP-139] found that Perry's Wood Local Wildlife Site and Ancient Woodland which is located within 200m of the affected road network would be effected through nitrogen deposition during operation of the proposed scheme. As per Table 9.33 of Chapter 9 [APP-076] this effect was assessed as significant. Appendix 6.6: Project air quality action plan.

[APP-105] found there is no feasible mitigation for the impact. Measures to offset the impacts are detailed within paragraph 9.10.32 of Chapter 9 [APP-076] and are secured via commitments BI16 and BI14 of the REAC [APP-185].

As per paragraph 9.11.58 of Chapter 9 [APP-076], no verified veteran trees would be directly impacted by construction of the proposed scheme. However, five potential veteran trees (i.e., trees not formally designated, but assessed as part of A12 field surveys as veteran trees) would be removed during construction (T236, T316, T367, T452 and T542). Where practicable, the design

of the proposed scheme was refined to avoid impacts in accordance with commitment LV4 of the REAC [APP-185], however, loss of these five trees may be unavoidable. This is irreplaceable habitat and while these cannot be directly replaced, as per paragraph 9.10.38 of Chapter 9 [APP-076] and commitment BI17 of the REAC [APP-185] their loss would be partially compensated (acknowledging that features such as ancient and veteran trees are considered irreplaceable and therefore cannot be fully compensated) as per the latest guidance from Natural England and the Forestry Commission (2022). Young trees of the same species as that which are removed would be planted with sufficient space around them to encourage development of an open crown. Where practicable, trees would be planted close to the trees they are replacing, taking into account post construction air quality levels. Where practicable and safe to do so, the intact hulk of the potential ancient or veteran tree would be left where it is (preferably standing) to benefit invertebrates and fungi. Where this is not possible, the hulk would be moved near to other unimpacted potential ancient or veteran trees or parkland in the area.

Finally, the Policy also seeks to protect Local Wildlife Sites, Local Nature Reserves and Special Roadside Verges.

Impacts to Local Wildlife Sites and Local Nature Reserves are detailed within paragraphs 9.11.9 to 9.11.14, 9.11.17 to 9.11.52, and 9.11.268 to 9.11.293. Additional mitigation is proposed for Perry's Wood Local Wildlife Site (and Ancient Woodland) and Whetmead Local Nature Reserve and Local Wildlife Site. Mitigation, maintenance and monitoring is secured through commitments BI13, BI16, BI14, LV16 and LV18 of the REAC [APP-185].

Policy LPP65 of the Adopted Local Plan covers Tree Protection. Preservation Orders may be placed on prominent trees which contribute to the character of the local landscape and have a reasonable life expectancy and trees which make a significant positive contribution to the character and appearance of their surroundings should in general be retained unless there is a good Arboricultural reason for their removal. Trees of higher quality are also identified as being a material consideration in the planning process. Overall, the Policy seeks to retain and protect trees and to ensure that unnecessary, poorly considered or excessive tree loss is prevented.

Where practicable, the design of the proposed scheme was refined to minimise loss of trees including veteran trees, as detailed in Chapter 3: Assessment of alternatives, of the Environmental Statement [APP-070]. However, the loss of five potential veteran trees cannot be mitigated due to the time period over which a veteran tree matures. Paragraph 9.10.38 of Chapter 9: of the Environmental

Statement [APP-076] states the measures to compensate for the loss of the five potential veteran trees (as per commitment BI17 of the Register of Environmental Actions and Commitments, within the first iteration Environmental Management Plan [APP-184]), in accordance with the latest guidance from Natural England and the Forestry Commission. The significance of effect with respect to the five potential veteran trees is assessed as slight adverse (not significant) given that 93% of all potential and verified veteran and ancient trees within 15m of the Order Limits would be retained.

As per commitment LV4 of the REAC [APP-185], existing vegetation within the Order Limits including temporary works areas would be retained as far as reasonably practicable. Particular attention would be given to the retention of mature vegetation including the following, which would be retained in accordance with, as a minimum, the

Retained and Removed Vegetation Plans [APP-035 and AS-017]. Vegetation to be removed is shown on the same plan.

- Ancient, veteran and notable trees (both verified and potential)
- Trees subject to tree preservation orders
- Specimen trees
- Category A and B trees
- Important hedgerows
- Ancient woodlands

All trees to be retained would be protected throughout the construction period in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

Policy LPP66 of the Adopted Local Plan addresses the protection, enhancement, management and monitoring of Biodiversity. It states that 'Development proposals shall provide for the protection of biodiversity and the mitigation or compensation of any adverse impacts. Additionally, enhancement of biodiversity should be included in all proposals, commensurate with the scale of the development'. Some examples of enhancement are given such as watercourse improvements to benefit biodiversity and water quality, habitat creation and wildlife links

As referenced in the Council's Local Impact Report, and in accordance with National Networks National Policy Statement (NNNPS) (paragraph 5.23) the Applicant has taken advantage of opportunities to enhance biodiversity as described in paragraphs 9.10.116 to 9.10.122 of Chapter 9 [APP-076]. As per Table 9.32 within Section 9.13 of Chapter 9 Biodiversity [APP-076] the proposed scheme would result in a net gain of 25% of habitats, 26% of hedgerows and 156% of rivers.

Finally, LPP77 seeks to ensure that there is no harm to biodiversity, natural ecosystems and intrinsically dark landscapes from external lighting.

As per commitment LV11 of the REAC [APP-185], temporary lighting would be provided to ensure safe working conditions and to maintain security within construction compounds and working areas. Best practice measures would be implemented where practicable to ensure temporary lighting is avoided or directed away from heritage assets, residential and/or ecological receptors such as watercourses, woodland, badger setts, bat roosts and important commuting habitats.

As stated in Table 9.2 of Chapter 9 [APP-076], permanent lighting is to be designed sensitively, such as through the use of horizontally mounted flat glass lanterns, modern light-emitting diodes (LEDs), and designing lighting with zero tilt to produce no upward glare and minimal back light. Design will be carried out in accordance with the latest BS 5489 standard (British Standards Institution, 2020) and National Highways' specifications. The design will also take into consideration guidance notes from the Institution of Lighting Professionals, including Guidance Note 1 for the Reduction of Obtrusive Light (2021) and Guidance Note 8 for Bats and Artificial Lighting (2018).

As per paragraph 9.10.6, the use of permanent lighting would be developed at the detailed design stage. Lighting would be limited to junctions, handrail lighting on the bridges for walkers, cyclists and horse riders (WCH), and side road approaches to junctions, and designed to best practice to reduce light spill.

Furthermore, as per paragraph 9.10.16 of Chapter 9 [APP-076] landscape planting would be designed to reduce visual and lighting impacts to habitats, species and designated sites, and provide guide planting to maintain connectivity and encourage use of new or existing crossing structures.

Policy HPE1 of the Hatfield Peverel Neighbourhood Plan also requires the retention and enhancement of trees, hedgerows and habitats including ancient woodlands. The Policy is explicitly supportive of the creation of new areas of habitat and requires developments to meet a number of criteria which include restricting planting to native species and ensuring the protection and enhancement of the natural environment, habitats, biodiversity and geo-diversity of the Parish. HPE1 also specifically supports the development of a network of wildlife corridors alongside public rights of way.

Throughout the preliminary design process the environmental team have worked collaboratively with the engineering teams to minimise loss of habitats. This is evidenced by Chapter 3 Assessment of Alternatives [APP-071] which details how impacts to some veteran trees were avoided.

Whilst loss of some trees and hedgerows are unavoidable, this would be mitigated with new planting. As per Table 9.32 within Section 9.13 of Chapter 9 Biodiversity [APP-076] the proposed scheme would result in a net gain of 25% of habitats, 26% of hedgerows and 156% of rivers. There would be no direct loss of ancient woodland habitat.

As per paragraph 9.10.10 of Chapter 9 [APP-076] planting of new woodland, species-rich hedgerows and scrub would comprise locally native tree, shrub and herbaceous species of local provenance.

Commitments with the REAC [APP-185] with respect to standard mitigation measures would ensure protection of the natural environment, habitats and biodiversity, for example commitments B12 (exclusion zones around retained habitats), B13 (exclusion zones around designated sites), and B19 (buffer zones around sensitive features relating to protected species).

Biodiversity enhancements are detailed within paragraphs 9.10.116 to 9.10.122 of Chapter 9 [APP-076].

Implementation of the environmental masterplan [APP-086 to APP-088] would result in a corridor of habitat along the proposed scheme, providing connectivity to ecological mitigation areas which form stepping stones of habitat across the landscape.

Policy NE3 of the Kelvedon Neighbourhood plan also seeks to maintain and enhance Green Infrastructure such that development wherever possible provides net gain for biodiversity. Any loss of green infrastructure, local biodiversity, priority habitat, wildlife of a Local Nature Reserve or protected species should demonstrate no alternatives, appropriate mitigation and as a last resort compensation measures. Green/blue infrastructure should be connected to allow freedom of movement for species through the site. NE3 specifically refers to the use of suitable alternative nesting habitat where development results in a loss.

As stated earlier in this response, landscape planting has been designed to support green infrastructure objectives, through the use of planting to link to existing field boundary vegetation to provide screening and connectivity of existing wildlife corridors. Where appropriate, hedgerows would be provided along public rights of way however this has been balanced with the need to keep these routes open in order for users to feel safe.

Policy 6 of the Feering Neighbourhood plan concerns the natural environment and green and blue infrastructure, it seeks to protect and enhance the natural environment and deliver biodiversity net gain, in addition to protecting existing habitats & species. Limb B of the policy supports creation of new green and blue infrastructure. Paragraph 5.6.5 of the plan also states 'Biodiversity net gain can be increased by including the following provisions; boxes for bats, swifts and other birds, artificial badger setts, reptile mitigation strategies, hedgehog friendly fencing and bug hotels... along with the planting of native trees, hedgerows and sowing wild meadow



mixes native to this part of the country.'

Landscape planting has been designed to support green infrastructure objectives, through the use of planting to link to existing field boundary vegetation to provide screening and connectivity of existing wildlife corridors. Connectivity of water courses would be maintained and the net gain in ditches and ponds would contribute towards blue infrastructure.

Mitigation and enhancement measures for the proposed scheme include provision of bird boxes (over and above the number required for mitigation, as committed in BI38 in the REAC [APP-185]), provision of bat boxes (boxes over and above the number required for mitigation, as committed in BI20 of the REAC [APP-185]), creation of a network of reptile mitigation areas linked by the new verges of the A12 and planting around other design featured such as attenuation ponds.

Essex County Council have a strong history of working in partnership with Braintree District Council on the protection and mitigation of adverse effects on nationally and internationally designated sites under the Conservation of Habitats and Species Regulations 2017 (as amended). Their Place Services arm have dedicated Ecologists who have provided HRA screening assessment services for the vast majority of Neighbourhood Plans in the district, including Hatfield Peverel, Kelvedon and Feering NPs. ECC have also produced or are working to produce countywide guidance for Green Infrastructure Strategy and Local Nature Recovery Strategies to complement Biodiversity Net Gain. The Council will therefore defer to ECC on matters relating to biodiversity.

The Applicant notes that Braintree District Council will defer to Essex County Council on matters relating to biodiversity. The Applicant can confirm Natural England are in agreement with the Habitats Regulations Assessment [APP-201] which concludes no likely significant effects on internationally designated sites.

The Council notes and supports ECC who have stated that it currently does not consider that there is sufficient certainty that the Scheme would deliver effective and appropriate compensation and mitigation for potential ecological impacts for either the construction or operational phases of this Scheme. The Council shares concerns about impacts on protected species for which it is uncertain whether the mitigation is deliverable or appropriate. As LPP66 requires that development proposals must mitigate or

compensate adverse impacts on biodiversity, the mitigation must be deliverable to the satisfaction of the Council to be considered compliant with the Local Plan.

Please refer to our responses to Essex County Council's Local Impact Report paragraphs 9.5.1 - 9.5.20 and 9.6.1-9.6.22 which address Essex County Council's concerns with respect to biodiversity.

## Arboriculture

### Methodology

The Arboriculture Impact Assessment included within Appendix 8.4 of the Environmental Statement [APP-122] was carried out in accordance with the proposed proportionate and targeted methodology presented within Appendix H of the Environmental Scoping Report (Highways England, 2020).

Agreement was sought on the methodology and proportionate, targeted approach to the arboricultural assessment through consultation with local planning authorities, as described within paragraph 8.3.6 of Chapter 8 Landscape chapter of the Environmental Statement [APP-075].

Due to the scale of a project of this nature a proportional approach needs to be taken to tree surveys. National Tree Map data was used extensively by the Applicant to offer granularity within groups during early design iterations of the preliminary design. While it is acknowledged that tree condition changes quickly, a tree survey carried out to BS5837:2012 in 2020 and 2021 would not be considered unduly old and a resurvey of the existing data would be considered disproportionate to the results gained. Plans for the scheme are presented at small scale to allow for optimum viewing of the scheme and its context. While BS5837:2012 suggests 1:500 is an optimum scale it acknowledges that it is not always appropriate to present plans in this way.

### Response to survey findings

While plans are presented in a small scale, individual impacts on trees and groups were conducted using a shared tree constraints data model which was assessed for impacts using a combination of buffers applied by GIS programs and individual checks by qualified arboriculturalists to identify potential impacts on trees.

Highways plantings are considered to be category C as they meet the description of C category groups in BS5837:2012, that is 'trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits'. Highways plantings are generally densely planted and unlikely to be thinned as required, leading to groups of suppressed or stagnated trees of limited individual quality. Furthermore, highways groups, in many situations, cannot be allowed to develop into large individuals or high forest and are removed before they reach that stage, limiting their long useful retention span. Where trees which clearly did not form part of highways planting schemes were found during surveying, they were assessed and recorded separately.

### **Summary impact assessment**

While total number of trees within groups has not been included in the arboricultural assessment, canopy cover assessments of groups and woodlands has been considered in Chapter 9 Biodiversity of the Environmental Statement [APP-076]. Table 9.23 indicates both the existing canopy cover and the post development proposed canopy area.

The carbon sequestration impacts of tree removals for the scheme are considered in Table 15.21 of Chapter 15: Climate [APP-082]. Once operational, the increase in the area of woodland with the proposed scheme is estimated to result in a much larger net reduction in greenhouse gas emissions from forestry over the longer term (as shown in Table 15.22 of Chapter 15: Climate [APP-082]).

### **Matters for more detailed consideration**

Preliminary design involves outline design work which often lacks the necessary detail to make a full, detailed assessment of tree removal. Therefore, the retention category of certain trees remains 'at risk' until fixed detail design is available. While it is often possible to retain at risk trees during detailed design, the use of the 'at risk' category allows the assessments to present a 'worst case' arboricultural impact of the scheme to the examining body. Following the completion of detailed design, definitive tree and vegetation removal plans will be produced which will clearly illustrate the impact of the scheme. The Applicant is also fully committed to the production of a detailed arboricultural method statement (and tree protection plan) which will clearly set out how retained trees will be protected throughout the construction process including any specific veteran tree management required to protect and enhance the population in the area.

The following commitments with regard to trees are provided in the First Iteration Environmental Management Plan – Appendix A: Register of Environmental Actions and Commitments (REAC) [APP-185] and would be actioned during the pre-construction and construction phase.

LV4: Existing vegetation within the Order Limits including temporary works areas would be retained as far as reasonably practicable. Particular attention would be given to the retention of mature vegetation including the following, which would be retained in accordance with, as a minimum, the Retained and Removed Vegetation Plans [APP-035 and AS-017]. Vegetation to be removed is shown on the same plan.

- Ancient, veteran and notable trees (both verified and potential)
- Trees subject to tree preservation orders
- Specimen trees
- Category A and B trees
- Important hedgerows
- Ancient woodlands

All trees to be retained would be protected throughout the construction period in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

LV5: Works to Tree Preservation Orders, veteran, ancient and notable trees would be supervised by the Ecological Clerk of Works (ECoW) and supported by an experienced arboriculturist. In the event tree canopy pruning is required to facilitate the works, this would be undertaken by qualified and competent staff working to BS 3998:2010 Tree work – Recommendations.

LV6: An Arboricultural Method Statement and Tree Protection Plan would be prepared during the detailed design phase, refined following final design agreement and in place prior to works affecting trees commencing and appended to the EMP. The Arboricultural Method Statement and Tree Protection Plan would include areas of special measures to protect and retain features that would be subject to encroachment and localised removal. This would be based on the special measure areas, construction exclusion zones and outline tree protection measures presented within the Arboricultural Impact Assessment (Appendix 8.4 of the Environmental Statement [APP-122]).

In line with REAC commitment LV17 [APP-185], the landscape proposals illustrated on the Environmental Masterplan Figure 2.1 [APP-086, APP-087 and APP-088] would be refined at the detailed design stage.

The First Iteration Management Plan [AS-006] would be updated during detailed design to create the Second Iteration Management Plan including updating the Arboricultural Method Statement and Tree Protection Plan refined following final design agreement and in place prior to works affecting trees commencing [AS-006 paragraphs 1.1.14 - 1.1.15]. The Second Iteration Management Plan would also include an update to the Landscape and Ecology Management Plan [APP-193] which along with a Series 3000 Landscape and Ecology Specification and other relevant specifications would provide the detail requested by the Braintree District Council for the next stage of design development.

## **B Assessment of Impacts and Adequacy of Response**

## **9. Geodiversity and soils**

The Applicant notes Braintree District Council's comments on geodiversity and local policies.

The Applicant acknowledges the calculations that Braintree District Council has quoted from Chapter 10: Geology and soils (Tables 10.6 and 10.13), of the Environmental Statement [APP-077] in their representation. Clarification on what constitutes 'permanent development' within the context of the agricultural land-take quantification presented within Chapter 10: Geology and Soils [APP-077] is provided in our response to RR-184-010 [REP1-002].

With regards to the statement that Hatfield Peverel NP policy HPE1 requires an economic assessment of lost agricultural land and this information is inadequate, the Hatfield Peverel Neighbourhood Development Plan 2015-2033 – Adopted 16th December 2019 states that "Development should also...take into account the economic and other benefits of the best and most versatile agricultural land".

The economic and other benefits of best and most versatile agricultural land have been taken into account:

- through route selection to reduce agricultural land-take, as described in Chapter 3 (Assessment of Alternatives), of the Environmental Statement (ES) [APP-070];
- by consolidating development footprints to reduce the loss of agricultural land, as identified in Chapter 10 of the ES [APP-077];
- by committing to restoring best and most versatile agricultural land back to its original Agricultural Land Classification grade, where the land is known to be returned to agricultural use post-construction (refer to the Applicant's response to RR-184-010 [REP1-002]);
- by committing to restoring soils and land in essential mitigation areas to conditions that could support best and most versatile agricultural land in the future as far as practicable (refer to the Applicant's response to RR-184-010 [REP1-002]); and
- by developing a Soil Handling Management Plan [APP-197] that will protect soil functions during construction.

As Braintree District Council states, embedded mitigation includes the restoration of areas of temporary agricultural land-take to agricultural use. As stated in Chapter 10 (Geology and soils [APP-077], a soil resource survey will be undertaken which further supports the Soil Handling Management Plan [APP-197] and will facilitate the sustainable use of soils.

## **B Assessment of Impacts and Adequacy of Response**

### **10. Material assets and waste**

Table 11.6 (Local policy requirements for material assets and waste) in Environmental Statement Chapter 11: Material Assets and Waste [APP-078] references Policy LPP 55 (Layout and Design of Development) in the Braintree District Council (June 2017) Publication Draft Local Plan. This was the extant policy at the time of preparing the Environmental Statement.

Policy LPP 55 (Layout and Design of Development) states that the Council will seek a high standard of layout and design in all developments in the District and encourage innovative design where appropriate. Planning permission will be granted where the relevant following relevant criteria are met (i.e. those criteria that are directly relevant to material assets and waste):

- Development proposals will incorporate measures for environmental sustainability throughout the construction, occupation and demolition of the development.
- Designs shall incorporate details of waste storage and collection arrangements, including provision for recycling.

The Braintree District Council (July 2022) Adopted Local Plan 2013 – 2033 was not available at the time of preparing Chapter 11 Material assets and waste of the Environmental Statement [APP-078].

Nevertheless, the Applicant can confirm the relevant criteria of Policy LPP 52 (Layout and Design of Development) have been addressed through the measures outlined in Section 11.10 of Chapter 11 Material Assets and Waste of the Environmental Statement [APP-078].

The Register of Environmental Actions and Commitments (REAC) [APP-185] includes the following measures of relevance to criteria

f (waste separation) and criteria g (waste storage and collection) of Policy LPP 52 Layout and Design of Development):

- MW1: Implementing Design for Resource Efficiency Principles;
- MW2: Producing a Sustainable Procurement Plan; and
- MW3: Implementing a Site Waste Management Plan

A Site Waste Management Plan [APP-196] and Outline Construction Traffic Management Plan [REP2-003] have also been prepared for the proposed scheme.

## **B Assessment of Impacts and Adequacy of Response**

## **11. Noise and Vibration**

The Applicant notes that Braintree District Council find the assessments of construction and operational noise are thorough and acceptable.

There are several areas of the Local Impact Report where Braintree District Council have requested a response, and one where the Applicant is unclear on a few comment. These are:

1. The Council's main concern is that development would not result in unacceptable increased in noise and vibration, having taken into account any mitigation.

The Applicant is unclear whether the Council does or does not find the development acceptable.

2. A noise model has been constructed to calculate the noise impact at all receptors in the study area. However, the ES noise chapter does not specifically iterate that the baseline surveys have been utilised to validate the noise model.



The results from the baseline noise surveys have not been used to validate the noise model. There is no requirement within DMRB LA 111 to undertake such a validation exercise, and no guidance on how to use the findings from any such exercise. However, the noise model and associated input data pass through an extensive quality assurance process.

3. This plan relies on the Principal Contractor to assess the construction noise surveys and act where appropriate. The surveys would only be conducted on an ad-hoc basis when works are likely to cause significant effects or when a complaint is received. However, we believe it would be prudent to have routine surveys and share the data with the Environmental Health Officer of the BDC.

The Applicant acknowledges that routine surveys can help to ensure compliance with any mitigation measures and that best practicable means are being used. However, routine surveys solely for the purpose of following a commitment can lead to unnecessary use of resource that could be used elsewhere. Therefore, the Applicant does not consider it necessary commit to routine noise surveys being undertaken during construction. The results from any noise surveys undertaken would be available upon request from Braintree District Council

4. A low-noise surface has been assumed for the new carriageways in certain sections with a RSI of -6.5 dB and where the existing carriageway is resurfaced (as part of the routine maintenance programme), it will also have the same low noise surface. It is assumed that for the Design Year (2042), all carriageways will have a low noise surface. BDC should seek reassurance from the scheme promoter that the low noise surface will in place for the year 2042. Further, the low noise surface tends to lose the noise 'benefits' with age. BDC should request further information from the scheme promoter on how often the road will be resurfaced against the probable deterioration of the noise benefits of the surfacing.

The Applicant would note that there are some sections of the existing carriageway of the A12 that will not be surfaced with the surface with an RSI of -6.5 dB. These would either be left unchanged (i.e. remain as they are which is an existing low noise surface) or surfaced with a new conventional low noise surface offering an RSI of -3.5 dB. The extent of the surfacing with the -6.5 dB

surfacing is shown on Figure 12.4: Additional noise mitigation, of the Environmental Statement [APP-231].

Within the first iteration Environmental Management Plan - Appendix A: Register of Environmental Actions and Commitments (REAC) [APP-185] there is commitment NV10 which states 'Subsequent resurfacing of these sections of the A12 would be undertaken with a surface meeting the RSI described above as a minimum.' This commitment is in reference to resurfacing the sections of the proposed scheme where the surface with better noise reducing properties than a conventional low noise surface is proposed (i.e. the -6.5 dB surfacing).

The Applicant acknowledges that the noise reducing properties of a low noise surface will reduce over time. When the A12 is resurfaced will depend upon the wear of the surface, which will vary lane by lane. However, as a conservative approach, for the assessment of impacts in the future assessment year (i.e. 2042) the Applicant assumed a surface correction of -3.5 dB (i.e. that of a conventional low noise surface). This did not result in any additional significant adverse effects being identified over those identified for the opening year assessment.

5. In terms of the NIR, 3 dwellings provisionally qualify for additional sound insulation. BDC will need the scheme promoter to confirm this before the commencement of the scheme construction.

Within the first iteration Environmental Management Plan - Appendix A: Register of Environmental Actions and Commitments (REAC) [APP-185] there is commitment NV7 which states 'A full assessment of likely eligibility for sound insulation measures in accordance with the Noise Insulation Regulations 1975 (as amended 1988) would be undertaken for the proposed scheme. This assessment would be undertaken once the scheme design is finished, which may be once the construction has started if design of some parts is still ongoing.'

## **B Assessment of Impacts and Adequacy of Response**

## **12. Human health and population**

The Applicant notes the detailed policy review that Braintree District Council (BDC) has provided within their Local Impact Report (LIR). The Applicant has assessed Braintree Local Polices where relevant at Appendix F of the Case for the Scheme [APP-252]to

demonstrate compliance with the Local Plans Policies. Further information on local plans policies is available in this document's response to the Statutory Development Plan.

The Applicant notes BDC's concerns regarding the effects of construction on mental wellbeing and sleep disturbance for occupants of residential properties, including noise, air pollution and night-time light from construction, diversions, movements of construction vehicles and HGVs. Paragraph 13.18.3 – 13.18.9 of the Population and Human Health Assessment of the Environmental Statement [APP-080] provides our assessment of the impacts of construction noise from construction traffic and other activities on sleep disturbance and wellbeing. We assess this as negative and significant due to the potential scale of exposure to increased night-time noise. Health impacts of construction related air pollution are assessed in paragraph 13.18.10 of APP-080, while lighting is assessed in paragraph 13.18.11. Both these impacts are assessed as neutral in terms of population health effects. Paragraphs 13.18.16 – 13.18.23 of APP-080 describes impacts on communities related to the routing of construction traffic. This includes the identification of the communities which we predict would be most affected by construction traffic movements. We have assessed the effect on population health outcomes from these impacts as negative but not significant on the basis that construction traffic related impacts on wellbeing would be relatively localised and expected to be reversible on completion of the proposed scheme. These assessments are based on the proposals set out in the Outline Construction Traffic Management Plan [APP-272] and its appendices [APP-273, APP-274, APP-275].

With regards to the point around the use of 2011 Census data to inform the Population and Human Health baseline in Chapter 13 of the Environmental Statement [APP-080], this was the most recent publicly available population data at the time of the assessment of the scheme on population and the subsequent acceptance of the Environmental Statement by the Examining Authority in September 2022. As noted in the LIR, 2021 Census summary populations for wards in Braintree only became available in January 2023. However, as noted in Table 13.8 of APP-080, we did account for BDC's statutory consultation feedback that the overall population of Braintree district is expected to increase at a greater rate than the official Office of National Statistics projections for mid-2018 – mid 2043 and this higher growth prediction informed the baseline sensitivity for the assessment. It is not considered that the differences in ward populations apparent in the more recent census data would materially affect the assessment conclusions presented in the Population and Human Health chapter [APP-080] since our assessment relates to the likely scale of population exposure to impacts on land use, accessibility or other health determinants, rather than the overall population within the study area (many of whom would not be affected by identified impacts).

We note that BDC has provided a table which compares the Applicant's assessment with BDC's own assessment. For some routes BDC has identified a difference in assessment conclusions and/or has raised some specific points or has stated that an assessment of the route is not included within our Environmental Statement. We have responded to each route where these issues have been raised.

#### **Footpath PROW 95\_34 Hatfield Peverel 44**

We have assessed this PROW as footpath 90\_34 and it is assessed in Table A.8 of Appendix 13.3 [APP-155]. The assessment states that during construction 'This footpath would need to be closed for approximately nine months to allow for demolition of parapets of River Ter bridge. Walkers who use this footpath could take an alternative route across Crix Bridge and along A1137 The Street, which would be a similar distance, albeit with a less rural feel'. 'Mitigation proposed is Signage advising of PROW closures to be provided on access, so people do not walk part way down the PROW and have to turn back at point of closure (refer to the first iteration of the Environmental Management Plan (EMP)' [APP-184], and the magnitude of impact is assessed as negligible adverse with essential mitigation in place.

#### **Footpath PROW 90\_02 Hatfield Peverel 2**

An assessment of effects on this footpath is provided in Table A.8 of Appendix 13.3 of the Environmental Statement [APP-155]. The description of impact during construction states that 'The existing public footpath would be crossed by the proposed main compound and construction haul routes. Approximately 215m of public footpath would be temporarily diverted west (surfaced with wood chippings and segregated by Heras fencing), adjacent to a farm track to maintain access, although recreational amenity of the route would be reduced.' Mitigation proposed includes 'WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision'. The magnitude of impact during construction is assessed as minor adverse with mitigation in place. Once the proposed scheme is operational the existing footpath would join the newly realigned footway on Wellington Road, which is assessed as a negligible

neutral magnitude of impact.

### **WCH between Wellington Bridge, Hatfield Peverel to Lodge Farm Witham**

We note that BDC comment that for the Environmental Statement assessment 'we would suggest that the operational effects are Neutral not Moderate Beneficial as this WCH link is already in active use and there would be no improvement.'

It should be noted that our assessment assessed the magnitude of impact on this stretch of WCH provision as 'minor beneficial' (See 'Footway alongside northbound A12 carriageway between Hatfield Peverel and Witham', Table A.8 [APP-155]). It remains our view that there would be a minor beneficial effect for users of this route. As noted in our assessment (Table A.8 [APP-155]), the existing route is relatively narrow for a shared use path. The proposed new footway/cycleway provision would be widened to modern specification and would link with footway / cycleway provision around the new junction 21 arrangements. The route includes a bypass section for junction 21, offering more traffic free elements and overall, the cycleway/footway would be alongside a less busy road than the baseline arrangement close to the edge of the existing A12 and is judged to be minor beneficial.

### **Footpath PROW 90\_25 Hatfield Peverel 29**

We have identified this route from Essex County Council's online PROW interactive map as footpath 90\_29. This is assessed in Table A.8 [APP-155]. It should be noted that we have assessed the magnitude of impacts on this footpath as 'Negligible adverse' during construction and 'Major adverse' during operation (not 'slight beneficial' as stated in the Local Impact Report). The magnitude of impact on this route is assessed as major adverse during operation in accordance with DMRB LA112 due to the length of diversion required for users of the footpath wishing to get to/from Witham which would be in excess of 2km.

### **Olivers Bridge (Maldon Road) and Benton Bridge (Blackwater Rail Trail)**

We note BDC's comment that it would 'prefer if Oliver's Bridge would be upgraded to remain open at all times given the importance of retaining access for residents and businesses on Maldon Road' and 'The effects of the closure of Cycle Route 16 and the suitability of the proposed diversionary route appears not to have been assessed. In particular, an assessment of the traffic lights at Maldon Road and Blue Mills Bridge are not suitable for cycle diversion.'

The magnitude of impacts on Maldon Road (which passes under Oliver's Bridge) and the Blackwater Rail Trail (which passes under Benton Bridge) are assessed in Table A.12 [APP-155]. The assessment states that 'One footway would be maintained where safe and practicable while works to widen Oliver's Bridge take place (over approximately seven months) although there is potential that access would be suspended intermittently for safety reasons. Temporary lighting to the new route would be provided. The impact would be transient periods of inconvenience to a well-used route.' This means that we anticipate that the route would be kept accessible for the majority of the works. The Environmental Statement has assessed this magnitude of impact as 'Moderate adverse'.

The status of the Blackwater Rail Trail as a link route for the National Cycle Network is acknowledged in the baseline description of the route in Table A.12 where we also note that 'evidence from Strava Global Heatmap suggests that more cyclists use the parallel Maldon Road (B1018), indicating that the Blackwater Trail may generally be used recreationally.'

We note BDC's comment regarding the suitability of the proposed diversionary route not being assessed. Table A.12 [APP-155] provides a description of this proposed diversionary route. As noted in the baseline description, the roads which would form the diversionary route already appear to be well used by cyclists although we note that these roads may attract a different type of cyclist (i.e. road cyclists who may be more confident interacting with traffic).

Proposals for the diversion route while the NCN Link Route 16 is closed are set out in paragraph 9.10.7 of the Outline Construction Traffic Management Plan (OCTMP) [APP-272]. This requires that a 'suitable signed diversion route' would be implemented. An objective of the OCTMP is to 'ensure the safety of all road users, including walkers, cyclists and horse riders (WCH), as they approach, and travel through, the existing SRN and LRN and other routes affected as a result of the proposed scheme' and that the Construction Traffic Management Plan which will supersede the OCTMP would be drafted in consultation with the local highway

authority (Section 1.3 [APP-272]). The assessment in the Environmental Statement has assumed this standard mitigation would be in place as set out in paragraphs 13.9.13 – 13.9.14 of Chapter 13, Population and Human Health [APP-080].

### **Footpath PROW 121\_101 Witham 101 Brain Bridge**

We note that BDC agrees with our assessment within the Environmental Statement but comments ‘there is little proposed by way of mitigation. It is unclear how closure will be communicated to residents and users of the LNR.’ Details of how stakeholders would be notified of the proposed closure of access to the nature reserve are set out in section 3 of the OCTMP [APP-272] (refer to paragraph 8.1.5 of APP-272).

### **Little Braxted Bridge NCN 16 Witham 121**

We note that BDC agrees with our assessment within the Environmental Statement. For clarification, the proposed little Braxted Bridge would be designed for pedestrian and cycle use (not suitable for horse riders). BDC has commented that there has been a missed opportunity to create a straightened descent on south side of Little Braxted Bridge to match the north side.

The design of Little Braxted Lane overbridge presented as part of the DCO application is a preliminary design which will be progressed prior to construction. A minimum 5m external radius where ramp sections change direction on both the northern and southern ramps will be considered by the Applicant. A narrative matrix of decisions leading to the number of foldbacks has been shared with the Braintree District Council, explaining that as Little Braxted Lane falls towards the River Blackwater Valley, reducing the number of foldbacks would increase the overall length of the southern ramp. Additionally, as well as serving the existing cycling and walking movement from Little Braxted Lane to Motts Lane and the onward National Cycle Network route 16, it provides an opportunity for walkers using the proposed footpath south-west of the southern ramp to cross the proposed A12. For these reasons, the most compact ramp arrangement was sought.

## **Witham to Rivenhall**

We note that BDC agrees with the assessment for construction effects but considers that operational magnitude of impact should be 'minor positive'. To clarify, we have assessed this route in Table A.12 [APP-155] under the heading 'B1389/Eastways junction and existing A12 from chainage 22800 to 23600.' Where we have also assessed the operational magnitude of impact as 'minor beneficial'.

## **Oak Road crossing on detrunked A12 at Rivenhall**

We note that BDC agrees with our assessment within the Environmental Statement but that it considers there are 'missed opportunities to reduce the carriageway to one lane in each direction which would reduce the length of roads crossed by 50% thus encourage and further improve the potential health benefits of WCH in this area. A staggered crossing is not considered to be necessary for modelled traffic flows and a straight crossing would be preferred. This could be a significant benefit compared to the baseline.'

There is a notable level difference between the northbound and southbound carriageways of the existing A12 at this Oak Road crossing location, which if converted to a perpendicular ramp would not be appropriate for walkers and cyclists to overcome within the width of the existing central reserve. Whilst it is not expected that a staggered crossing arrangement is required at this location in terms of traffic delay and cycle times, a shallow longitudinal ramp linking the two surface crossings of the existing A12 carriageway directions will be required to overcome this level difference and hence a staggered crossing has been proposed. However, opportunities to negate the need to stagger the crossing will be considered as the preliminary design presented as part of the DCO application is progressed further.

## **Rivenhall 45, 46 and 36 Footpath 105\_36 Footpath 105\_46**

Our assessment of impacts on these footpaths is set out in Table A.12 [APP-155]. The magnitude of the impact of the realignment of



Rivenhall 45 is assessed as 'minor adverse', on Rivenhall 46 as 'minor adverse' (on the basis that the existing route appears to be rarely used) and impact on Rivenhall 36 as 'major adverse' as it would be closed for the entire construction period. The proposal to create a circular route around the attenuation pond is assessed as 'minor beneficial'.

### **Snivellers Lane Footpath 92\_27 Kelvedon 27**

We note BCD's view that there is a missed opportunity to reduce the number of zig-zag foldbacks to improve attractiveness to cyclists.

The design of Snivellers Lane overbridge presented as part of the DCO application is a preliminary design which will be progressed prior to construction. A minimum 5m external radius where ramp sections change direction will be considered by the Applicant, on both the northern and southern ramps.

A narrative matrix of decisions leading to the number of foldbacks on this bridge has been shared with the Braintree District Council, explaining that as the bridge serves two parallel walking and cycling routes either side of the proposed A12, as well as the perpendicular Snivellers lane/footpath 92\_27/footpath 92\_32 desire line, the most compact ramp arrangement was sought to minimise the length of detour for users from these directions.

### **Footpath PROW 246\_19 Kelvedon 30**

For clarification we have assessed the magnitude of impacts on this PROW as minor adverse during construction due to realignment and associated impact on amenity, while we have assessed the magnitude of impact as minor beneficial during operation due to the upgrade to bridleway resulting in serving cyclists and horse riders as well as walkers (Table A.16 [APP-155]).

### **Highfields Overbridge (Kelvedon) (Maldon Road)**

For clarification we have assessed the magnitude of impacts on Highfield Overbridge. The assessment is against 'Maldon Road and Highfields Lane and FP 246\_2, 246\_19 and 92\_26' and we have assessed the magnitude of impact of the overbridge demolition, footpath diversion and temporary closure as 'moderate adverse' (Table A.16 [APP-155]).

### **Ewell Overbridge Kelvedon 25**

For clarification we have assessed the magnitude of impacts on Ewell Overbridge. The assessment is against 'Ewell Hall Chase (FP 92\_15) and Ewell Hall Chase overbridge (FP 92\_25)' and we have assessed that the impact of the overbridge demolition, footpath diversion and temporary closure would be 'minor adverse' magnitude (Table A.16 [APP-155]).

### **New Footpath link between Kelvedon 15 and Inworth Road**

We note that we have not specifically assessed the magnitude of impact of the proposed new PRoW link between Footpath Kelvedon 15 and Inworth Road as our assessment largely focused on the impacts on existing routes. We agree that this is a moderate beneficial magnitude of impact in terms of providing improved access to open countryside.

### **Hinds Bridge (Inworth Road)**

The Applicant notes BDC's view that there is a missed opportunity to link the strategic development at Feering with wider footpath routes south of the A12. The Applicant has considered walking routes in the context of strategic development within the local plan. PROW 145\_7 and 92\_41 are proposed to be diverted around the proposed junction 24 roundabout and slip roads, to provide a traffic free walking link between the B1023 and the replaced Ewell Hall Bridge. Whilst the Applicant is in discussions with Essex County Council regarding the cross-section of the proposed junction 24 underbridge, and will seek the County Council's view on providing

footway provision within junction 24 given potential development in the area, the Applicant is of the view that the replacement Ewell Hall bridge is the appropriate footpath route over the A12.

### **Prested Hall Access Road Footpath PROW 78\_15 Feering 18**

For clarification we have assessed the magnitude of impacts on Footpaths 78\_15 and 78\_18 in Table A.16 [APP-155]. We have assessed the construction impact on 78\_15 as 'moderate adverse' while no direct impact is anticipated on 78\_18 during construction. We have assessed the operational impact on 78\_15 as major adverse in accordance with LA112 due to the large increase in length of footpath due to the diversion.

### **Feering to Marks Tey**

We have assessed the magnitude of impact on this route against the description 'Existing footway/cycleway London Road, Feering' in Table A.16 and in Table A.20 [APP-155] against 'Footway alongside existing A12 London Road (southbound carriageway) from Wishing Well Farm access to Marks Tey'. For both sections we have assessed the construction impacts as 'moderate adverse' due to the level of disruption anticipated. However, for operation we have assessed the impact as 'minor beneficial' for London Road, Feering as while the overall length and connectivity would not change, the route would be wider. A moderate beneficial impact is predicted for the section between Wishing Well Farm access to Marks Tey due to the provision of new crossing points on the de-trunked road.

We note BDC's comments on the adequacy of the DCO in relation to walkers, cyclists and horse riders (WCH). We do not consider that BDC's overall conclusions are significantly different from the assessment of accessibility presented in the Population and Human Health chapter [APP-080] and its Appendix 13.3 [APP-155].

## **B Assessment of Impacts and Adequacy of Response**

### **13. Road drainage and water environment**

The Applicant has noted that Braintree District Council (BDC) defer to Essex County Council (ECC) as Lead Local Flood Authority with regards to proposed scheme surface water drainage and flood risk mitigation proposals.

The Applicant has assessed Braintree Local Polices where relevant at Appendix F of the Case for the Scheme [APP-252] to demonstrate compliance with the Local Plans Policies. Further information on local plans policies is available in this document's response to the Statutory Development Plan.

National Networks National Policy Statement Accordance Table of the Case for the Scheme [APP-250] as this is the relevant planning policy given the proposed scheme was submitted as a Development Consent Order under the 2008 Planning Act (2008 Act). The National Planning Policy Framework is a material consideration under the 2008 Act and as such the applicant as prepared an assessment against the relevant Development Plan policy in the Case for the Scheme - Appendix F: Local Planning Policy Accordance Tables [APP-252].

With regard to water pollution assessment and mitigation strategy, the Applicant would like to make BDC aware that a water quality assessment was undertaken for the proposed scheme road drainage the results of which can be found in the Water Quality Assessment Report [APP-158].

## **B Assessment of Impacts and Adequacy of Response**

## **14. Climate Change**

The Applicant has assessed Braintree Local Polices where relevant at Appendix F of the Case for the Scheme [APP-252] to demonstrate compliance with the Local Plans Policies. Further information on local plans policies is available in this document's response to the Statutory Development Plan. LPP71 and LPP72 are within the Applicant's assessment.

It is noted that the main concern of the Braintree District Council is that the proposed scheme should demonstrate that the principles of climate change mitigation and adaptation have been adopted, particularly at the main compounds and the traffic management and logistics compound.

However, as climate impacts have been considered within the DCO application for the scheme as a whole (including those associated with site compounds), a separate climate assessment is not proposed to be undertaken. Furthermore, mitigation measures to both reduce the magnitude of GHG emissions associated with construction phase activities and the vulnerability of construction phase activities to climate related impacts have been proposed within paragraphs 15.10.6 and 15.10.7 of Chapter 15: Climate [App-082], respectively. These measures are relevant to the proposed scheme as a whole (including site compounds).

The applicable guidance for National Projects is derived by National Highways Design Manual for Roads and Bridges (DMRB), and as such a BREEAM rating is not required. Furthermore, no non-residential buildings with a floor area in excess of 500sqm are proposed.

## **B Assessment of Impacts and Adequacy of Response**

### **15. Other Matters - Road network and traffic - Development Plan Policies**

The Applicant notes the Braintree District Council's comments.

An assessment of the proposed scheme against the relevant planning policies of the Braintree District Local Plan 2033, is provided in Appendix F to the Case for the Scheme [APP-252].

Where the Applicant considered the policy not to be relevant to the proposed scheme, for example Policy LPP43, the Applicant has not included these policies within the accordance table. Here, this decision was based on the policies not being related to the scope of the proposed scheme.

The Applicant notes some of the proposed diversion routes use Protected Lanes. However, it is not considered that the diversion routes would have a negative impact on the setting of the Protected Lanes and the Applicant does not propose to widen any Protected Lanes as the diversion would be for an alternative route to the main diversion for the local traffic.

The Station Road temporary diversion route has been determined as the most appropriate as this avoids obstructions such as low height bridges on Terling Hall Road and Blunts Hall Road. The Applicant acknowledges that part of this diversion route includes both Witham Road and Terling Road which are Protected Lanes. An alternative diversion route which continued north along Terling Road and Hatfield Road was considered however, this option was not considered suitable as it was a longer diversion which would pass through the village of Terling.

For further information on the Station Road signed diversion route see paragraph 5.9.37 to 5.9.44 of the Outline Construction Traffic Management Plan [REP2-003] and Outline Construction Traffic Management Plan - Appendix A: Proposed Diversion Routes Part 2 [APP-274].

#### **15. Other Matters - Road network and traffic - Key Local Issues**

The Applicant has undertaken detailed analysis of the forecast traffic at the B1019/B1137 junction (the Duke of Wellington roundabout), and proposals for a Maldon Link Road as outlined in Chapter 3 of the Environmental Statement [APP-070]. In response to requests from Essex County Council, the Applicant has provided a capacity note to show what effect a future link might have on junction 21.

With regard to facilitating a future Maldon Link Road, the Applicant has had several letter exchanges with Essex County Council on this matter and these can be found in Appendix A of the Applicant's Response to Relevant Representations [REP1-002].

With regard to National Highways contributing to the cost of developing a feasibility study to identify a preferred option for a bypass of Hatfield Peverel, the Applicant has provided a detailed technical report in Appendix 3.2 of the Environmental Statement [APP-094]. This concludes the Applicant's work on the matter.

#### **15. Other Matters - Road network and traffic - Construction traffic**

The Applicant plans to mitigate the impact on the local road network (LRN) by keeping construction HGVs on the strategic road network (SRN) where possible as well as utilising internal haul routes.

As detailed in Section 7 of the Outline Construction Traffic Management Plan (OCTMP) [REP2-003], purpose built haul roads and temporary access point would be built from the SRN, where possible. Where this is not possible the Applicant has proposed permitted routes, permitted routes with restrictions, and excluded routes (see paragraph 7.1.5 of the OCTMP [REP-003] for definitions) on the LRN. Please refer to Appendix B of the OCTMP [REP2-004] for plans of these routes. For further information on the borrow pit accesses refer to section 15. Other Matters - Road network and traffic - Construction compounds.

Standard mitigation would occur as a matter of course due to legislative requirements or standard sector practices, and these measures are included within the first iteration of the Environmental Management Plan [APP- 184]. Some examples of standard mitigation can be found in paragraph 12.10.11 of Chapter 12: Noise and Vibration of the Environmental Statement [APP-079]

The traffic management recovery compound on Gershwin Boulevard would be operational 24/7 as it would be required to recover broken down vehicles of vulnerable road users within the proposed scheme limits of the A12 mainline. This location has been determined considering the perspective of the road user due to the close proximity to local amenities should they require them, its location near to the centre of the proposed scheme allowing compliant response times, this location also mitigates the requirement for traffic management vehicles to enter local towns and villages. Further detail on vehicle movements can be found in the Applicant's response to section 15. Other Matters - Road network and traffic - Construction compounds.

Advanced works would be undertaken prior to consent for the Development Consent Order (DCO) application being granted, and would be secured through separate planning permissions and landowner agreements outside of the powers contained in the DCO. Advanced works would primarily comprise archaeological investigations, advanced ecology work, and diversions of key utilities.

As stated in paragraph 2.6.3 of Chapter 2: The Proposed Scheme of the Environmental Statement [APP-069], advanced works have been included in the draft DCO and assessed as such in the Environmental Statement.

For further information on advanced works see section 2.6 and Table 2.8 of Chapter 2: The Proposed Scheme of the Environmental Statement [APP-069].

All compounds are included in the DCO Application. These are described in the Environmental Statement – Chapter 2: The Proposed Scheme [APP-069] at 2.6.16 to 2.6.42 and shown on the Construction Phase Plans [AS-018 and AS-019]. Ahead of construction, the first iteration Environmental Management Plan [APP-184] and first iteration Environment Management Plan – Appendix C: Construction Compound Management Plan [APP-187] will developed to consider the environmental effects of all of the construction compounds.

The Applicant is planning to submit a planning application to Braintree District Council for an initial, advanced works, junction 20b main compound separately. This initial compound would expand in size, upon the granting of the DCO, with this expansion including but not limited to logistics yards and batching plants.

In this instance, the construction of the junction 20b main compound would be classed as advanced works and be delivered outside the powers of the DCO, powers are included within the draft DCO [AS-020] to deliver these advanced works.

### **15. Other Matters - Road network and traffic - Detrunking**

The Applicant notes Braintree District Council's view regarding the proposed de-trunked sections of the A12. The Applicant can confirm it received the options explored by Essex County Council on 7 February 2023. Furthermore, several letters which have been exchanged between the Applicant and Essex County Council. The exchanges can be found in Appendix A of the Applicant's Response to Relevant Representations [REP1-002].

The proposed arrangement for the de-trunked roads has not yet been finalised as this will be undertaken in detailed design in liaison with Essex County Council. However, all of the required safety governance has been undertaken during the development of the



design to date. This will continue in detailed design including a Walking, Cycling, Horse Riding Review and Road Safety Audit by a team independent of the design team.

National Highways will continue to engage with Essex County Council on detrunking.

Lastly, Braintree District Council may wish to view the Applicant's responses on detrunking to Essex County Council's Local Impact Report which can be found in paragraphs 8.2.1-8.2.9, 8.3.34-8.3.42 and 8.3.76-8.3.80

### **15. Other Matters - Road network and traffic - Diversions routes**

The Applicant notes the comments raised by the Braintree District Council with regards to proposed diversion routes. A more detailed assessment of the number of closures of the A12 mainline would be available in the Construction Traffic Management Plan prepared prior to the start of construction, as detailed in Paragraph 4.1.6 of the OCTMP [REP2-003].

The Applicant has considered other diversion routes for when Station Road Bridge is closed. The route selected is viable as this avoids obstructions such as low height bridges. The Applicant acknowledges the Braintree District Council's concerns on the use of this route, and a suite of options have been detailed in Section 5.9 and Table 5.1 of the Outline Construction Traffic Management Plan (OCTMP) [REP2-003] to reduce the number of journeys on this diversion route. Some of these alternatives are, pedestrian access via the temporary bridge, via Bury Lane and via the temporary car park. Those with additional accessibility needs would use the shuttle bus.

The Applicant notes that users of the Station Car Park travelling from the north will be able to do so in the same way as they currently do. It is not expected that users of the Station Car Park travelling from the south (and therefore unable to cross Station Road when it is closed) would divert and use the signed diversion route to access the existing car park. This is due to the additional 6.5-mile journey. It is predicted they would use one of the suite of options that have been detailed in Section 5.9 and Table 5.1 of the Outline Construction Traffic Management Plan (OCTMP) [REP2-003]

It is correct that delivery vehicles would generally be expected to use the signed divisions. As set out in Table 5.1 of the OCTMP [RE2-003] the majority of residential vehicles would be expected to use the temporary vehicular, pedestrian and cyclist connection between the Hatfield Grove and Bury Farm Estates. Therefore, it is anticipated that only a small number of the vehicles currently using Station Road would need to use the signed diversion route whilst Station Road is closed. Suitable signage would be implemented along the diversion route to notify other roads such as Blunts Hall Road as being unsuitable.

The Applicant notes the concerns raised by the Braintree District Council with regards to impacts from noise and vibration from diversion routes. The strategic diversion route for the proposed scheme is the only strategic diversion route available. The Applicant would look to mitigate the number of closures where possible by planning multiple works to be undertaken in a single road closure as detailed in paragraph 4.1.7 of the OCTMP [REP2-003].

Suitable diversion signage is key to directing traffic along a diversion route, due to the strategic diversion route being in place for the duration of the construction programme, semi-permanent signage would be erected along the diversion route. The Applicant would also implement other measures to ensure traffic can follow the diversion route as detailed in Paragraph 4.3.6 of the OCTMP [REP2-003] "The proposed scheme would use technology-based signals to identify which section of the carriageway would be closed at any one time. Advanced warning of road closures and diversion routes will be communicated to all affected road users and stakeholders". Information regarding road closures would be placed at strategic areas such as at ports and other major trunk roads, giving road users as much notice as possible, and to encourage other major trunk roads to be used where possible.

Additionally to this a communication strategy would be developed as detailed in Section 3 of the OCTMP [REP2-003] utilising communication methods such as letter drops and social media etc. to notify road users and local residents of upcoming works. Traffic management forums and user groups forums would also be set up as detailed in Section 3.2 and Table 3.1 of the OCTMP [REP2-003].

The purpose of these forums would be to provide relevant information with regards to traffic management to affected stakeholders, to seek input into the proposals as they are developed and feedback on the implementation of proposals. The user group forums will

form a key part of the strategy for advance notification of restrictions and closures.

The Applicant appreciates the importance of public transport and has detailed this in section 5.5 of the OCTMP [REP2-003] and has listed potentially affected bus routes in Appendix C [APP-276] of the OCTMP [REP2-003]. The Applicant would also encourage that representatives of the bus services attend the Public Transport Forum as detailed in Table 3.1 of the OCTMP [REP2-003], where impacts on bus routes would be mitigated where possible.

The detailed design of utilities diversions that are required for the proposed scheme are currently being developed. The Applicant looks forward to engaging with the Braintree District Council further once this information becomes available.

#### **15. Other Matters - Construction compounds**

The traffic management and logistics compound proposed on Gershwin Boulevard is recovery base 2 of 5 as shown in table 5.5 of the Outline Construction Traffic Management Plan (OCTMP) [REP2-003] however it would be the main recovery compound for recovering vehicles and affected members of the public if required. It will also be used for recovery vehicles operating between junction 19 and junction 22 on the north and south bound carriageways, therefore the compound would be operational 24/7 to ensure quick response times at any time, reducing any delays on the A12 mainline due to a broken down vehicle or road traffic collisions.

All vehicular parking for this compound would be provided within the extremities of the compound, no traffic related with the compound would park on the local road network.

Access to the traffic management recovery compound on Gershwin Boulevard (Recovery base 2) would be from junction 21, B1389 and Gershwin Boulevard to the traffic management compound.

Sheet 7, 8 and 9 of Appendix B Permitted and Excluded routes for construction vehicles of the OCTMP [REP2-004], show that

access for construction HGVs is not permitted through the centre of Witham, additionally to this there is a 7.5 tonne weight limit through Witham Town centre. Sheets 6 and 7 of Appendix B Permitted and Excluded routes for construction vehicles of the OCTMP [REP2-004] show that the main access will be via the permitted route from junction 21, B1389 and Gershwin Boulevard to the traffic management compound. The traffic accessing and egressing the compound would mainly be the recovery vehicle for an incident on the A12 mainline, which is also supported by an additional four recovery bases as detailed in Table 5.5 of the OCTMP [REP2-003] and for shift changes. The Applicant therefore does not foresee that additional traffic on the local road network to this compound will be significant. Therefore, the Applicant does not see any significant impact of noise, vibration or air pollution. For more information see paragraph 12.9.7 in Chapter 12: Noise and Vibration of the Environmental Statement [APP-079]

For clarification the majority of construction traffic from the A12 southbound would gain access to the main compound using the J20b southbound off slip turning right over Wellington Bridge. Refer to Sheet 5 of Appendix B Permitted and Excluded routes for construction vehicles of the OCTMP [REP2-004] which shows the Duke of Wellington roundabout is a restricted route.

The Applicant has proposed two main mitigation measures to reduce the impact of construction traffic accessing the J20b main compound via Wellington Bridge. The first one being the construction of the temporary road shown at Work No. T14 on Sheet 6 of the Temporary Works Plans [AS-004], this temporary road would be the main route for all vehicles accessing the compound from the northbound carriageway. The second mitigation measure is to construct a temporary slip road shown as Work No. T19 on sheet 6 of the Temporary Works Plans [AS-004], this temporary slip road would be used for Heavy Goods Vehicles (HGVs) accessing the junction 20b main compound from the southbound carriageway and access over Woodend Bridge and junction 21 accessing the compound via the temporary road Work No. T14.

Through detailed design the Applicant is looking to bring the construction of the junction 21 forward in the programme which would bring phase 4 of the junction 20b compound access/egress phasing forward therefore reducing the duration Wellington bridge access would be used for construction traffic and as such would reduce potential impact on the local road network.

The material from the Borrow Pit E Work No. T17 shown on sheet 6 and Borrow Pit F Work No. T21 shown on sheet 7 of the Temporary Works Plans [AS-004], would be used for the local fill of the proposed junction 21. As detailed in paragraph 2.7.1 of the

Borrow Pit Report [APP-278], construction traffic trips on the wider public road network would be reduced in part through obtaining material directly from borrow pits adjacent to the required areas and other measures, such as haul roads. Further information on the borrow pit transport assessment can be found in section 2.7 of the Borrow Pit Report [APP-278].

As shown in Table 5.3 of the Borrow Pit Report [APP-278], the preferred location for the material proposed to be extracted from Borrow Pit I would be used for the construction of the proposed junction 22 which would be transported off line using the haul road shown at Work No. T26 crossing the existing A12 using the temporary bridge Work No. T31, both works are shown on sheet 11 of the Temporary Works Plans [AS-004], and for the construction of the proposed mainline between Rivenhall End and junction 23 using Work No T34 to access the area as shown on sheet 12 of the Temporary Works Plans [AS-004], transporting majority of the material offline via internal haul roads would significantly reduce the impact on the local road network.

As shown in Table 5.3 of the Borrow Pit Report [APP-278], the preferred location for the material proposed to be extracted from Borrow Pit J would be deposited in the junction 24 embankments and the embankments between junction 23 and 25. Both of these work areas would be accessed by internal haul routes shown as Work No. T37, T39, T46 and T46 on sheets 13, 14 and 15 of the Temporary Works Plans [AS-004].

Where access to the road network is required, the Applicant would endeavour to create temporary access directly on to the A12 mainline to reduce impacts on the local road network.

The Applicant acknowledges the comments made by the Braintree District Council on vehicle movements which will be further developed in the Construction Traffic Management Plan (CTMP) as detailed in paragraph 1.3.1. The OCTMP [REP2-003] will be superseded by the Construction Traffic Management Plan ahead of commencement of the construction phase of the proposed scheme. The Construction Traffic Management Plan would be drafted in consultation with the local highway authority and submitted to the Security of State for approval. The Applicant looks forward to further engagement on this point.

## 15. Other Matters - Employment

The Applicant notes the comment about the application documents not specifying whether the loss of agricultural land would result in loss of employment. The methodology applied for the Population and Human Health assessment in Chapter 13 of the Environmental Statement [APP-080] is set by National Highway's standard, the DMRB LA 112 Population and Human Health. LA 112 provides a methodology for a land use assessment and therefore the focus is on physical impacts on land use and not the loss of employment.

The reference to 1,500 peak full time equivalent construction jobs appears to be paraphrased from paragraph 16.7.53 of Chapter 16 Cumulative Effects Assessment in the Environmental Statement [APP-083]. For clarification, we have estimated that there would be 1,500 construction workers involved at peak construction (assumed to be the year 2025), of whom around 20% (approximately 300 staff) would be local. It should be noted that many of these workers would already be employed with supply chain organisations, and therefore this does not represent an estimate of the new jobs expected to be generated, which is uncertain, as noted by Braintree District Council.

**15. Other Matters - Road network and traffic -  
Cadent Gas Diversion**

The Applicant notes Braintree District Council's comments.