





# A428 Black Cat to Caxton Gibbet Road Improvement Scheme

Planning Inspectorate reference: TR010044

# Joint Written Representations

Submitted by:

Cambridgeshire County Council
Huntingdonshire District Council
South Cambridgeshire District Council

August 2021

Document reference: CLA.D1.WR

#### 1. INTRODUCTION AND EXECUTIVE SUMMARY

- 1.1 Cambridgeshire County Council (**CCC**), Huntingdonshire District Council (**HDC**) and South Cambridgeshire District Council (**SCDC**) are host authorities for the A428 Black Cat to Caxton Gibbet Road Improvement Scheme (the **Scheme**) in respect of which Highways England (the **Applicant**) has submitted its application for a Development Consent Order (**DCO**). CCC, HDC and SCDC are Interested Parties for the purposes of the Examination of the DCO application.
- 1.2 This document contains the combined written representations of CCC, HDC and SCDC (hereinafter together referred to as the **Councils**) unless otherwise specified. It should be read alongside the Local Impact Report to be submitted jointly by the Councils and the joint Statement of Common Ground (**SoCG**) with the Applicant.
- 1.3 The Councils would like to take this opportunity to reiterate their strong support for the Scheme in principle. The Scheme is considered to be critical to the delivery of the ambitious growth agenda for the Councils' area(s). It is one of several nationally significant infrastructure projects which collectively support the economic agenda for growth as part of the Ox-CAM Arc and will provide a multimodal local and regional transport network including East West Rail. The Councils also recognise the economic recovery potential the Scheme could facilitate.
- 1.4 This written representation is based on the Councils' current understanding of the information comprised in the DCO application for the Scheme at the time of writing. The Councils' position on individual topics may therefore change and/or be supplemented as the Examination progresses particularly if there is meaningful engagement with the Applicant on key topics of concern. New points may also be raised as the Councils' understanding of the Scheme evolves.
- 1.5 Within the Application it seems that impacts aren't always clearly articulated so it is hard to tell what mitigation is required. We need to understand this through the Examination so the Councils can fully support the scheme.
- 1.6 The Applicant provided the Councils with a draft Statement of Common Ground on 30 July 2021. In light of the other calls on the Councils' time prior to Deadline 1 of the Examination, the Councils have been unable to review and provide a comprehensive set of comments in the time available. Matters should therefore be considered to be under discussion at this time. The Councils reiterate their willingness to engage substantively with the Applicant on each of the issues identified and remain optimistic that a more complete Statement of Common Ground can be presented to the Examination at later deadlines.
- 1.7 The main topics of concern for the Councils are:
  - 1.7.1 Traffic modelling (section 2)
  - 1.7.2 Highway asset management (section 3)
  - 1.7.3 Highway design (section 4)
  - 1.7.4 Highway network impact during construction (section 5)
  - 1.7.5 Non-motorised users (**NMU**) and public rights of way (**PROW**) (section 6)
  - 1.7.6 Biodiversity and ecology (section 7)

- 1.7.7 Landscape and arboriculture (section 8)
- 1.7.8 Noise (section 9)
- 1.7.9 Air quality (section 10)
- 1.7.10 Contaminated land (section 11)
- 1.7.11 Cultural heritage and archaeology (section 12)
- 1.7.12 Minerals and waste (section 13)
- 1.7.13 Flooding and drainage (section 14)
- 1.7.14 Climate change (section 15)
- 1.7.15 Digital connectivity (section 19).
- 1.8 These points are discussed in more detail in the sections below, along with other comments that the Councils have on the DCO application.

### 2. TRAFFIC MODELLING

- 2.1 The Councils have concerns with the methodology used for the traffic modelling, in particular:
  - 2.1.1 Some traffic flows and routing in the base and forecast year strategic models appears unrealistic and insufficient information has been supplied to CCC as the local highways authority (**LHA**) to enable it to be checked. In particular, the Applicant has provided a cordoned traffic model, which does not allow routing to be checked against the larger area model. The key routes of concern are detailed at sections 2.3.1 to 2.3.3 below.
  - 2.1.2 Modelled traffic flows highlight areas of concern in relation to the local road network. In addition, some consequential impacts on the local road network need to be assessed for the effects on the local network and communities to be understood. The key construction traffic flows of concern are detailed at sections 2.4.1 to 2.4.7 below.
  - 2.1.3 Strategic model flows have been used directly to build the local junction models, but these flows have not been validated for this purpose. Strategic model flows are not sufficiently detailed to allow accurate representation of existing conditions or modelling of flows at local junctions, resulting in effects being diluted.
- 2.2 In overview the Councils request that:
  - 2.2.1 a revised traffic model is provided with the corrections / information requested at sections 2.3.1 to 2.3.3 and 2.4.3 below;
  - 2.2.2 the revised traffic model is compatible with CCC's area model to allow validation:
  - 2.2.3 an assessment of the consequential impacts noted at 2.4.1 and 2.4.2 is provided;

- 2.2.4 an updated suite of local junction models and an accompanying narrative is provided addressing the comments at section 2.5 below; and
- 2.2.5 the modelling of construction traffic be revisited to take into account CCC's comments at sections 2.7 to 2.13 below.
- 2.3 The following sections provide more detail on the three main areas of concern noted above although the Councils note that the impacts of the scheme are far reaching on the local network, residents, and businesses, both during construction and operation. Main concerns with the base year strategic model traffic routing and flows are:
  - 2.3.1 No traffic travelling eastbound between the A428 and M11 southbound is using M11 junction 13 in the morning peak. This traffic instead cuts through Coton and this effect is likely due to modelled congestion on the M11. In reality this routing is unlikely due to the nature of the road through Coton, which is narrow and subject to a number of different speed limits. This issue is present in the base year model and this is not supported by the available count data. Therefore this is a movement that is not being made in the base year but is a result of the congestion in the model on the M11. This effect is amplified in the forecast year scenarios. Instead, traffic looking to head south down the M11 continues along the A1303 Maddingly Road and uses M11 J13. An updated model is required.
  - 2.3.2 Traffic is using the B1040 throughout the full extent of the cordoned model and impacting on Eltisley. Due to the coverage of the cordoned model we are unable to determine the full origin and destination of these trips which are present in the base year and increase in the Do Minimum and Do Something scenarios.
  - 2.3.3 There are no modelled turning movements at the Caxton Gibbet junction between A1198 northern arm and the A428 western arm which is of particular concern as this is the eastern end of the proposed scheme. This effect is also observed in the forecast year scenarios. CCC requests that an updated traffic model is provided with these turning movements included.
- 2.4 Impacts of the scheme on particular areas of the local road network are of concern and some consequential impacts need to be assessed so that they can be understood in more detail, specifically:
  - 2.4.1 Great North Road, St Neots, Southbound on the approach to Wyboston Junction as traffic reroutes from elsewhere in St Neots to access both the old A428 or the A1 southbound. This increase adds approximately 24% to traffic volumes in the peak periods. Therefore, CCC requires an assessment of the adjacent junctions on Great North Road up to and including the junction with Nelson Road.
  - 2.4.2 Cambridge Road, St Neots, East bound on the approach to A428 junction the modelling predicts an increase of approximately 200 passenger car units (**PCU**) in the peak periods to the stretch between Station Road and the A428 junction. Therefore, CCC requires the junctions on the local road network to be assessed to ensure that the proposed increase in traffic can be accommodated.

- 2.4.3 Girton Interchange the eastbound merge of A428/M11 is over capacity in future years and Highways England propose to monitor this situation. The westbound A14/M11 and A14/A428 diverges are incorrectly represented with reduced capacity for these movements modelled, effectively reducing the attractiveness of the scheme. CCC requests that these inaccuracies are corrected in an updated model. CCC also requests that a solution is agreed between the Applicant and CCC should monitoring highlight an issue at this interchange that requires rectification.
- 2.4.4 Coton all traffic travelling between A428 and M11 in the model avoids using M11 junction 13, instead travelling through Coton. This is due to modelled congestion on M11 between junctions 12 and 13 causing traffic to route on an unsuitable minor road. This is not a movement seen in the available traffic data. As this is a result of the coding of the M11 in the model HE need to monitor traffic levels through Coton to show that in reality this suggested impact of the scheme is not happening in reality.
- 2.4.5 A1198 south of Cambridge Road junction the scheme attracts long distance traffic from A428 west of Black Cat junction to travel south on the A1198 towards Royston in the morning and vice versa in the evening peak hours. Due to the size of the cordoned model supplied the origins and destinations of this traffic cannot be verified for reasonableness. A revised traffic model which is compatible with the wider area is requested for this verification.
- 2.4.6 Dry Drayton the scheme increases traffic through Dry Drayton during both morning and evening peak hours. This is a direct result of the scheme and therefore HE will need to devise a programme of mitigation to reduce the impact of this traffic on the settlement. This mitigation should be agreed with CCC and the Parish Council.
- 2.4.7 Madingley the scheme increases traffic travelling through Madingley during the morning and evening peak hours. This is a direct result of the scheme and therefore HE will need to devise a programme of mitigation to reduce the impact of this traffic on the settlement. This mitigation should be agreed with CCC and the Parish Council.
- 2.5 The Applicant has built a number of detailed local junction models to support the application and while most models are built to acceptable standards, we have the following key concerns:
  - 2.5.1 The majority of the local junction models do not have base year models to demonstrate the ability of the models to replicate existing conditions accurately.
  - 2.5.2 Some of the local junction models have base year models that use flows taken directly from the base year of the strategic model rather than from observed count data. The strategic model is not validated to turning movement level of detail so flows from it are not appropriate for use in this way. Independent CCC analysis of observed versus strategic model turning flows at key junctions showed large discrepancies underlining the inappropriateness of this approach.
  - 2.5.3 Heavy goods vehicle (HGV) flows used in the local junction models have been taken from the strategic model rather than being based on observed

counts. Furthermore, HGVs modelled in the micro-simulation models have not been split by observed rigid and articulated goods vehicle proportions. This is important because of the different lengths and acceleration/deceleration characteristics of rigid and articulated vehicles.

- 2.5.4 All the junction models use forecast year traffic flows taken directly from the strategic model. This is not an industry standard approach because, as noted previously, the strategic model is not validated to turning movements, so flows from it are not appropriate for use in this way.
- 2.5.5 The following section sets out further key issues with the assumptions included in the modelling that need to be addressed by the Applicant:
  - (a) Cambourne Junction (LinSig)

Most of the geometric inputs to the LinSig models are overestimated and this increases saturation flows which directly affect junction capacity. The Applicant should review all input geometric data to the models in terms of road widths, turning radii and use of nearside lanes.

(b) Madingley Mulch (ARCADY)

The model shows this junction to be operating well within capacity. Local observations (pre-Covid) indicated exit arm capacity restraint on A1303 Madingley Road towards Cambridge during AM peak due to signals at M11 junction 13 and queuing traffic beyond the junction into Cambridge city centre.

- (c) Wyboston junction (Arcady)
  - (i) Some observed u-turning traffic has been removed from the model and an explanation as to why that has been done is required.
  - (ii) The morning peak hour model has been built for the hour 07:00-08:00 but examination of the count suggests the busiest hour is 08:00-09:00. An explanation of peak hour selection is required.
  - (iii) Forecast year flows appear to be a combination of counted turns for the Premier Inn access and flows taken directly from the strategic model. Direct use of strategic model flows is not accepted.
  - (iv) Some of the geometric measurements used in building the model are over-estimated, for example approach road widths, while some flare lengths have been underestimated. Documentation suggests the model was built using OS kerb data. CCC would further suggest aerial photo information is used as there is significant hatching at this junction and clearly marked road edging.
  - (v) An independent model run for 2040 AM peak, using revised geometries and future year flows (derived using industry standard methods) shows a marked deterioration

- in junction performance compared with the Applicant modelling. This junction needs to be reassessed.
- (vi) Future year performance of this junction suggested by the Applicant is therefore not accepted.
- 2.5.6 Use of Transport for London assumptions are not supported as these were derived for assessing traffic conditions in London. This includes very short standstill distances which may lead to queues being underestimated. The modelling should use the default values in the model unless there is local information available to indicate that there needs to be a bespoke set of inputs as is the case with the TfL parameters which are specifically defined to cater for the traffic conditions in London.
- 2.5.7 The results of the models presented in the Vissim Model Technical notes include speed heat maps and journey times but more information is required on such things as changes in turning movements and queues/delays at key junctions. This is needed to enable the impact of the scheme to be assessed.
- 2.5.8 Vehicles overlap in the models which overestimates the capacity at a junction.
- 2.5.9 Some junction results are based on too few runs of the model.
- 2.6 Due to the concerns with the detailed junction models noted above, the Councils are unconvinced at this time whether the new junctions are of appropriate design or whether existing junctions will be able to accommodate future year traffic flows.

#### Construction impacts

- 2.7 The Applicant undertook modelling to assess the impact of the construction of the scheme (App 241 Transport Assessment part 1 Appendix 9.1 TN43) (APP-241). This modelling made use of the 2025 future year model as the scheme is predicted to be open by 2025. The modelling has been undertaken for each of the 4 planned phases of construction. The changes made to the model to assess the construction impact include:
- 2.8 The assessment has two elements to it, these are as follows:
  - 2.8.1 Construction traffic; and
  - 2.8.2 Traffic diverted due to the impact of each phase of construction.
- 2.9 Please refer to the Council's comments on this matter in the First Written Questions, and also the Local Impact Report. The impacts of diverted traffic due to construction and subsequent operation are of great importance to the Councils and need to be understood in detail, and appropriate mitigation put in place.
- 2.10 Construction traffic this has been included in the model through the introduction of new use classes in the model. The routing of construction traffic, especially HGV traffic, is controlled by the introduction of "significant" time penalties added on the routes that the Applicant does not want HGV traffic using. This is a reasonable approach, but greater information is required on the location and nature of the time penalties imposed on construction traffic.

- 2.11 Diverted traffic when it comes to modelling of the impact of general traffic that reroutes as a result of each phase of development, no limits or restrictions have been introduced to the model and as a result traffic is allowed to use any route available in the model meaning that the impact is widespread throughout the model and includes significant increase in traffic on unsuitable routes, such as the road through Yelling and Toseland. This is not somewhere that CCC would wish to see increased traffic flows due to the nature of the road. The road through Toseland and Yelling is very narrow and there is an almost ninety-degree bend that means it is very difficult for two vehicles to pass each other especially if one of the vehicles is a HGV.
- 2.12 The design of the construction phases should be done in such a way that the volume of traffic that would be expected to use the A428 is accommodated rather than allowing traffic free rein on the routes to be used for the duration of the scheme construction (September 2021 to May 2025).
- 2.13 The use of the strategic model to assess the impact of construction means that the impacts are diluted and therefore the routing of diverted traffic should be agreed with CCC and modelling redone to ensure that traffic is restricted to appropriate routes.

## 3. **HIGHWAY ASSETS**

- 3.1 The comments below address the articles and contents of the draft DCO (and associated schedules and plans) where there are adjudged to be divergences between those documents and the requirements of CCC in fulfilling its functions as LHA to: (i) maintain the legal records of the highway network; and (ii) carry out statutory processes related to changing the network through creation, diversion and extinguishment of highways.
- 3.2 For the avoidance of doubt, all public rights of way (PROW) are highways. Where the term "highway(s)" is used in the paragraphs below, it is used to address PROW infrastructure as well as roads.
- 3.3 In overview the Councils' submissions relate to the following:
  - 3.3.1 Provisions and processes relating to the transfer of new roads and detrunked roads (sections 3.4 to 3.14);
  - 3.3.2 The limits of deviation applicable to the Scheme and construction in accordance with the DCO plans (sections 3.15 to 3.24); and
  - 3.3.3 Liability for maintenance of private vehicular accesses (sections 3.25 and 3.26)
  - 3.3.4 Amendments requested to the DCO plans and schedules (sections 3.27 to 3.31); and
  - 3.3.5 Revisions to be considered to the Streets, Rights of Way and Access Plans (sections 3.32 to 3.33).

# Transfer of new roads and de-trunked roads

3.4 Significant further discussions between CCC as LHA and the Applicant regarding the transfer of assets (new roads and de-trunked sections) and appropriate

provisions in the DCO to regulate asset handover are required, in addition to an agreement between the parties. The DCO must not operate to transfer assets (including de-trunked roads) to CCC as LHA unless and until the assets are of a standard and extent agreed with CCC as LHA (acting reasonably). CCC seeks amendments to the draft DCO (APP-025) to ensure that any new roads or detrunked roads will not transfer until CCC as LHA approves them. The nature of that approval process can be set out in a further agreement between CCC and the Applicant, however the principle must be secured in the DCO. CCC as LHA requests that article 13 of the draft DCO is amended to provide a mechanism for certification of all highways to be vested in the LHA prior to that vesting.

- 3.5 The draft DCO (APP-025) offers no detail on the processes related to certifying that the works completed by the undertaker are to the satisfaction of the LHA. This is a crucial element of the LHA's interaction with the scheme. From experience of the delivery phase of the A14 improvement works it is notable that the absence of an agreed process for certification of new local highways caused delays in the transfer of some of the completed new highway assets to CCC as LHA, until such time that a process was agreed between CCC as LHA and the A14 Integrated Delivery Team. CCC as LHA requires that a formal process is agreed for the certification by the LHA that new and amended local highways are satisfactorily completed and are suitable for adoption.
- 3.6 The draft DCO (**APP-025**) also makes no reference to the transfer of new highway asset data to the LHA. This element of the works is essential to enabling the LHA to accurately record new highway assets, to understand and manage the new maintenance burden it has inherited, and to comply with statutory requirements regarding the documentation and publication of highway network information. Further details are required on the timeline within which CCC as LHA can expect to receive asset data for transferred infrastructure. CCC as LHA requires express provision for the transfer of this data in the DCO and a legal agreement.
- 3.7 In particular, the draft DCO (APP-025) at article 14(8) states that "the roads described in Part 8 (roads to be de-trunked) of Schedule 3 are to cease to be trunk roads" on a date determined by the Applicant. This article does not include any reference to the prior agreement of the LHA regarding the timing of the de-trunking, or that the de-trunked road and related infrastructure is in an acceptable condition at the proposed point of de-trunking. It is also unclear whether the Applicant intends to de-trunk all of the road at once, or in sections. This has the potential to place a significant burden on the LHA with insufficient notice. CCC as LHA requires article 14(8) be amended to provide that de-trunking will only take effect on a date to be agreed between the Applicant and CCC as LHA. As part of that, a formal detrunking process should be outlined by the Applicant for agreement with the LHA, including a Handover Plan that includes, but is not limited to:
  - 3.7.1 the assets that make up the road to be de-trunked;
  - 3.7.2 the expected condition of highway assets upon de-trunking;
  - 3.7.3 the maintenance activities to be taken between the making of the Order and the de-trunking date;
  - 3.7.4 the timeline for works to be undertaken prior to de-trunking; and
  - 3.7.5 the extent of highway and location of boundaries of the road to be detrunked.

- 3.8 Advanced understanding of such a plan is essential to CCC as LHA in planning its future maintenance activities and funding requirements. Furthermore, agreeing such a plan at an early stage is central to ensuring that the eventual handover of the de-trunked road proceeds efficiently and on time. In respect of the de-trunking of the old A14 (now the A1307), a de-trunking Handover Plan was not agreed at an early stage and the lack of clarity that ensued over this matter resulted in the detrunking date being repeatedly delayed.
- 3.9 It is noted that the De-Trunking Plans (APP-012) have already been edited to accommodate comments made during winter 2020/21, for which CCC is grateful. This is very helpful and adds some clarity to the extent of asset to be inherited by CCC as LHA.
- 3.10 However, some sections of the existing A428 that are identified for de-trunking in the De-Trunking Plans (APP-012) extend a considerable distance away from the current A428 carriageway. This is particularly notable as the A428 passes Croxton Park, where a curve in the road leaves areas of surplus land to the north and south of the carriageway. CCC as LHA is only able to adopt areas of land that are necessary for highway purposes. Therefore, we request early engagement on the areas and assets that are to be de-trunked, to ensure that non-operational land is not unnecessarily inherited by CCC as LHA. Surplus areas should be removed from the De-Trunking Plans (APP-012).
- 3.11 Through experience with the A14 improvement scheme, it is the understanding of CCC as LHA that new local roads that have been constructed on land that had previously been considered part of the trunk road network cannot be legally adopted by the LHA until such time as the de-trunking has taken place. This may pose difficulties when the 'handover' of new local roads to the LHA is proposed by HE. For example, Streets, Rights of Way and Access plan 14 in the draft DCO (APP-013) shows the construction of a new local highway, the 'Caxton Gibbet junction south west link road', which is on the alignment of part of the current A428 that is to be de-trunked. CCC as LHA's understanding is that until this section of the A428 is formally de-trunked, it will not be possible for the LHA to assume responsibility for that section of new road, as the land on which it stands remains a designated part of the trunk road. CCC therefore requests that the Applicant engages in discussions with affected LHAs with a view to agreeing a legal solution to this situation (and others as they occur across the scheme) that is acceptable to In the absence of such an agreement, it is the default position of CCC as LHA that any affected local highways must remain the responsibility of HE until the affected areas are legally de-trunked.
- 3.12 Finally, CCC as LHA requires a commitment from the Applicant that all street lighting assets are compliant with Cambridgeshire County Council Street Lighting PFI Development Specification dated January 2016, or relevant equivalent standards at the time of adoption, for adoption by CCC into its PFI Contract for Maintenance. Compliance with CCC construction standards, installation, inspection and accrual processes must also be followed. No street lighting assets relating to roads to be handed over will be older than 2 years old at the point of handover.
- 3.13 Existing lighting on de-trunked sections must be adapted to comply with the County Council Standard Development Specification, where they are not greater than 2 years old, so long as they are not damaged, unsafe or unserviceable. All other existing columns, cables, feeder pillars, cabinets and other equipment associated with illuminated assets that are not compliant with the PFI specification or

- equivalent at the time of adoption and older than 2 years old, or are damaged, unsafe and unserviceable shall be replaced prior to de-trunking.
- 3.14 CCC as LHA requests that the expected standards and procedures noted at paragraphs 3.12 and 3.13 above are provided for in a separate legal agreement.
  - The limits of deviation applicable to the Scheme and construction in accordance with the DCO plans
- 3.15 Article 9(1)(a) of the draft DCO (APP-025) allows lateral deviation "from the lines or situations of the authorised development shown on the works plans to the extent of the limits of deviation shown on those plans". There is a similar article in the A14 DCO. During the construction of the A14 scheme many of the routes of diverted PROW (and indeed of some local roads) that were specified in the DCO, were constructed on different alignments both within and outside of the limits of deviation of the scheme.
- 3.16 As with the A14 scheme, the PROW for the Scheme are shown on the Streets, Rights of Way and Access Plans (APP-013) and not on the Works Plans (APP-009 and APP-010) where the limits of deviation are detailed and to which Article 9(1)(a) refers. It is therefore unclear whether or how the limits of deviation apply to the PROW. The position is further complicated when article 9(1)(a) is read alongside the provisions of articles 14(7) and 18(2)(a) of the draft DCO (APP-013). Both those provisions require the construction of the PROWs set out in Part 7 of Schedule 3 and Part 2 of Schedule 4 to be constructed in specific places – in the case of article 14(7) as "identified on the streets, rights of way and access plans" and in the case of article 18(2)(a) between the specific points set out in column (4) of Part 2 of Schedule 4 as shown on the streets, rights of way and access plans. In the A14 instance, this has given rise to extended legal questions about (i) whether the DCO has empowered the undertaker to construct routes on different alignments to what was specified in the equivalent plans certified for that DCO; and (ii) the implications as to how the changed routes of these diverted highways can be given legal effect on the Definitive Map and Statement (DM&S) for which the relevant surveying authority (i.e. the LHA) is responsible.
- 3.17 Under section 53 of the Wildlife and Countryside Act 1981, any changes to the DM&S must be effected through a Legal Event Modification Order (LEMO). In this case the DCO is the relevant legal event and a new PROW, if constructed on the alignments specified in the DCO Streets, Rights of Way and Access plans (APP-013) and as listed in the DCO schedules (APP-025), will be incorporated into the DM&S via LEMOs made by the LHA.
- 3.18 However, as the PROW are not detailed on the *Works plans* and the *Streets, Rights of Way and Access plans* (APP-013) do not include limits of deviation, CCC as LHA's experience is that article 9(1)(a) as drafted does not provide a clear mechanism as to the authority by which any changes to the alignments of PROW as shown in the DCO can be legally made. Consequently, it will not be possible for any such changes to be legally evidenced for inclusion on the DM&S.
- 3.19 The A14 scheme has resulted in a large number of significant deviations from the DCO alignment, mainly affecting PROW, many within the limits of deviation and some outwith it. In order for the stopping up and PROW extinguishment to take effect, in some cases, it is a pre-condition that substitute PROWs are provided (article 18(2) and Schedule 4). In such cases, where those substitutes have not

- been constructed in accordance with the alignments specified in the DCO, the original lines on the DM&S are incapable of being legally stopped up.
- 3.20 CCC as LHA is advised that any changes to the DCO-specified location or alignment of new highway provisions (including PROW), or private means of access (PMAs), could be resolved through a prospective application for a non-material amendment (NMA) to the DCO (if the deviation can be considered non-material). However, once works have commenced, CCC as LHA is of the understanding that any deviations from the DCO are likely to have to be remedied through the separate provisions of the Highways Act 1980 (HA1980) or the Wildlife and Countryside Act 1981 (WCA1981). Such changes particularly impact on PROW where individual legal remedies can be extremely variable and complex depending on the issue and landowners affected. In the case of the A14 scheme, this has resulted in approximately 28 additional individual legal events being needed to regularise the deviations.
- 3.21 In such a scenario, the LHA would expect the costs of regularising the position to be met by the Applicant. The cost and resource implications on the amount of administrative and legal work that are required to process the necessary changes to the new highway network under HA1980 or WCA1981 can quickly build and outweigh any initial cost-saving that might have been envisaged through value engineering or other reasons in the initial decision to diverge from the route specified in the DCO. This is not in either party's interest.
- 3.22 The burden of carrying out such procedures rests with the LHA as the relevant order-making authority. Furthermore, it should be noted that the relevant legal procedures under HA1980 and WCA1981 are public processes that have no guaranteed outcome. Thus, the burden of risk for their successful completion rests not on the Applicant, but on the LHA. This is an unacceptable outcome for CCC as LHA, and costs for corrective legal orders will be sought from HE.
- 3.23 CCC as LHA therefore seeks the following:
  - 3.23.1 the proposed limits of deviation to apply to PROW are submitted to the Examination for consideration by Interested Parties;
  - 3.23.2 the draft DCO is amended so that the limits of deviation applying to PROW are clear in Article 9 of the draft DCO the Councils submit this may need to be accompanied by modifications to the *Streets, Rights of Way and Access plans* (APP-013) so that each PROW shown on those plans has a specified limit of deviation. This would mirror the approach adopted for utilities diversions where a specific limit of deviation for each of those works is shown (in blue) on the Works Plans (APP-009 and APP-010);
  - 3.23.3 the Applicant reviews the interaction of articles 9(1), 14(7) and 18(2)(a) and if they are to be retained in their current form, explains the interaction to the Examination;
  - 3.23.4 the Applicant commits to a formal process whereby CCC is consulted early on in the detailed design process, is consulted on value engineering and is required to formally sign off any changes that would result in a divergence from the DCO alignments outside the limits of deviation:
  - 3.23.5 Article 9(2) of the draft DCO is amended so that where the alignment of highways other than a special road or a trunk road is amended outside the

- limits of deviation, requires the certification of the LHA as well as the Secretary of State; and
- 3.23.6 the Applicant commits to providing appropriate support and resource to the LHA if further legal events are required to process the necessary changes under the HA1980 or the WCA1981.
- 3.24 All alterations to the alignment of PROW will be scrutinised very closely prior to and during the consideration of requests to certify completion of works under the proposed amendments to article 13 (see paragraph 3.4 above).

## Liability for maintenance of private vehicular accesses

- 3.25 Article 13(3) of the draft DCO (APP-025) appears to be a repeat of article 13(2), as footpaths, cycle tracks and bridleways are all highways. CCC as LHA considers it likely that this article is intended to address non-motorised user (NMU) routes that share a surface with private vehicular means of access. For reference, the equivalent article in the A14 DCO reads (emphasis added): "(3) Subject to paragraphs (6), (7) and (8), where a footpath, cycle track or bridleway is altered or diverted under this Order along a vehicular private means of access, the altered or diverted part of the highway must, when completed to the reasonable satisfaction of the highway authority and unless otherwise agreed in writing, be maintained (including any culverts or other structures laid under that part of the highway) by and at the expense of the person or persons with the benefit of the vehicular private means of access". The issue of NMU routes running over private accessways does not appear to be addressed elsewhere in the draft DCO (APP-025), and therefore this appears to be an error of drafting. CCC as LHA therefore objects to the wording of this article, requests that article 13(3) of the draft DCO is amended to include the italicised wording quoted above to clarify that any PROW that is diverted or created on the route of a private vehicular means of access must be maintained by and at the expense of the person or persons with the benefit of the private vehicular means of access.
- 3.26 It is welcomed that article 13 (7), (8) and (9) explicitly outline the areas of future responsibility for different parts of bridge structures. Notwithstanding this, CCC objects to the wording of article 13(9). It is unreasonable for CCC as LHA to assume maintenance responsibility for the surface of a shared private vehicular access that also carries public foot, equestrian or cycle traffic, given that liability for a vehicular surface is far higher than that for a NMU route. It is requested that this section of the draft DCO (APP-025) is re-worded so that the surface of the shared private vehicular access is maintained by the persons with the benefit of that vehicular access or by the Applicant. The latter position is the case in the A14 DCO where article 11(8) provides: "In the case of a bridge constructed under this Order to carry a private right of way (whether or not it also carries a footpath, cycle track or bridleway), the surface of the street and the structure of the bridge must be maintained by and at the expense of the undertaker".

## DCO Schedules and Plans (APP-025)

3.27 Schedule 1 of the draft DCO (APP-025) also includes references to the diversion of utility infrastructure, such as underground cabling. It is notable from review of the Works Plans (APP-009 and APP-010) that a number of these works are proposed to be located a considerable distance away from the new local highways (for example, works numbers 95 and 100). CCC as LHA wishes to clarify that it will not

- adopt land that is surplus to highway requirements simply because it provides access to utility infrastructure.
- 3.28 It is notable that the draft DCO Streets, Rights of Way and Access plans (APP-013) do not show any fixed or proposed boundaries for any of the new local roads to be delivered. Only the carriageways are shown as forming part of the new local roads. It is essential for CCC as LHA to understand the full extent of the asset that it is proposed it will inherit, otherwise the implications of the scheme for the LHA's highway maintenance service cannot be fully understood. It is of particular concern that the draft DCO Land Plans (APP-008) show large tracts of countryside alongside proposed new local roads as being purchased for the delivery of the Scheme. There should not be an assumption that CCC as LHA will adopt land just because it is adjoining the local road network and may be remote from the trunk road network. CCC as LHA is only able to adopt land that is required for the operation of the highway. Clarification over the highway and land assets that are anticipated to be offered to the LHA would be welcome. The inclusion of a proposed local road boundary in the Streets. Rights of Way and Access plans (APP-013) would assist with this and would present a starting point for discussions between CCC as LHA and the Applicant with a view to formally agreeing the boundaries of new local highway assets.
- 3.29 The provision of proposed local highway boundaries would also bring benefits for adjoining private landowners, and indeed for the Applicant, by adding some clarity over the areas of responsibility for newly delivered infrastructure once the works are completed. For example, numerous accommodation features and PMAs are proposed in the draft DCO (APP-025) and it must be clear to the beneficiary landowners what part of those new features they will be responsible for. It cannot be assumed that the LHA will become the maintainer of PMAs or other features that serve private land only, or that act as replacement provisions for pre-existing private features.
- 3.30 As such it is a requirement of CCC as LHA that the Applicant undertakes to establish a technical working group with CCC (and other LHAs as necessary) to discuss and agree all highway asset boundaries that are affected by the proposed A428 works. Such a working group should be convened prior to the detailed design stage. This will promote an understanding of asset responsibilities across all stakeholders, and will reduce the risk of delays to the 'handover' of completed new assets to the LHA (under article 13 of the draft DCO (APP-025)). This approach has been deployed during the A14 improvement scheme and has the benefit of ensuring that when any works are proposed to be handed over to the LHA, there is a clear understanding on the part of both the constructor and the adopter regarding the extent of the highway in question, and the maintenance responsibilities for asset infrastructure within the area. CCC as LHA requests that this matter is provided for in a legal agreement but sees no reason to wait to start this work.
- 3.31 In respect of Schedule 1, Part 1 ('Authorised Development'), the draft DCO (APP-025) refers to the delivery of landscaped areas as part of the Scheme, with further detail given in Schedule 2, Part 1 ('Requirements'). Landscaped and planted areas frequently fall within highway verges and therefore CCC requests that the Applicant engages proactively with the LHA in respect of landscaping proposals, as well as the District Councils as LPAs. It is requested that the draft DCO (APP-025) is amended to include an element of consultation with the LHA.

Streets, Rights of Way and Access Plans (APP-013) – revisions to be considered

- 3.32 Streets, Rights of Way and Access plan 6 reference FC (APP-013) Highway rights on the section of the existing alignment of the B1046 where it is co-existent with the proposed new emergency slip to the westbound A428 carriageway are not shown on the plans as being stopped up. This should be rectified, otherwise there may be a risk that public highway rights will remain in place over an emergency slip road that the Applicant will require to be closed to the public.
- 3.33 Streets, Rights of Way and Access plan 11 reference KB, KC (APP-013) Highway rights on the section of the existing alignment of Toseland Road where it is co-existent with the proposed new emergency slips to the westbound and eastbound A428 carriageways are not shown on the plans as being stopped up. This should be rectified, otherwise there may be a risk that public highway rights will remain in place over the emergency slip roads that the Applicant will require to be closed to the public. It is noted that these slip roads do serve part of the proposed diversion route for footpath 278/7, so any extinguishment of public rights would need to ensure a right of way on foot is retained.

#### 4. HIGHWAY DESIGN

- 4.1 [The Applicant should commit to comply with the "Vision Zero" strategy published by the Cambridgeshire and Peterborough Vision Zero Partnership (July 2020).
- 4.2 The Applicant and CCC as LHA have not yet agreed matters relating to highway design and standards. The Applicant did not submit their preliminary design proposals to CCC as LHA for comments until August 2020 for the five Local Road Packages as follows:
  - 4.2.1 Package 1 B1046 and Potton Road Junction
  - 4.2.2 Package 2 Cambridge Road Junction
  - 4.2.3 Package 3 Toseland Road
  - 4.2.4 Package 4 B1040 Eltisley Road Junction
  - 4.2.5 Package 5 Caxton Gibbett Junction
- 4.3 Each Package comprised a Technical Note (**TN**) to explain the preliminary design rationale and a series of drawings outlining the proposals. A Technical Review of these proposals was undertaken which revealed that they included unnecessary departures from standards for carriageway width / cross section. This had not previously been disclosed to CCC as LHA. The first technical meeting to discuss local road design took place on 1 October 2020, with a further meeting on 12 October 2020 and the last pre-application meeting on 18 December 2020. During this period CCC as LHA issued detailed comments to the Applicant in an attempt to agree matters, but many issues remain unresolved as outlined below.
- The DCO application does not accord with the required design principles and contains unnecessary departures from acceptable standards for carriageway widths / cross section. In particular, at several locations the proposed carriageway width is 6 metres whereas the standards require the carriageway width to be 7.3m plus 1.0m hard strips. This departure has implications for safety and emergency services' operations. Further detail follows in sections 4.6 and 4.7.

- 4.5 The principles which CCC as LHA requires to be applied in the design and construction of the Scheme's local roads within CCC's boundary are:
  - 4.5.1 Consistent application of Highways England's Standards for Highways standards and specifications as follows:
    - (a) Design Manual for Roads and Bridges (DMRB)
    - (b) Manual of Contract Documents for Highway Works (MCHW)
    - (c) Interim Advice Notes (IAN)

Full compliance with standards wherever possible, with appropriate justification for any divergence. Departures from standard are not justified for carriageway width / cross section. A compliant design is realistically achievable. Further detail follows in sections 4.6 to 4.9.

- 4.5.2 The methods of highway drainage should be considered at the preliminary design stage as they are linked to other factors, for example the extent of hard strips and the application of a balanced carriageway or superelevation. This is not currently considered in the application. Further detail follows in section 4.10.
- 4.6 Local Road Highway Design Principles Applying to the Scheme
  - 4.6.1 This section describes the highway design principles that CCC, as Highway Authority for the proposed local roads within Cambridgeshire, advised the Applicant of and responds to the supplementary Technical Note (Ref. HE551495-ACM-HSR-GEN\_Z\_Z\_ZZ-TN-CH-0004) prepared in late December 2020 by AECOM on behalf of the Applicant outlining the basis of determining the side road carriageway cross section widths used in the preliminary design.
  - 4.6.2 The DMRB, IAN and MCHW provide standards and specifications applicable to the strategic road network. DMRB, IAN and MCHW are also applied to many local roads nationally by Highway Authorities, including Cambridgeshire. DMRB document GG101 Introduction to the Design Manual for Roads and Bridges provides for this, stating on Page 7 (Definitions) "NOTE 2: Where a local highway/road authority decides to use the DMRB in whole or part for development of its own highway/road network, the Overseeing Organisation is defined in accordance with their own procedures." The County Council as the Overseeing Organisation (Highway Authority) for local roads determines the extent to which DMRB is applied. It is particularly appropriate for those local roads affected by the A428 scheme which are primarily rural rather than urban in nature. The local roads associated with the Applicant's recent A14 Cambridge to Huntingdon (A14 C2H) Improvement scheme, contained wholly within Cambridgeshire, used these standards and specifications.
  - 4.6.3 The Applicant has erroneously also referred to Manual for Streets (MfS) in the design of the local roads. This is not considered to be appropriate for use in rural and inter-urban locations as it is intended for the public realm and urban locations. The principles of MfS include "Applying a user hierarchy to the design process with pedestrians at the top. This means considering the needs of pedestrians first when designing, building,

- retrofitting, maintaining and improving streets." Clearly this principle is not appropriate for the A428 scheme and none of the affected local roads could be deemed to be "streets" in that context and the scheme should be designed to DMRB standards.
- 4.6.4 The local roads for which CCC is to be LHA must be designed and built in accordance with DMRB, IAN and MCHW. Other standards/specifications must not be applied unless specifically requested by CCC. Such requests typically would relate to matters of detail, for example, the type of road surface course materials.
- 4.6.5 The original TNs provided in August 2020 state a cut-off date of October 2019 for incorporating changes to the Standards for Highways used in the Scheme design. This cut-off date was not discussed with CCC as LHA. The supplementary TN provided in December 2020 refers to standards that were updated after the cut-off date; for example TD27/05 was replaced by CD127 in November 2019 and revised in March 2020. The Applicant is requested to clarify the conflicting information and agree a cut-off date with CCC for the design standards applying to local roads.
- 4.7 Departures from Standards (DfS): Cross Section carriageway width
  - 4.7.1 The Applicant's proposals include several DfS relating to DMRB Standard TD27/05 Cross Sections and Headrooms, which CCC as LHA understands from the Applicant was the standard that was current at the time the design decisions were taken. DMRB Standard TD27/05 requires that any departures from Standard TD27/05 relating to the cross-section of a side road, which is not a trunk road and is diverted or improved as part of a trunk road scheme must be agreed with the relevant highway, planning and technical approval authorities. The Applicant has not reached agreement on this matter with CCC as LHA.
  - 4.7.2 DMRB Standard TD27/05 permits a DfS only in exceptional circumstances where the relevant Overseeing Organisation agrees that the standard including permitted relaxations is not realistically achievable. Organisations wishing to consider pursuing a DfS must discuss this at an early stage in design with the Overseeing Organisation. Proposals to adopt a DfS must be submitted by the organisation to the Overseeing Organisation and formal approval received before the DfS is incorporated into a design layout.<sup>2</sup> This is also reflected in the current standard.<sup>3</sup> It is not appropriate for the Applicant to decide to adopt a DfS in relation to roads for which CCC will be the LHA without CCC's agreement. (TD27/05 Clause 5.1.4 states "The Cross-section of a side road, which is not a trunk road and is diverted or improved as part of a trunk road scheme must be agreed with the relevant highway, planning and Technical Approval Authorities." This Clause is contained within a box and is therefore a mandatory requirement.)
  - 4.7.3 Despite these mandatory requirements CCC, as the Overseeing Organisation for local roads in Cambridgeshire, was not consulted on this proposal until August 2020. CCC as LHA's response to this consultation in October 2020 clearly explained why the Departures are not acceptable in

<sup>&</sup>lt;sup>1</sup> Clause 5.1.4, DMRB Standard TD27/05 Cross Sections and Headrooms

<sup>&</sup>lt;sup>2</sup> Clause 1.6.1, DMRB Standard TD27/05 Cross Sections and Headrooms

<sup>&</sup>lt;sup>3</sup> CD127, referring to GG101, Clause 2.4

principle. The Applicant has not provided sufficient evidence to demonstrate that there are "exceptional situations" that necessitate DfSs; that permitted relaxations have been considered; and that a compliant design "is not realistically achievable". In addition, the Applicant did not obtain approval from CCC for the DfSs before incorporating them into the Application design layouts.

4.7.4 The Applicant's TN dated December 2020 quotes the following:

"Highways England's current standard CD 127 "Cross-sections and headrooms" states the following under Section 1, Scope:

- 1.1 This document provides requirements and advice for the cross-sections and headrooms that shall be used for both new and improved motorways and all-purpose trunk roads including connector roads.
- 1.3 The cross-section and headrooms of roads that are not motorways or all-purpose trunk roads and are diverted or improved as part of a trunk road scheme shall be agreed with the highway authority for that road.

CD 127 further states the following under Section 2, Highway cross-section:

2.1.1 Numerous changes in the cross-section and its components are not desirable along a route and a consistent width should be provided.

The SRN has a fundamentally different role to the local road network.

Most existing country roads are not built to current standards and have narrow carriageways, poor visibility and tight geometry.

The combined effect of a widened carriageway cross section, improved horizontal geometry and improved forward visibility is that it would give drivers an opportunity to increase their speed and encourage overtaking. If the alignment then went back into the existing cross section drivers may easily continue their higher speed which would be inappropriate for the lower standard existing road(s) beyond.

It is standard practice throughout the country to maintain a consistent carriageway width for side road diversions, including at any new structures, in accordance with CD 127 2.1.1. A lane width of 3.0 metres is considered the absolute minimum width appropriate for all vehicle types and would allow all but the largest agricultural vehicle to pass side by side without running on the verges. Therefore, if existing road widths are less than 6m, then a minimum overall carriageway cross section width of 6m has been adopted. Where existing side road widths are generally wider than 6m, then the existing width has been adopted."

- 4.7.5 CCC as LHA agrees with the design philosophy contained within the DMRB, but considers that the Applicant has incorrectly interpreted and applied it to rural local roads within CCC's area for the following reasons:
  - (a) There will not be numerous changes in the cross section and its components along a route. Full compliance with the standards would mean only one change from the existing width to 7.3m at each tie-in, which shall be applied over the standard taper length.
  - (b) The existing rural local roads were not built to current standards because they pre-date those standards by many years.
  - (c) The existing geometry at Toseland Road, the B1046, Potton Road and the B1040 is not "tight" neither is "visibility poor"; see section 4.11 below for the detailed assessment.
  - (d) Providing the standard carriageway width of 7.3m for the full extent of the local road diversions will, contrary to the statements made by the Applicant, comply with "...standard practice throughout the country to maintain a consistent carriageway width for side road diversions, including at any new structures."
  - (e) A lane width of only 3.0m is the absolute minimum, but not recommended as the Applicant's traffic flows indicate significant volumes of HGV traffic. When passing side by side HGVs would be extremely close to the edge of the carriageway, thereby increasing the risk of pavement instability beneath the wheel tracks (with associated additional maintenance costs).
  - (f) A lane width of only 3.0m at locations adjacent to Non-Motorised User (NMU) facilities with highway drainage comprising kerbs and gullies would mean that the gullies would be directly under the wheel tracks, thereby increasing the risk of damage to the gullies (with associated additional maintenance costs). The wheel tracks would be within the drainage path, so during heavy rainfall surface water is likely to be splashed across the NMU facility.
  - (g) The proposed design speed for the new sections of rural local road is 100kph, which matches the existing and proposed National Speed Limit of 60mph.
  - (h) DMRB Terms and definition states that a rural road is "...generally not subjected to a local speed limit." DMRB states that an urban road is "...within a built-up area either a single carriageway with a speed limit of 40mph or dual carriageway with a speed limit of 60mph or less." Undoubtedly the County Council's local roads are rural and shall be designed as such in accordance with Standards for Highways.
- 4.8 Departures from Standards (DfS): Cross Section hard strips
  - 4.8.1 Regarding hard strips, the current standard, CD127 Clause 2.6 NOTE 2 states the following:

- "A hard strip provides a surfaced strip that abuts the carriageway. The key reasons for the provision of hard strips include:
- 1) pavement integrity/stability;
- 2) partial provision for stopped vehicles;
- 3) snow and water collection:
- 4) overrun facility for driver error or evasive action;
- 5) improved level of service and driver comfort;
- 6) supports edge lines;
- 7) reduces the risk of vegetation encroachment over edge lines; and
- 8) allows for the placement of road studs outside vehicle wheel paths, where appropriate."
- 4.8.2 Without the necessary hard strips the local roads will be lacking provision of the above operational safety and maintenance measures.
- 4.8.3 In addition, TD27/05 Clause 2.6.3 (current at the time of the preliminary design) states as a mandatory requirement that "The Design Organisation must ensure that the proposed cross-section and lane widths are adequate to enable maintenance to be undertaken safely. Care must be taken to ensure that where cyclists are permitted to use the designated lane, the width is adequate for this purpose."
- 4.8.4 Maintenance/resurfacing work would have to be undertaken under full road closures to provide the necessary safe working widths, rather than simply using single lane working temporary traffic management. This is highly likely to result in an increased impact on road users and additional costs for CCC as LHA. In addition, the absence of hard strips would compromise the safety of cyclists with a lane width of only 3.0m and no adjacent NMU facility.
- 4.8.5 The preliminary design packages containing unnecessary Departures for carriageway width / cross section were rejected and a fully compliant design was requested. This still has not been provided by the Applicant.
- 4.8.6 The Applicant has not provided sufficient evidence to demonstrate that there are exceptional situations that necessitate Departures; that permitted Relaxations have been considered; and that a compliant design is not realistically achievable.
- 4.9 Departures from Standards: The views of other local authorities
  - 4.9.1 The Applicant's Technical Note dated December 2020 states that "The basis of design has been discussed and agreed with Bedford Borough Council and Central Bedfordshire Council for the side roads they are responsible for. The basis of design was not fully discussed with Cambridgeshire County Council as they were unable to engage without a

- Planning Performance Agreement in place." CCC side roads "...have been designed on the same basis as Roxton Road and Barford Road to maintain the existing carriageway width and the basic cross section."
- 4.9.2 Other Local Authorities may have taken the view that there are exceptional situations that necessitate DfS within their jurisdiction, CCC as LHA has not been party to such discussions. The basis of design was not discussed at all with CCC as LHA prior to August 2020. The Applicant's team took the decision to design the side roads in CCC's administrative area on the same basis. CCC's comments on the proposed design were provided in a timely manner, well in advance of the DCO application. The Applicant has not taken account of them.

## 4.10 Highway Drainage

- 4.10.1 It is important to consider the principles for the method of highway drainage at the preliminary design stage as they are linked to other factors, for example the extent of hard strips and the application of a balanced carriageway or superelevation. This was recorded as agreed by Highways England Safety, Engineering and Standards (SES) at the meeting on 18 December 2020. CCC understands that subsequent Value Engineering (VE) ideas may be proposed, as with the Applicant's A14 Improvement scheme, but establishing the principles now does not preclude this. Rather a clear set of principles will enable the Applicant's team to understand CCC's requirements to quickly determine the potential suitability of any VE proposal to avoid wasted time and money developing an inherently unsuitable idea.
- 4.10.2 The principles that shall be adopted are as follows:
  - (a) Positive drainage system comprising kerbs and gullies to be provided adjacent to all NMU facilities/separation strips, where the carriageway slopes towards that facility. Kerbs are to be provided where the carriageway slopes away from the NMU facility.
  - (b) Where kerbs are provided adjacent to an NMU facility with the required separation strip then a 1.0m wide hard strip is not necessary as the edge restraint for pavement integrity/stability is provided by the kerb.
  - (c) Combined kerb and drainage units are not permitted as they present an unnecessary maintenance liability.
  - (d) Over the edge drainage systems are permitted, but only in the verge where there are no adjacent NMU facilities. A concrete surface water channel shall be provided in accordance with DMRB HA119/06 / CD521, Hydraulic design of road edge surface water channels and outlets, Revision 1, March 2020.
  - (e) A drainage ditch shall be provided at the toe of embankments generally and to collect run-off from the outfalls of the over the edge drainage systems.
- 4.11 Location Specific Assessments: Package 1 B1046 and Potton Road Junction

- 4.11.1 The Applicant's Technical Note (TN) dated 19<sup>th</sup> February 2020 Revision P03 Status S3 Document ID: HE551495-ACM-GEN-A428\_Z\_ZZ-TN-CH-0001 Title: B1046 and Potton Road Junction states in Table 3.1 the following alignment design parameters:
  - (a) Total length of improvements is 1417m and 495m at the B1046 and Potton Road respectively.
  - (b) The minimum horizontal radius is 720m and 360m at the B1046 and Potton Road respectively.
  - (c) The super-elevation is 5% and 7% at the B1046 and Potton Road respectively.
  - (d) The required Stopping Sight Distance (SSD) of 215m is achieved at both locations.
- 4.11.2 The total length of proposed road is approximately 2km, with a compliant design requiring only one change in carriageway width at each tie-in, so there will not be numerous changes in cross section, contrary to statements made in Applicant's TN dated December 2020 (see section 4.7.4 above).



Figure 1: B1046/Potton Road realignment limit of works

4.11.3 From the western tie-in point on the B1046 travelling North-West across the existing A428 to the bridge over the East Coast Main Line (ECML) the existing road is straight for a distance of approximately 600m. There is then a very slight curve in the road at the ECML bridge, after which the B1046 again continues in a straight line for a distance of approximately 600m into St Neots and the junction with Cromwell Road.

- 4.11.4 From the eastern tie-in point on the B1046 travelling East the existing road is straight for a distance of approximately 300m. There are then two bends within 300m after which the B1046 continues East in an essentially straight line for a distance of approximately 2km to Abbotsley.
- 4.11.5 The TN states that collision data for B1046 and Potton Road was obtained from crashmap.co.uk website dating from 1st January 2014 to 31st December 2018. There were five collisions recorded in this period, of which none were fatal, 1 serious and 4 slight. These five collisions resulted in 6 casualties and involved 9 vehicles. Most collisions occurred at the junction between the two roads.
- 4.11.6 Contrary to the Applicant's statement the existing geometry is not "tight" neither is "visibility poor". The primary safety concern is the existing B1046/Potton Road Simple Priority junction layout; the Applicant's current proposal for this is a simple priority junction.

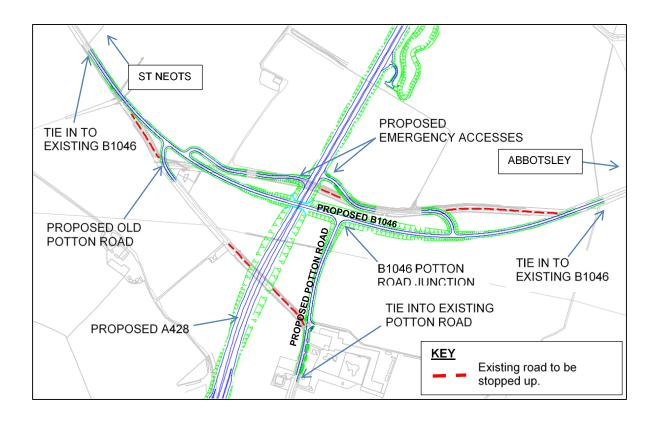


Figure 2: Current Proposal - Offline design of B1046 and Potton Road Realignment

- 4.11.7 Accordingly, the principle of the DfS is not accepted by CCC. The Applicant has not provided sufficient evidence to demonstrate that there are exceptional situations that necessitate the DfS; that permitted Relaxations have been considered; and that a compliant design is not realistically achievable.
- 4.12 Location Specific Assessments: Package 3 Toseland Road
  - 4.12.1 The Applicant's Technical Note (TN) dated 19th February 2020 Revision P02 Status S3 Document ID: HE551495-ACM-GEN-A428\_Z\_Z\_ZZ-TN-

CH-0004 Title: Toseland Road Realignment states in Table 1 the following alignment design parameters:

- (a) Total length of improvements is 970m
- (b) The minimum horizontal radius is 720m
- (c) The super-elevation is 5%
- (d) The required Stopping Sight Distance (SSD) of 215m is achieved
- 4.12.2 The total length of proposed road is approximately 1km, with a compliant design requiring only one change in carriageway width at each tie-in, so there will not be numerous changes in cross section, contrary to statements made in Applicant's TN dated December 2020 (see section 4.7.4 above).
- 4.12.3 From the northern tie-in point on Toseland Road the existing road continues in a straight line for approximately 1.4km to the junction with High Street.
- 4.12.4 The TN states that collision data was obtained from crashmap.co.uk website dating from 1st January 2013 to 31st December 2017. Just one collision on Toseland Road was recorded as slight with 2 vehicles and 1 casualty involved. There were a total of 3 collisions recorded at the junction of Toseland Road and the existing A428.
- 4.12.5 Contrary to the Applicant's statement the existing geometry is not "*tight*" neither is "*visibility poor*".



Figure 3 – Toseland Road realignment limit of works

4.12.6 Regarding the cross section width the Applicant's Side Roads Departure (Ref. HE551495-ACM-HAC-ZN4\_SR\_Z\_ZZ-DF-CH-4047) Ref. DFS-CCCSR-TR-01 Section 2D Other guidance relating to carriageway width, refers to TD27/05 Clause 5.4.2 which states "If a structure is required under or over an existing single lane rural side road of carriageway width less than 6.0m, the carriageway width of that side road should be retained

- where all the following requirements are met: i.e. Traffic flows are not expected to exceed 200 vehicles per day."
- 4.12.7 Toseland Road is not a single lane road, it has two lanes, one in each direction, with appropriate road markings. Secondly the 2040 Design Year average annual daily traffic (**AADT**) is 3839 which far exceeds only 200 vehicles per day. Accordingly, the Applicant's assertion that the existing width of side road should be retained does not comply with the quoted guidance.
- 4.12.8 Although TD27/05 Clause 5.4.3 states "...there is potential for driver confusion, inappropriate speeds and poor visual appeal being generated by very localised widening", Toseland Road is 2.4km long from its junction with the A428 to its next junction with High Street to the North. The proposed diversion of Toseland Road extends for almost 1km or 42% of its length, which is not considered to be "very localised" in the context of the Standard.
- 4.12.9 Accordingly, the principle of the DfS is not accepted by CCC. The Applicant has not provided sufficient evidence to demonstrate that there are exceptional situations that necessitate the DfS; that permitted Relaxations have been considered; and that a compliant design is not realistically achievable.

# 4.13 Detailed Design Technical Approval

- 4.13.1 CCC requires provision within the wording of the DCO and/or legal agreement to approve the detailed design of all roads for which it will be LHA, with certification of the standard of local roads by the LHA being required prior to adoption.
- 4.13.2 As part of this the Applicant must submit their detailed design documents for new local roads [and de-trunked roads] for Technical Approval at least 3 months prior to the commencement of construction work for each Work Package. Construction of any Local Road Package shall not commence until the Council is satisfied with the proposals and has given permission to do so. This applies to both temporary and permanent works. The Applicant should be treated in a manner consistent with other third parties seeking to undertake works on the local highway under a Section 278 Agreement of the Highways Act.
- 4.13.3 The Applicant shall apply the agreed 'A14 and CCC Lessons Learnt Change Plans'. Lessons to be learnt by the Applicant from the A14 Scheme include submitting detailed design packages before the commencement of construction rather than after. This should be provided for in the legal agreement.
- 4.13.4 The preliminary design package includes a Road Safety Audit (RSA). CCC as LHA considers the current RSA to be primarily concerned with the new trunk road. Specific RSAs should be provided for each local road. This should be provided for in the legal agreement.

## 4.14 Detailed design scope

- 4.14.1 The details to be submitted to the Council for the purposes of obtaining Technical Approval shall include:
  - (a) detailed design drawings, construction details, specification appendices and schedules for the following:
    - (i) General arrangement plus longitudinal and cross sections
    - (ii) Site Clearance
    - (iii) Fencing
    - (iv) Road Restraint Systems
    - (v) Drainage and Service Ducts
    - (vi) Earthworks
    - (vii) Pavements
    - (viii) Kerbs, Footways & Paved Areas
    - (ix) Traffic Signs & Road Markings
    - (x) Traffic Signals
    - (xi) Road Lighting
    - (xii) Electrical Work for Road Lighting & Traffic Signs
    - (xiii) Structures incl. AIPs
    - (xiv) Special Structures
    - (xv) Landscape and Ecology
    - (xvi) Site Accesses
    - (xvii) Balancing Ponds
    - (xviii) Borrow Pits
  - (b) vehicle tracking (swept path) analysis
  - (c) draft approvals in principle for structures;
  - (d) design and check certificates for structures;
  - (e) road safety audit reports and any exception reports; and
  - (f) the precise extent and boundaries of the relevant Local Roads.
- 4.14.2 The Applicant shall facilitate appropriately qualified officers of CCC as necessary to participate in the local road detailed design process as recommended in the A14 and CCC Lessons Learnt Change Plans.

4.14.3 Once construction work commences joint inspections and testing of materials will be required, to be carried out as stipulated in the Legal Agreement.

## 4.15 Conclusion

- 4.15.1 The existing local road speed limits are appropriate for the existing road conditions, as evidenced by the collision data. Contrary to the Applicant's statements the existing rural local road geometry is not "tight" nor is "visibility poor". The Council has been consistent in its position on design standards throughout, but this has not been reflected in the Application. At the Meeting on 1st October 2020 the Applicant stated that design decisions were taken during 2018 and that the reduced cross section would reduce construction costs.
- 4.15.2 The Applicant has not provided sufficient evidence to demonstrate that there are exceptional situations that necessitate Departures; that permitted Relaxations have been considered; and that a compliant design is not realistically achievable. In addition, the Applicant did not obtain approval from CCC as LHA for their proposals before incorporating them into the Application design layouts.
- 4.15.3 A fully compliant design is preferrable in terms of both operational safety and maintenance liability. This outweighs seeking to reduce construction costs.
- 4.15.4 The principles to be applied in the design and construction of the Scheme's local roads within Cambridgeshire are as follows:
- 4.15.5 Consistent application of Highways England's Standards for Highways DMRB, MCHW and IAN standards and specifications `
- 4.15.6 Full compliance with standards wherever possible, with appropriate justification for any divergence. Departures from Standard for carriageway width / cross section are not justified as exceptional situations; a compliant design is realistically achievable
- 4.15.7 The methods of highway drainage should be considered at the preliminary design stage as they are linked to other factors, for example the extent of hard strips and the application of a balanced carriageway or superelevation; currently this is not considered in the application
- 4.15.8 The Applicant's local road design needs to be amended to comply with these principles.

# 5. HIGHWAY NETWORK IMPACT DURING CONSTRUCTION

5.1 [Further information is required on the construction programme and timings for closures, for example whether the Applicant intends to implement night-time closures only or full weekend closures. If full weekends closures will be required, the Councils request advanced discussion on the planning of the dates to minimise conflicts with other works and events. CCC requests a commitment from the Applicant that weekday, day time closures will not be implemented.]

- 5.2 Section 3.3 and Appendix C of the Outline Construction Traffic Management Plan (OCTMP) (APP-244) sets out the permitted construction network routes and categorises them as green (construction traffic permitted), amber (construction traffic permitted subject to restrictions) or red (no construction traffic permitted). Insufficient detail is provided as to the nature and extent of the restrictions applying to the amber routes, with the routes around St Neots being of particular concern to the Councils.
- 5.3 The Councils have concerns regarding amenity, noise, safety and pollution on the construction routes going through St Neots past the Ernulf Academy secondary school: Barford Road, Cromwell Road, the B1046 and Cambridge Road. The Councils request further information on the need for these routes and whether any alternatives have been considered. If these construction traffic routes are required, the Councils request that the OCTMP is updated so that use of these routes is restricted to:
  - 5.3.1 certain classes of construction traffic only i.e. Light Goods Vehicles up to 3500kg; and
  - 5.3.2 times outside peak hours and avoiding school opening and closing times.
- 5.4 Effective methods of measuring and managing temporary traffic diversions must be secured in the DCO or by agreement with the Councils. Traffic counts, including by vehicle type, and condition surveys must be carried out pre-commencement of works to establish a baseline on routes with the potential for impacts from reassigning traffic. The relevant routes are through the following villages Yelling, Toseland, Graveley, Abbotsley, Great Gransden, Elsworth and Waresley, Gamlingay and Eltisley. Other routes may become apparent during the works. The Councils request that these routes are monitored for impact and condition during works and that the Applicant agrees to fund appropriate mitigation measures, e.g. traffic calming measures as well as VAS to be installed pre-commencement, if traffic levels are predicted to be significantly impacted by the works. The Councils would welcome discussion of this with the Applicant.
- Where the condition of roads is being severely impacted by HGVs or HGVs are using unsuitable routes as they are reassigned from the official diversion routes we request that temporary traffic regulation order (**TTRO**) weight limits are considered and discussed with the Councils and the police and if agreed are funded by the Applicant. Unsuitable routes may include but not limited to routes that are of a lower classification than the one being diverted, routes through villages or affecting other local sensitivities.
- 5.6 The Councils would expect the recovery of expenses incurred by the Councils in relation to maintaining any roads due to extraordinary traffic to be provided for in an agreement with the Applicant.
- 5.7 CCC operates a permit scheme for roadworks and streetworks. It is requested that the Nominated Undertaker is required to submit permit applications to CCC to enable CCC to effectively co-ordinate its network in addition to the consent process.
- 5.8 Should CCC need to administer any TTROs on CCC's network to facilitate the Nominated Undertaker's work then CCC would request that the Applicant meets these costs.

- 5.9 For the diversion route for the closure of the A428 Girton Caxton Gibbet the Councils anticipate some possible confusion and disruption for example at Brampton Hut. This needs to be effectively signed for example using variable messaging signs to minimise confusion. This should include variable message signage. The Applicant should also ensure there are effective communications with the public, local Parish councils and haulage companies on diversions routes and the LHA and LPAs.[These elements should be reflected in the OCTMP.]
- 5.10 CCC considers that Section 59 of the Highways Act 1980 is applicable to the extraordinary levels and type of construction and diverted traffic that will be using the local highway network. CCC would therefore seek formal agreement of the applicability of said Section 59 via an appropriate legal agreement with Highways England.

# 6. NON-MOTORISED USERS (NMU) AND PUBLIC RIGHTS OF WAY

- 6.1 The Scheme currently contains insufficient support for Non-Motorised Users (NMUs) and connectivity with local communities is considered to be poor. The Government Guidelines, the Cambridgeshire and Peterborough Combined Authority (CPCA) Local Transport Plan (LTP), the Huntingdonshire Local Development Plan, the South Cambridgeshire Local Plan and the Cambridgeshire Rights of Way Plan (ROWIP) policies have not been complied with. These require new infrastructure developments to contribute to an enhanced transport network that supports an increasing proportion of journeys being undertaken by sustainable travel modes and connectivity with local communities. Any proposals affecting a PROW or other formal NMU route should protect and enhance these modes. Further detail follows in the remainder of this section.
- 6.2 Policy background Non-Motorised Users
  - 6.2.1 The Department for Transport's recent policy and guidance documents make clear that provision for walking and cycling is a priority and sets out that much higher standards are now expected:
    - (a) Local Transport Note 1/20 Cycle Infrastructure Design (LTN 1/20) states that:

"The guidance should be applied to all changes associated with highway improvements, new highway construction and new or improved cycle facilities, including those on other rights of way such as bridleways and routes within public open space."

(b) Department of Transport "Gear Change 2020" includes the following statements:

"We will ensure that new local and strategic A road schemes include appropriate provision for cycling...

"To receive Government funding for local highways investment where the main element is not cycling or walking improvements, there will be a presumption that all new schemes will deliver or improve cycling infrastructure to the new standards laid down, unless it can be shown that there is little or no need for cycling in the particular road scheme."

<sup>&</sup>lt;sup>4</sup> Gear change: a bold vision for cycling and walking (publishing.service.gov.uk)

(c) The Connecting Our Customers 2020-21 Highways England<sup>5</sup> publication also states that they will:

"work with our partners and stakeholders to improve how our roads connect with other transport modes and networks by providing more sustainable options for our customers" and

"make improvements for walkers, cyclists and horse riders based on what they tell us they want to see. For example, building better cycle routes and safer crossing points."

- 6.2.2 CCC's Local Transport Plan 3 ('LTP3') <sup>6</sup> was adopted in 2017 and contributes towards the delivery of the Councils' main outcomes set out in its Business Plan. The strategic objectives of the subsequent CPCA LTP adopted in 2020 include the objective to: Promote social inclusion through the provision of a sustainable transport network that is affordable and accessible for all, and the following policies:
  - (a) Develop the network of public rights of way which is safe and encourages healthy activities
  - (b) Support travel plan development and implementation of travel plan measures within workplaces so that healthy, safe, low carbon travel options for commuters are actively encouraged and supported
  - (c) Promote existing and new walking and cycling routes to commuters and residents
  - (d) Develop a public rights of way network which is safe and encourages healthy activities
    - Enhance and expand cycling infrastructure across Cambridgeshire and Peterborough, including connecting links to surrounding towns, villages and rural areas
- 6.2.3 CCC's ROWIP Rights of Way Improvement Plan 2016<sup>7</sup>, adopted in 2006 and revised 2016, is a daughter document of CCC's Local Transport Plan 3 (LTP3) adopted in 2017, and contributes towards the delivery of the same outcomes as the CPCA LTP.
- 6.2.4 It also includes the following policies:
  - (a) the development of the network of public rights of way which is safe and encourages healthy activities;
  - support for travel plan development and implementation of travel plan measures within workplaces so that healthy, safe, low carbon travel options for commuters are actively encouraged and supported;

<sup>5</sup> connecting-our-customers-2020-21.pdf (highwaysengland.co.uk)

<sup>&</sup>lt;sup>6</sup> The Cambridgeshire & Peterborough Local Transport Plan

<sup>8</sup> Cambridgeshire Insight – Joint Strategic Needs Assessment (JSNA) – Health and Wellbeing Strategy

- (c) promotion of existing and new walking and cycling routes to commuters and residents:
- (d) the development of a public rights of way network which is safe and encourages healthy activities;
- the enhancement and expansion of cycling infrastructure across Cambridgeshire and Peterborough, including connecting links to surrounding towns, villages and rural areas;
- (f) the embedding of cyclists' needs in the design stage of new transport infrastructure;
- (g) the improvement of sustainable access to the natural environment; and
- (h) the improvement of access to the green spaces for all.
- 6.2.5 The ROWIP sets out in detail how CCC will manage and improve the public rights of way network. Production of a ROWIP is a statutory requirement for all highway authorities under the Countryside & Rights of Way Act 2000 (CROW Act). Cambridgeshire's ROWIP was first adopted in 2006, and a revised version was published in 2016. The key principles and statements of action relevant to the A428 Scheme are:
  - (a) Statement of Action 1, Guiding Principle 1 (SOA1, GP1): "Countryside access provision should be physically accessible to the widest possible range of people. New countryside access provision should generally be planned to avoid imposing restrictions."
  - (b) Statement of Action 2, Guiding Principle 2 (SOA2, GP2):
    "Countryside Access provision should be safe for users and encourage healthy activities. Where significant potential conflict with motor traffic or railways can be demonstrated, then measures to reduce risk will be considered."
  - (c) Statement of Action 5, Guiding Principle 5 (SOA5, GP5):
    "Countryside access provision should build on the platform of the historical network to meet the needs of today's users and land managers. A central action for the updated ROWIP is to improve the network as a whole, making connections with the cycle network and wider transport network."
- 6.2.6 The LTP and ROWIP work in harmony with the Cambridgeshire Health & Wellbeing Strategy 2016-17<sup>8</sup>, which promotes priorities to support and improve the physical and mental health of the county's communities. The Health and Wellbeing Board comprises services across the National Health Service (NHS), district councils, CCC, children's and social care, and elected representatives. Maintaining and developing the rights of way network supports most of the priorities of the Strategy. The key priorities relevant to the highway network are:

<sup>&</sup>lt;sup>8</sup> Cambridgeshire Insight – Joint Strategic Needs Assessment (JSNA) – Health and Wellbeing Strategy

- (a) Priority 2: "Support older people to be independent, safe and well, which encourages older people to stay active" and links to ROWIP SOA1 SOA2, and SOA5.
- (b) Priority 3: "Encourage healthy lifestyles and behaviours in all action sand activities while respecting people's personal choices, which promotes physical activity" and also links to ROWIP SOA2, SOA3, SOA4, SOA5 and SOA8.
- (c) Priority 4: "Create a safe environment and help build strong communities, wellbeing and mental health, which recognises the strong link between physical and mental health." Rights of way and access to green space is an important, free source for people. This Priority also relates to ROWIP SOA1, SOA2, SOA3, SOA4, SOA5 and SOA8.
- (d) Priority 5: "Create a sustainable environment in which communities can flourish, which acknowledges the importance that good transport planning, green spaces and the built environment play a vital role in determining health and wellbeing, together with the benefits that these bring to the local economy." This priority has the following three aims:
  - (i) Develop and maintain effective, accessible and affordable transport links and networks, within and between communities, which ensures access to services and amenities and reduce road traffic accidents.
  - (ii) Ensure that housing, land use planning and development strategies for new and existing communities consider the health and wellbeing impacts for residents in the short and long term.
  - (iii) Encourage the use of green, open spaces including public rights of way, and activities such as walking and cycling through the provision of safe, continuous networks.

Priority 5 links to SOA1, SOA2, SOA3, SOA5, SOA6 and SOA8 of the ROWIP

- 6.2.7 The LTP (2020) prioritises active modes of travel over other forms as the benefits align with the overarching goals and objectives. It acknowledges that within Huntingdonshire high traffic flows particularly through rural villages and High Streets make it less attractive to walk or cycle for local journeys. The lack of dedicated, high quality walking and cycling infrastructure deters the use of active modes of travel and contributes to poor health outcomes. The LTP promotes new high-quality active travel infrastructure specifically for St Neots as helping to make active travel a safer and more attractive option, allowing residents without access to a car more independence and opportunity to travel.
- 6.2.8 An assessment of the Scheme against the above policy considerations is set out in sections 6.5 and 6.6.

- 6.2.9 Policy LP 16 of Huntingdonshire's Local Plan to 2036 (HLP2036) sets out the expected approach for new development in the District in relation to Sustainable Travel. It is considered that there are a number of instances within Huntingdonshire where the Scheme may not meet policy LP16. Whilst it is acknowledged the policy is geared towards planned development it does state 'all new development' and therefore is pertinent in assessing the Scheme.
- 6.2.10 Policy TI/2 of the South Cambridgeshire Local Plan to 2031 requires that developments provide safe, direct cycle and walking routes that connect to existing networks. Some of the walking and cycling gaps evident within the current scheme design are in South Cambridgeshire particularly between Eltisley and Caxton. This is considered to be contrary to the requirements of Policy TI/2.
- 6.2.11 In considering whether the Scheme meets Policy LP16 of HLP2036, the Councils have looked at each policy criterion in turn.
  - a) opportunities are maximised for the use of sustainable travel modes
- 6.2.12 It is noted that the proposals seek to maintain the existing public rights of way network where possible. It is concerning, however, that the proposals fail to maximise the opportunities for use of sustainable modes. For example, routes that had previously been indicated as shared use paths in earlier iterations of the design are now downgraded to paths or removed. This is detailed in comments later in this section (see 6.5.7 e, f, g & k) in relation to the specific points on each affected route. In addition, the Councils are concerned that due to the design of routes not meeting the appropriate standards that this could deter some users and as such does not maximise the opportunities.
  - b) its likely transport impacts have been assessed, and appropriate mitigation measures will be delivered, in accordance with National Planning Practice Guidance
- 6.2.13 CCC, as Local Highway Authority, has assessed the submitted Transport Strategy and related documents. There are aspects of the transport impacts that present concerns for NMU and public rights of way. For example, at the new roundabout junctions at Cambridge Road St Neots, suitable crossings have not been designed into the scheme. Traffic levels and speeds are expected to rise in parts of the surrounding network, impacting on the ability of non-motorised users to cross or use busy sections safely, e.g. Toseland Road. It is considered that, as a consequence, elements of the proposals do not accord with National Planning Practice Guidance or LP Policy LP16.
  - c) safe physical access from the public highway can be achieved, including the rights of way network where appropriate
- 6.2.14 There are aspects of the scheme design that are cause for concern in relation to safe access of the public highway network, as detailed at paragraph 6.5. The revisions set out will overcome these concerns and ensure that this aspect of HLP2036 Policy LP16 is complied with.

- d) any potential impacts on the strategic road network have been addressed in line with Department for Transport Circular 02/2013 and advice from early engagement with Highways England
- 6.2.15 This is addressed elsewhere in this response and, as it stands, there is currently concern that the impacts have not been appropriately addressed.
  - e) there are no severe residual cumulative impacts.
- 6.2.16 The councils are concerned that the level of severity of residual cumulative impacts may be incorrectly assessed in the Environmental Statement (APP-084) and would urge the applicant to revisit this in light of other comments set out in this representation.
- 6.2.17 CCC position is supported by the Cambridgeshire Local Access Forum (CLAF), a statutory group operating under the Countryside and Rights of Way Act 2000, formed to advise on the management of the county's public rights of way. CLAF stated as part of their A428 consultation feedback to Highways England "We are concerned at the lack of Non-Motorised Users (NMU) access included in the project and the missed opportunities for improving and enhancing the rights of way network".
- 6.3 Cambridgeshire Transport and Health Joint Strategic Needs Assessment: The Public Health Benefits of increasing Active Transport
  - 6.3.1 Physical inactivity is the fourth leading risk factor for death worldwide. It is known that a lack of physical activity is harmful, contributing to an increased risk of diabetes, cardiovascular disease and cancer. Fitting physical activity into the working day can be difficult. Active travel to and from work is a good way for many people to get active and work towards the 30 minutes a day target.
  - 6.3.2 The National Institute for Clinical Excellence (NICE) provides Public Health guidance aimed at preventing disease and improving the health of the population. Walking and Cycling Briefing (LGB8, NICE, 2013) This briefing, endorsed by the Department for Transport (DT), summarises NICE's recommendations for local authorities and partner organisations on walking and cycling. Among the key actions are:
    - (a) Ensuring there is a network of paths for walking and cycling between places locally;
    - (b) Reducing road danger and perception of danger; and
    - (c) Ensuring other policies support walking and cycling.
  - 6.3.3 The main barriers to walking and cycling identified in the Transport Strategy for Cambridge City and South Cambridgeshire included the following:
    - (a) Safety and perception of safety (of cyclists, pedestrians and drivers);
    - (b) Lack of awareness:

- (c) Lack of dedicated routes/links between major cities;
- (d) Pedestrian/cyclist/driver conflict;
- (e) Distance/access to local facilities/services;
- (f) Lack of routes/access to frequently used services and facilities;
   and
- (g) Quality of walking/cycling environment.

# 6.4 Representations on general provisions made within the DCO

- 6.4.1 CCC reiterates the amendments to the draft DCO requested at section 3, many of which are relevant to NMU provision.
- 6.4.2 Article 14(7) Classification Timing and implementation mechanism for new/amended PROW CCC experience with the A14 is that works are completed at very different times. Therefore, unless it is intended for nothing to be opened until the whole scheme is certified as complete, the wording should be accordingly amended to: 'the date on which individual works to PROW are certified as complete to the reasonable satisfaction of the LHA and handed over'.
- 6.4.3 **Article 14(7) Incorrect reference** It is the Local Highway Authority that is responsible for highways, not the Local Planning Authority. The wording needs to be corrected to 'street authority'.
- 6.4.4 Article 18 Permanent stopping up of PROW Article 18 does not offer the LHA any opportunity to comment on or authorise the permanent stopping up of highway and of private means of access (PMA) onto the highway, yet the LHA plays a critical role as the local street authority and the traffic manager. The LHA needs to be satisfied that:
  - (a) New routes or amended or diverted highways are completed to our satisfaction before taking over the responsibility for the asset
  - (b) Routes for which it is responsible and for which there is no alternative provision can proceed to be extinguished.

There is no provision in the draft DCO for any certification process that would provide the necessary check mechanism. Article 18(2)(a) requires the new street to be completed to the satisfaction of the street authority. This is insufficient. The LHA needs to know when PROW are to be extinguished because 1) there might effectively be an alternative provided (e.g. 4 PROW are to be 'merged' into two new routes over the A428), of which the LHA needs to be satisfied, and b) in order for CCC in its role as the Order-Making Authority to undertake its statutory duty with regard to effecting changes on the DM&S through appropriate Legal Event Modification Orders under s53WCA81. If the OMA don't know the changes are coming the LHA cannot put in place the appropriate follow-up legal work. As Highways England will be paying for those LEMOs, they presumably would also want to know when those costs are likely to come back to them.

- 6.4.5 Article 29 Extinguishment of Public Rights of Way Article 29 of the draft DCO (APP-025) affords the LHA no involvement in the process to stop up public rights of way, which CCC requests is reconsidered.
- 6.4.6 Article 29(2) Extinguishment of Public Rights of Way There needs to be an established audit process that enables service of the proposed notice to the LHA so that extinguishments do not come as a surprise and any related issues such as signage on the ground can be addressed to manage any user expectations. The LHA request that the following provision is added: "and, where applicable, have provided the relevant alternative section of public right of way identified in column (4) of Part 1 of Schedule 4 and shown on the rights of way and access plans."
- 6.4.7 Article 18(3), Schedule 4, Part 1 Highways to be stopped up for which no substitute is provided Where highways are to be stopped up and no substitute provided, the LHA requests that it is notified that the PROW is extinguished at the time of extinguishment and that site notices must be erected where the PROW is extinguished to allow the LHA to make any required changes to the Definitive Map and Statement.
- 6.4.8 **PROW Widths** A process for determining width of PROWs must be agreed prior to development commencing; width is one of the categories of legal information that will be required in the certification and handover package to enable CCC to comply with its statutory duty under Wildlife and Countryside Act 1981 s53 to record the changes to the PROW network on the Definitive Map & Statement. The handover of new PROW from the undertaker to CCC will not be accepted without this information. As a minimum, CCC would expect the following widths to be adhered to and would expect the Applicant to commit to these in the draft DCO with the relevant widths for each highway being set out in Part 7 of Schedule 3 (APP-025) and in the detailed design prior to the commencement of construction:

Type of facility	Minimum Width
Footway	2 metres
Footway/Cycle track	3 metres
NMU: Pedestrian/Cyclists/Equestrian	3 metres
Public Footpath	2 metres
Public Bridleway	4.5 metres

- 6.4.9 **PROW Specifications** The specifications for PROW surfacing/construction, infrastructure and signage to CCC's standards must be agreed with CCC early in detailed design, before any construction commences. With the A14 project, this was not considered until after works had started, leading to unnecessary additional resource costs and duplication of work on the ground to correct inappropriate works. The LHA require documented agreement that standards will be agreed early in detailed design.
- 6.4.10 **Asset Ownership** The ownership and maintenance liabilities of assets (including gates and bollards) placed on Public Rights of Way and Non-Motorised Routes, must be clarified at the outset to avoid issues later. With the A14 scheme there are several assets that have been installed where CCC has not been informed as to who is the owner responsible for

maintenance. Delayed handover of new highways to the LHA and additional costs are likely to result whenever there is an issue with these assets. A full asset register and ownership must be provided to CCC before handover.

# 6.5 **Joint Non-Motorised User (NMU) and Public Rights of Way (PROW) Representations**

- 6.5.1 CCC is required to consider its public sector equality duty (PSED), (specifically regarding those with disabilities) when considering the provision of facilities for pedestrians and cyclists. It is also the CCC's' policy to consider the needs of equestrians, and where desirable to include equestrian provision (ROWIP SO1- GP1 and SOA2- GP2, SOA2, Ref 2/1). All roadside NMU provisions should, in addition to walkers and cyclists, accommodate equestrian users.
- 6.5.2 Schedule 1 of the Draft DCO (APP-025) (the Schedule of Works) does not include any reference to the construction of NMU facilities and Public Rights of Way. The provision of these facilities is specified in Schedule 3 part 7, so these routes can be considered to have been legally created. However, they should also be identified for physical construction in Schedule 1. For example, work number 98 specifies construction of the new Eltisley Link local road, but the work description makes no mention of the NMU facilities shown in Schedule 3-7 and on the Streets, ROW & Access Plans (APP-013). With the A14 scheme, discrepancies between works and schedules led to issues over which text in the DCO takes precedence. Inclusion in both sections of the DCO will avoid any ambiguity.
- 6.5.3 The experience of the A14 works is a useful example of lessons that can be learnt regarding the provision and design of NMU facilities. Early engagement with CCC officers and user groups can avoid the need for remedial work by the Applicant when assets are handed over to the LHA and ensure that facilities for people on foot, on bicycles and, where appropriate, on horses, are fit for purpose and allow for growth in user numbers.
- 6.5.4 The example of the shared cycle and pedestrian path built by Highways England at the Histon Road (B1049) roundabout should be a lesson learnt which feeds into the design of the NMU facilities for the A428. In this case there was insufficient engagement with CCC Cycling Team officers, local representatives and user groups, during the detailed design and construction stages for an NMU at-grade crossing of an off-slip. The outcome was that following a series of negative comments received from users of the completed crossing, the design was reconsidered in conjunction with CCC and corrective works were required in order to optimise the layout of the affected NMU crossing, including the re-siting of some electronic signal infrastructure. This has come at an additional monetary cost to the Applicant in terms of revising the physical layout, and a time cost in terms of the negotiations undertaken with CCC to reach a solution. It is therefore essential that design matters related to PROW and NMU facilities are discussed in detail with the relevant LHA to ensure costly remedial works are not required. Appropriate provision will be required in a legal agreement with the Applicant. This applies in relation to the provision of highway apparatus within the new PROW and NMU, as well as any issues related to alignment or width of such facilities. There

has been significant frustration experienced by both CCC and highway users, that the A14 NMU provision elsewhere was to a minimum standard, with poor crossings of accesses and no set-back from a high-speed carriageway. At little, if any, extra expense the shared paths could have been designed to be safer, more convenient to use, and more pleasant places to be.

- 6.5.5 There is also an inconsistency in the Applicant's provision for NMUs across its schemes. For example, the Highways England, Caxton Common to Hardwick improvement scheme which opened in 2007 and will connect to the A428 Black Cat to Caxton Gibbet scheme, included signalised crossings for NMUs at each of the slip roads into Cambourne. This is to ensure that users can safely cross where vehicles will be accelerating up to or de-accelerating rapidly from 70mph, making it difficult for non-motorised users to assess when it is safe to cross. Signalised crossings at these locations also prevent users being deterred from using these routes. Similar provision is not proposed for slip roads in the current works and no explanation or justification is given.
- 6.5.6 Any gaps in provision for NMUs that remain unaddressed by the DCO should not be neglected as part of this process. The delivery of the DCO represents an opportunity to bridge such gaps efficiently while the legal authority and physical and financial resource is available. Re-working recently constructed facilities does not enhance the public reputation of either Highways England or the LHA. These are detailed at 6.5.7 (b) to 6.5.7 (m) inclusive. CCC requests that sites such as this are reconsidered for inclusion in the DCO and is happy to engage constructively on the matter.
- 6.5.7 It is the Councils' strongly held opinion that NMU improvements should be delivered by the Scheme where they sit within the red line boundary: it is unreasonable to push the risk and burden of delivering these improvements onto the LHA. The Councils request the inclusion of the following specific NMU improvements within Part 7 of Schedule 3 to the draft DCO (APP-025):
  - (a) NMU facilities alongside the sections of the former A428 that are to be de-trunked. Any asset which is to be transferred to, or maintained by, CCC as the Local Highway Authority must comply with Local Transport Note 1/20 Cycle Infrastructure Design. A continuous, safe NMU route should be provided between Cambourne and St. Neots in accordance with government and local policies set out above. The proposed provision for NMUs is not acceptable in terms of route continuity and crossing facilities, as set out below.
  - (b) Safe NMU provisions should be installed in the verges to the realigned Potton Road (connecting to footpath 1/11 on Streets, Rights of Way and Access sheet 5 (APP-013)) and the B1046. These roads have a 60mph limit and the new T-junction and bridge will present visibility issues. The proposed bridge should include safe NMU segregated provision across the new A428, future-proofing this site for potential future enhancements to the cycle network and the PROW network. This amendment is

- required to bring the Scheme into compliance with ROWIP (SOA2, GP2; SOA5, GP5).
- (c) At the new Cambridge Road junction, Streets, Rights of Way and Access sheet 9 (APP-013) a signalised NMU crossing at the A428 eastbound on slip road should be provided to enable NMU users to safely negotiate the junction. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP2, SOA2, Ref 2/1).
- (d) At the new Cambridge Road junction, Streets, Rights of Way and Access sheet 9 (APP-013), a signalised NMU crossing at the A428 westbound off slip should be provided to enable NMU users to safely negotiate the junction. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP2, SOA2, Ref 2/1).
- (e) The Councils note that the Toseland Bridge, Streets, Rights of Way and Access sheet 11 (APP-013), will only have a footway. A NMU available to walkers, cyclists and equestrians should be provided here in accordance with ROWIP SOA2, GP2. This should also allow for cyclists to continue north with a suitable transition from off to on-road; and south of the bridge a crossing facility should be provided to enable safe access to Abbotsley Road, on the south side of the current A428. This route had previously been indicated as shared use paths in earlier iterations of the design and has been downgraded.
- (f) The Eltisley Link North roundabout Streets, Rights of Way and Access sheet 13 (APP-013), should facilitate cyclists who wish to continue northwards on the B1040 with a suitable transition from off to on road. The roundabout should be designed to slow traffic speeds with LTN 1/20 compliant refuges for crossing the roundabout.
- (g) The NMU link between Eltisley and the Caxton Gibbet Junction North Roundabout: Streets, Rights of Way and Access sheets 13 & 14 (APP-013) has a 600-metre gap in provision where vulnerable NMU users would have to use the carriageway. This conflicts with ROWIP SOA2, GP2 and SOA5, GP5. The proposed NMU link requires users to cross the re-aligned old A428 with no provision, and the link into Eltisley ends before it is safe to be onroad. This is an important east-west link, particularly as a route to school. This DCO should include a continuous, safe, segregated NMU route from Eltisley village to the Caxton Gibbet roundabout with a suitable LTN 1/20 compliant crossing.
- (h) At the Caxton Gibbet Junction North Roundabout, Streets, Rights of Way and Access sheet 14 (APP-013), the NMU crossing of the A1198 should be a signalised crossing with a suitably sized central island, or an underpass to allow all classes of NMU users to cross the 3 southbound and 2 northbound lanes of traffic safely. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP2).

- (i) At the Caxton Gibbet Junction North Roundabout, Streets, Rights of Way and Access sheet 14 (APP-013), a signalised crossing should be provided across the on-slip to the A428 eastbound. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP2).
- (j) At the Caxton Gibbet Junction South Roundabout, Streets, Rights of Way and Access sheet 14 (APP-013), a signalised crossing should be provided across the off-slip from the A428 westbound. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP2 and SOA5, GP5).
- (k) At the Caxton Gibbet Junction Services, Streets, Rights of Way and Access sheet 14 (APP-013), the footway linking to the services should be built as an NMU for pedestrians and cyclists to enable workers and customers services to safely access them by active travel. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP5). This route had previously been indicated as shared use paths in earlier iterations of the design and has been downgraded.
- (I) At the Caxton Gibbet junction South Roundabout, Streets, Rights of Way and Access sheet 14 (APP-013), the NMU southwards along A1198 should continue on the eastern side and not cross the A1198. This will facilitate connectivity into the planned NMU connections of the developments at Cambourne West, avoiding non-motorised users needing to cross the A1198 twice within a short distance. This amendment is required to bring the Scheme into compliance with ROWIP (SOA2, GP2).
- (m) Footpath 1/17: Streets, Rights of Way and Access sheet 14 (APP-013), CCC's request for the upgrade of FP 1/17 to Bridleway status, included in its Supplementary Consultation response, and the associated improvements to the proposed NMU bridge over the new A428, have not been incorporated into the draft DCO. This is disappointing as an opportunity to enhance the network for all local users has been missed. This amendment is required to bring the Scheme into compliance with ROWIP (ROWIP SOA2 Ref 2/1).
- In relation to connectivity at the Caxton Gibbet Junction to Cambourne Junction, the speed and volume of traffic on the old A428 section between Brockley Road, Elsworth and Cambourne junction is not suitable for cycling, and so the NMU route from the Caxton Gibbet roundabout to the old A428 at Brockley Road should be continued eastward to link with the existing NMU route into Cambourne. This is a high priority route in the draft Cambridgeshire Local Cycling and Walking Infrastructure Plan and, with the Applicant's funded link to Papworth Everard, would provide a continuous segregated route from Papworth to Cambourne.

## 6.6 Public Rights of Way Specific Representations

6.6.1 Footpath 1/9, Hen Brook: CCC requests that the underpass which Footpath 1/9 will share with the Hen Brook beneath the new A428 is sufficiently open and high, so users do not feel unduly enclosed. The public

- right of way should have a width of 3.5 metres and a height of 4 metres and be upgraded to a bridleway, as part of supporting the Wintringham Park PROW strategy. This amendment is required to bring the Scheme into compliance with ROWIP (SOA5, GP5).
- 6.6.2 Incorrect reference: 3.1 draft DCO Vol.3 Part 7, page 90 (APP-025) states "1406 metres of footpath from point 6/2 to point 8/1 to point 8/3 as shown on Sheets 6 and 8 of the streets, rights of way and access plans." and "166 metres of footpath from point 8/1 to point 8/2 as shown on Sheet 8 of the streets, rights of way and access plans". These paths are erroneously described as being in Bedford Borough Unitary Authority area; whereas they are actually wholly in Cambridgeshire. CCC requests that the draft DCO is amended to correct this inaccuracy. In addition, in 3.1 draft DCO Vol.3 Part 7, page 90, the distance is between 8/1 to 8/2 is 166 metres, whilst in 3.1 draft DCO Vol.3 Schedule 4, Part 2, page 104, the distance is 160 metres.
- 6.6.3 Incorrect reference: 3.1 draft DCO Vol.3 PART 7, page 91 (APP-025) states "Toseland CP, Croxton CP, Yelling CP; 32 metres of footway...."

  The wording "Cambridgeshire County Council" has been omitted here and should precede the parish references. Legal events for the creation of Public Right of Ways could be invalid due to omission of the County name. CCC requests that the draft DCO is amended to correct this inaccuracy.
- 6.6.4 Footpath 1/16: The revised route of Footpath 1/16 seems to unnecessarily pass down to and up from a cutting, before users are discharged onto the combined NMU route and maintenance track adjacent the accommodation bridge. If the route follows along the top of the cutting, the issue would be resolved. An amendment is required to the route to bring the Scheme into compliance with ROWIP (ROWIP SOA1, GP 1).
- 6.6.5 Bridleway 1/18: It is noted that a new accommodation bridge carries PMA no.47 over the new A428, as well as the realigned Bridleway 1/18. The matter of the party responsible for maintaining the surface remains unclear. We request that the draft DCO is amended to clarify that in circumstances where private means of access and PROW share the same surface, as in this instance, the burden of maintenance for that surface should be with the party benefiting from the private access.
- 6.6.6 Caxton Gibbet Junction Services: The footway linking to the services should be built as an NMU for pedestrian and cyclists, to enable workers and customers to safely access the services by active travel. This amendment is required to bring the Scheme into compliance with ROWIP (SOA5, GP5).
- 6.6.7 Caxton Gibbet Junction, continuation of NMU southwards along A1198: This should stay on the eastern side of the A1198. This will facilitate connectivity into the planned NMU facilities to be delivered in association with the development of Cambourne West, avoiding the need for non-motorised users to cross the A1198 twice within a short distance.
- 6.6.8 Private access road between Caxton Gibbet north roundabout and Brockley Road, Elsworth: The Streets, Rights of Way and Access Plan no 15 (APP-013) shows a new bridleway being provided along the private access road between Caxton Gibbet north roundabout and Brockley Road,

Elsworth (points 14/5 to 15/1). However, the route appears to share its surface with a private means of access. As noted above, responsibilities for these shared surfaces need to be clarified. The draft DCO needs to be amended to address this concern.

### 7. BIODIVERSITY / ECOLOGY

- 7.1 The Councils have concerns regarding:
  - 7.1.1 The robustness of the baseline survey data used to inform conclusions drawn within the Environmental Statement:
    - (a) Aquatic and river habitats were assessed under significantly dry and hot conditions, which scoped out many areas due to lack of water. No attempt to re-survey under better conditions was made prior to the submission of the DCO application. Similar issues were found with fish and aquatic invertebrate surveys. In addition, fish survey data was over two years old and is considered out of date prior to the submission of the DCO. Terrestrial invertebrate data was similarly out of date and should have been updated prior to the submission of the DCO application. Terrestrial invertebrate data was limited to predominantly day flying and easily observed species. Only pitfall trapping was used to capture nocturnal species (such as coleoptera, non-flying Hymenoptera), no attempt to survey moths which are important to the County's bat population, for example, was made.
    - (b) No surveys were undertaken of potential priority habitat grassland and a Protected Road Verge. Details for the arable field margin survey are missing, including the extent of field surveys and location of arable field margins of importance.
    - (c) The Applicant should provide up to date survey data where necessary, re-survey those areas that were subject to significant short-term climatic events and re-visit the scope of terrestrial invertebrate survey to include important local species such as moths.
  - 7.1.2 The methodology used in the Biodiversity Net Gain assessment:
    - (a) The Applicant is using a bespoke Biodiversity Net Gain Calculator modified from the 2012 "Warwickshire" model. However, the Applicant model further reduces the level of detail required significantly from the original. The Applicant's model assumes that all post construction habitats will never reach anything other than "low" quality, that all pre-construction habitats in a single category are of the same quality (for example, that all semi-improved grassland across the whole scheme is of medium quality) and does not distinguish between linear and area biodiversity scores. By not separating linear and area biodiversity scores, the Applicant has not identified that the scheme will have a net loss in linear biodiversity. There is also the issue of mathematical integrity, as the model puts both linear (measured in

- km) and area (measured in ha) in the same calculation, the model does not appear to be mathematically sound. Biodiversity Net Gain principles are clear, in that, net gains should be provided in both area and linear biodiversity. Considering that the hedgerow surveys undertaken by the Applicant stated that the hedgerow network as a whole should be considered up to County level importance due to the contributing ecosystem services to other species (birds and insects for example), this is not acceptable.
- (b) The Councils request that the Applicant re-calculates the biodiversity net gain calculation using either the DEFRA Metric 2.0 or 3.0, separating pre-construction habitats into their different habitat quality groups, or provides better assumptions regarding post-construction habitat quality. Use of either of these metrics will automatically separate linear and area biodiversity.
- 7.1.3 The completeness of the Environmental Masterplan (APP-091), which does not reflect general works arrangements and does not maximise biodiversity opportunities:
  - (a) Some of the habitats to be created under the Environmental Masterplan (APP-091) appear to be either inappropriate, fail to adequately mitigate / compensate for adverse impacts, or are a missed opportunity to provide greater biodiversity net gain. Mitigation strategies for these habitats and species (e.g. arable field margins, farmland birds, Great Crested Newt and invertebrates) must be developed and incorporated into the Env. Masterplan in consultation with the Councils.
  - (b) The use of *Betula pendula*, silver birch (currently 25% of the woodland mix), is not considered appropriate within the climatic conditions of the County. Cambridgeshire is much dryer than much of the UK and species such as this require much higher levels of soil moisture than will be available within the scheme boundary. Therefore, it is likely that these species will not thrive under the conditions, and not reach their full potential. While other species, such as elm sp., which is a key component of local woodland, hedgerows and veteran trees and supports terrestrial invertebrate assemblages of county importance have not been included within the planting scheme. The proposed planting scheme should be updated to address this comment.
  - (c) The Environmental Statement (APP-077) is quite clear that 18 new ponds are to be created to mitigate the loss of aquatic habitats; however, the soft landscaping scheme does not provide any areas that would be considered a pond, nor is it clear if these features would be considered anything more than attenuation features and therefore of little advantage to aquatic species. The Councils requests that clarity of the location and characteristics of the 18 new ponds is provided.

- (d) The design of new hedgerows should be made much clearer, for example, allowing trees to grow within them, and expanding their range to provide a net gain in linear biodiversity which is currently lacking.
- (e) The Environmental Masterplan (**APP-091**) states that there will be mammal tunnels provided to mitigate badger, bat, and otter movements across the scheme. However, no design detail of these features has been provided within the application documents. The Applicant must re-consider the habitats which are to be created and gain a better understanding of local climatic conditions when choosing species and habitats. Where mitigating features such as mammal tunnels and ponds have been promised within either the Environmental Statement (**APP-077**) or Environmental Masterplan (**APP-091**), there should be consistency across other areas of the DCO, such as road design, underpasses and drainage.
- (f) Biodiversity net gain could be boosted in several ways. Firstly, through less reliance on woodland habitats. Although they can provide biodiversity net gain, it can take up to 35 years for these habitats to reach their full potential therefore their contribution to overall biodiversity net gain is less significant. Concentrating on the creation of aquatic and wetland habitats, along with rich native grasslands would provide a far greater gain in biodiversity across the Scheme in the near term. Currently there is a loss in linear biodiversity, therefore, a greater amount of native mixed species hedgerows is needed to deliver linear biodiversity net gain.
- (g) It is unclear how site compounds, soil storage areas and borrow-pits will be restored. It is understood they will be restored to arable farmland, although the general arrangement plan shows the Caxton Gibbet borrow-pits to be restored to amenity grassland. These areas provide the maximum opportunity for enhancement for biodiversity, located away from the road and therefore opportunities to mitigate impacts to habitats & species, as well as providing biodiversity net gain.
- 7.1.4 There has been insufficient consideration of the impact on Hen Brook and Wintringham Brook in terms of biodiversity and water quality resulting from insufficient survey data:
  - (a) Due to surveys being undertaken in abnormally dry and hot conditions, the results of the baseline surveys for these areas are not considered to be sound. Further surveys under more median conditions would provide much more confidence in the baseline assessment.
  - (b) The Environmental Masterplan (**APP-091**) identified surveys as part of a Water Framework Directive Strategy, but these have not been provided.

- 7.1.5 Some of the assessments of ecological impact do not present robust evidence to justify the predicted impact:
  - (a) As stated previously there is a permanent loss of linear habitats, the Environmental Statement (APP-077) has called this a "temporary loss", a conclusion which is not supported by either the Environmental Masterplan (APP-091) or the biodiversity net gain calculations.
  - (b) The Environmental Statement (APP-077) does not provide clear evidence that the increase in artificial light across the scheme will not impact commuting and foraging bats. No analysis of light impacts is presented, and it appears to be assumed that there will be no overall increase from pre-construction levels. Without this analysis, (i) a conclusion on the likely significance of the effects of artificial lighting on bat species cannot be reached; and (ii) Natural England will have insufficient information on which to issue a Letter of No Impediment confirming it is satisfied in principle that a European Protected Species licence can be issued at the appropriate time for the relevant disturbance activity.
  - (c) It is welcomed that the lighting scheme will incorporate the mitigation measures set out in chapter 8 of the Environmental Statement (APP-077). However, chapter 8 only provides generic information (paragraph 8.9.122):

"lighting design has been developed to minimise light-spill onto adjacent habitats, including where there are potential roosts or important foraging and/or commuting habitat that is regularly used by the local bat population". This does not contain sufficient detail to inform a detailed lighting scheme.

There must be certainty of likely impacts on the bat populations (all of which are European Protected Species), so the Councils would expect an outline lighting strategy to be submitted or evidence that there will be no lighting of hedgerows or tree belts.

The Councils request that (i) the Applicant provides more detailed information in relation to the lighting design; and (ii) the Applicant is required to develop a wildlife sensitive lighting scheme should show technical specifications which demonstrate measures to avoid lighting impacts to foraging or commuting bats.

(d) All predicted impacts stated within the Environmental Statement (APP-077) must be fully evidenced and justifiable. There are important areas that cannot be left to assumption as they may infringe legal obligations under the Conservation of Habitats and Species Regulations 2017 (as amended), The Wildlife and Countryside Act 1982 (as amended), the Badger Protection Act 1991.

- (e) Wimpole and Eversden Woods Special Area of Conservation (international site). The assessment of impact to the Barbastelle bat population is based on insufficient survey work as set out in Natural England's representation letter dated 10 June 2021<sup>9</sup>. The survey work requested at paragraphs 3.5.1 should be carried out and the results incorporated into an updated assessment.
- (f) Madingley Slip Road Roadside Verge County Wildlife Site (CWS). No evidence is provided to demonstrate this flora of the section to be impacted by air pollution is "relatively tolerant to nitrogen". The flora of many road verges in Cambridgeshire have declined over the last 50 years, with nitrogen deposition likely to have contributed to their decline (Shanklin, J. (2021) Nature in Cambridgeshire 2021, currently in draft). Further information on this matter is required.
- (g) Protected Road Verge S8, Brockely Road (PRV S8). The assessment of impact to PRV S8 cannot be determined until a detailed botanical survey is undertaken and assessment revised. The assessment does not consider direct impact and states that the PRV is located outside the Order Limits (paragraph 8.9.13, page 57, Chapter 8, 6.1 Env Statement) (APP-077). PRV S8 is shown within the Order limits and within the Limits of Deviation (2-3 Work Plan Regulation 5(2)(j) Sheet 15 Composite) (APP-009). There is potential for the PRV to be directly impacted by the construction of the proposed alignment of junction with the new road (Work No. 109c on the work plan) (APP-010), which is located adjacent to the southern boundary of the PRV.
- (h) **Woodland.** The assessment that the magnitude of impact to woodland is of Moderate (beneficial) during the operational phase (paragraph 6.1.3 on page 75 & Table 8-10, Chapter 8, 6.1 Env Statement) (APP-077) is not supported. Woodland, including two woodlands of district importance will be lost and remnant fragments of woodland will be vulnerable to future pressures. New woodland will not include key characterises of the existing woodland or resilience to climate change. In particular, the planting mix (Table L-4: Indicative woodland mix (LE 2.1), p131, 6.8 First Iteration of EMP) (APP-234) does not include elm, which is a key component of local woodlands, as identified in the woodland survey results (Table 4-3, page 27, Appendix 8.3, 6.3 Environmental Statement) (APP-190). Therefore, it is considered the Scheme will only deliver Minor beneficial effects, leading to a significance of Slight (beneficial) effect during operational period.
- (i) **Hedgerow.** The assessment that the magnitude of impact to hedgerow is of Moderate (beneficial) during the operational period (paragraphs 8.9.113 & 6.1.3 on page 75<sup>10</sup> and table 8-10, p.71 Chapter 8, 6.1 Env Statement) (**APP-077**) is not supported. 87 hedgerows will be lost / severed as part of the scheme. Although new hedgerows are proposed, they do not include key characterises of the existing hedgerows. In particular, they do not

-

<sup>&</sup>lt;sup>9</sup> RR-076

<sup>&</sup>lt;sup>10</sup> Paragraph is labelled at 6.1.3 in Chapter 8 of 6.1 Env Statement, but the numbering of the paragraphs has gone wrong. It is located 2 paragraphs after 8.9.114 (page 75)

include standing deadwood or elm (planting mixes LE4.3 & LE4.4, Tables L-11 & L-12, p131, 6.8 First Iteration of EMP) (APP-234), which is a key component of local hedgerows, as identified in the hedgerow survey results (paragraph 4.4.5, page 32, Appendix 8.3, 6.3 Environmental Statement) (APP-190). Therefore, it is considered that the scheme will deliver some benefits but only Minor beneficial effects, leading to a significance of Slight (beneficial) effect during operational period.

- (j) Hedgerow connectivity. In addition, the assessment does not consider the impact on hedgerow connectivity, with the hedgerow network identified as county importance (paragraph 4.4.16, Appendix 8.3, 6.3 ES) (APP-190). The Scheme will result in the partial loss / damage to a key characteristic of this county-wide hedgerow network, with no proposed green bridges or wildlife corridors across the route, resulting in Moderate (adverse) magnitude of impact, leading to a significance of Moderate (adverse) effect during construction and operational period
- (k) **Veteran tree.** The assessment of impact to the single veteran *Ulmus rocera* (irreplaceable habitat) cannot be determined until details as to its protection are provided. The tree is located within the Limits of Deviation (2-3 Work Plan Regulation 5(2)(j) Sheet 6) (**APP-009**). While the veteran tree will be retained in the Environmental Masterplan (**APP-091**), is not clear how it will be protected during construction works given it is not contained within the Biodiversity pre-commencement plan (appendix 6.13, 6.3 Env Statement) (**APP-239**).
- (I) Arable field margins. The assessment of impact to arable field margins (priority habitat) cannot be determined because it is based on insufficient survey information. The terrestrial habitat survey does not include the exact area of fields surveyed or locations of the arable field margins, particularly those identified of county importance (Figure 1, Appendix 8.3, 6.3 ES) (APP-190). Furthermore, the no mitigation hierarchy has been implemented within the design scheme /assessment and therefore, the loss of arable field margins of county importance will result in an adverse impact. The residual impact on this habitat should be addressed through the implementation of an arable field margin mitigation strategy, to be discussed and agreed with the Councils.
- (m) **Grassland.** The assessment of impact to grassland cannot be determined until botanical survey work of potential priority habitat grassland has been completed. It is assumed these grasslands were scoped out due to their small areas. However, this must be looked at in context. Only 2.6% of Cambridgeshire is considered to support the highest quality semi-natural habitats (Roquette J., 2019)<sup>11</sup>, with the road verge network representing the largest area of unimproved grassland in the county. Therefore, the loss of any small remnant of priority (grassland) habitats may be far more

<sup>&</sup>lt;sup>11</sup> Roquette, J, (2019) Mapping natural capital and opportunities for habitat creation in Cambridgeshire. Natural Capital Solutions, <a href="http://www.cpbiodiversity.org.uk/wp-content/uploads/2018/08/Cambridgeshire-habitat-mapping-final-report-FINAL.pdf">http://www.cpbiodiversity.org.uk/wp-content/uploads/2018/08/Cambridgeshire-habitat-mapping-final-report-FINAL.pdf</a> viewed 03/08/2021.

- significant in Cambridgeshire than other areas in England. The Councils request that this survey work is agreed with the Councils, carried out and incorporated into an updated assessment.
- (n) Aquatic habitats. The assessment of impact to aquatic habitats cannot be updated until further survey work is undertaken (as discussed above) and details of survey work / WFD mitigation and enhancement strategy for ecological protection measures identified along several reaches (E3.2, Environmental Masterplan) (APP-091).
- (o) **Bats.** The assessment of impact of bats cannot be determined until further survey work for barbastelle bats (as set out in Natural England's representation letter dated 10 June 2021) is carried out and details of the lighting scheme, bat underpasses and any changes to junction design (currently traffic flow modelling suggests the junctions are too large) are provided. The Councils request that this information is provided.
- (p) Wintering birds. The assessment that the magnitude of impact to wintering birds is of Minor (beneficial) during the operational period (paragraph 8.9.83 and table 8-10, p.71 Chapter 8, 6.1 Env Statement) (APP-077) is not supported. Wintering habitat for farmland bird species, will be permanently lost to the Scheme. There will be some limited gains for species adapted to utilise the road-side habitats (proposed) and are habituated to light, noise and movement. No mitigation measures for other (more sensitive) farmland birds are proposed within site compounds, soil storage or borrow-pits. No consideration has been given to the cumulative effect of displacement of farmland birds as a result of major-scale development across Cambridgeshire (e.g. transport, housing, national infrastructure projects etc.). Therefore, the impact is considered to be Minor (adverse).
- (q) **Breeding birds.** The assessment that the magnitude of impact to breeding birds is of Minor (beneficial) during the operational period (paragraph 8.9.135 & table 8-10, p.71 Chapter 8, 6.1 Env Statement) (**APP-077**) is not supported. The impact is considered to be Minor-Moderate (adverse), leading to a significance of slight-moderate (adverse) because the assessment does not adequately consider the loss of arable habitat (for farmland birds). The Environmental Masterplan (**APP-091**) primarily provides habitat within 250m of the scheme which is unlikely to be suitable for passerines given the level of noise pollution will affect their singing abilities. There is no mitigation for farmland birds within site compounds, soil storage areas and borrow-pits, which have the greatest opportunities for breeding birds, away from the road.
- (r) Amphibians Great Crested Newt. Insufficient information has been provided to determine the impact on Great Crested Newts (paragraph 8.9.83 & 8.9.135 and tables 8-8 & 8-10, Chapter 8, 6.1 Env Statement) (APP-077). Further information is required to determine whether the favourable conservation status of Great Crested Newt will be achieved, including details of the district level licence eligibility and/or an outline GCN mitigation strategy for the

- scheme to mitigate the loss of two breeding ponds and terrestrial habitat. Currently, the Environmental Masterplan (APP-091) does not provide mitigation for GCN.
- **Terrestrial Invertebrates.** The assessment of impact to terrestrial (s) invertebrates is based on incomplete survey information and therefore the impact on this group cannot be determined until further survey & assessment work is completed. The survey work was limited to 1 or 2 surveys, which is contrary to Natural England guidance for 7 visits between April - October (paragraph 3.3.4, Appendix 8.16, 6.3 Env Statement) (APP-203). In addition, no specific consideration was given to species that are impacted by light. From the surveys conducted to date, the scheme will result in the loss of key characteristic habitat features for terrestrial invertebrates / assemblages of county importance, namely elm and standing deadwood associated with no mitigation proposed. Furthermore, the Landscape Strategy and the scheme actively seeks to remove deadwood as part of the management of individual trees (paragraph 5. 1. 4, 1st Iteration EMP) (APP-234). Therefore, there will be adverse short-medium period and longterm impact on these key assemblages.
- 7.2 The Councils also request that any changes made to the project design envelope as a result of other comments are considered fully within the biodiversity assessment, for example the requirement for underpasses and works to local roads (see in particular sections 6.5 and 6.6).

#### 8. LANDSCAPE AND ARBORICULTURE

- 8.1 The scope of the Landscape and Visual Impact Assessment was agreed with the Councils, and the methodology accords with relevant, and current best practice guidance, including *Highways England Design Manual for Roads and Bridges*, the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment: Third edition and The Landscape Institute's Visual Representation of Development Proposals Technical Guidance Note 06/19.
- 8.2 It is considered that in places more could be done to help integrate the proposed A428 into the host landscape. There is concern that in places the development boundary (or order limits) lies too close to the road proposed A428 corridor and does not allow for sufficient mitigation to be implemented. This is particularly where there is considerable infrastructure, such as viaducts, bridges and roundabouts, to be integrated into the landscape.
- 8.3 The arboricultural plans (Tree Constraints Plan and Tree Protection Plans) (APP-183 APP-187) within the Environmental Statement do not show the location of trees subject to a Tree Preservation Order where they fall within or adjacent to the DCO area. Updated versions of these plans are requested.
- 8.4 In addition, these plans do not propose a sufficient level of protection to nearby trees subject to Tree Preservation Orders. While the proposals show basic tree protection measures, these are not considered to be sufficiently robust given the scale of the nearby works. The Councils request that the Applicant shows all protected trees and tree areas and makes alterations to the proposed tree protection measures in areas of significant activity. This will ensure protected trees

- are not subject to damage through accidental incursions into the into the root protection areas.
- 8.5 Throughout the Scheme construction activity is proposed within the root protection areas of retained trees. These areas are shown hatched in blue on the Tree Protection Plans (APP-186 to APP-187) and have the potential to have damaging, long term impacts. These include areas of excavation, highway realignment and surface reinstatement. The Councils request that the Applicant provides further details of these location specific operations in the form of a site specific Arboricultural Method Statement which sets out how the works and any potential impacts will be undertaken and mitigated against.
- 8.6 Areas of concern include the following:
  - 8.6.1 Ref: General Arrangement Sheet 3 - HE551495-ACM-LSI-ZN1\_SW\_Z\_ZZ-DR-DC-2653 (APP-011 – 2.4. General Arrangement Plans). This lies within the Local Landscape Character Area 04 – Ouse Valley Lakes as identified by the submitted Landscape and Visual Impact Assessment (figure HE551495-ACM-EGN-GEN-Z-Z-ZZ-GS-GI-0048) (APP-111). The character area is to host several two large infrastructure features: the New River Great Ouse Viaduct and New Barford Road Bridge, resulting in the introduction of new landform that is not characteristic of the low lying valley floor. The assessment identifies that riparian vegetation, willows and clusters of woodland are characteristic of the landscape, creating a "semi-enclosed character" (paragraph 1.3.24). The Councils consider that the introduction of additional vegetation along the River Great Ouse Corridor and areas of land to the north of the proposed A428 and west of the River Great Ouse, could help to screen. filter and soften views of the introduced features to receptors in the north, and reinforce the character of the landscape surrounding the road corridor.
  - 8.6.2 Ref: General Arrangement Sheets 8 and 9 - HE551495-ACM-LSI-ZN1 SW Z ZZ-DR-DC-2658 and 2659 (APP-011 - 2.4. General **Arrangement Plans)**. The above sheets straddle two Local Landscape Character Areas – LLCA 08: Settled Clayland Vale and LLCA 11: Wintringham and Weald/ Toseland Clay Farmland (APP-111). The LVIA for the scheme identifies tall hedgerows with frequent trees as a common characteristic of LLCA 08 and LLCA 11, though it is also acknowledged there has been historic field removal to amalgamate fields. The Huntingdonshire Landscape and Townscape Assessment places the area within Landscape Character Area 5: South East Claylands, which also notes these distinctive linear features within the landscape, but also the need to "plant tree and woodland belts along major roads to screen visually intrusive development particularly to the edges of the main settlements" in order to protect and enhance the character of the landscape. The proposals include several larger areas of woodland, particularly to the south of Hen Brook, however there are several locations where additional stretches of woodland and tree planting within already proposed native hedgerows, could help to better integrate the new features into the landscape and help achieve the aims of the Huntingdonshire Landscape Character Assessment. Additional planting would particularly be desired as follows and further expanded in section 8.11 below:

- (a) Frequent tree planting to proposed hedgerows west of the road and south of Wintringham Brook on General Arrangement Sheet 8 (HE551495-ACM-LSI-ZN1\_SW\_Z\_ZZ-DR-DC-2658) (APP-011).
- (b) Frequent tree planting to the 1km long stretch of proposed native hedgerow east of the road on General Arrangement Sheet 8 (APP-011).
- (c) Additional woodland planting to the east facing embankment of the earthworks General Arrangement Sheet 8 (APP-011).
- (d) Frequent tree planting to proposed hedgerows east of the road on General Arrangement Sheet 8 (APP-011).
- (e) Tree planting to proposed native hedgerow west of the attenuation basin, north of Wintringham Brook Tributary, on General Arrangement Sheet 8 (APP-011).
- (f) Frequent tree planting to the proposed hedgerows north of the road corridor and roundabouts on General Arrangement Sheet 9 (HE551495-ACM-LSI-ZN1\_SW\_Z\_ZZ-DR-DC-2659) (APP-011). There is a particularly long stretch of hedgerow along this edge, forming the only feature by which the proposed road is integrated into the host landscape. The tree planting becomes particularly important as we enter LLCA 11 as identified by the LVIA.
- (g) Frequent tree planting to the proposed hedgerow south of the road corridor on General Arrangement Sheet 9 (**APP-011**).
- 8.7 Note should be taken of the comments regarding species when putting together the species selections for these hedgerows. The Applicant's commitment to timing of planting, and maintenance regime needs to be clarified. Timing will dramatically affect success of planting depending on the type of plant used (Bare root vs Container grown). It is not expected that the Applicant will be able to water plants/trees during the first growing season so the standard Oct-Mar planting time may be too liberal. It is recommended that planting is completed in late autumn/early winter to allow a full winter period to establish roots. If planted too late in the spring, such as the last week of March, the plants will be heading out of their dormant period and looking to grow above ground as well as below ground and require more regular water.
- 8.8 In addition to the above comments, the Councils make the following submissions in relation to the draft DCO (**APP-025**):
  - 8.8.1 Articles 45 (felling and lopping of trees and removal of hedgerows) and 46 (trees subject to tree preservation orders) Broadly, article 45 allows the Applicant to fell or lop trees and remove hedgerows within the Order limits. Article 46 sets out the applicable procedure where trees are subject to tree preservation orders. The interaction between between articles 45 and 46 is not clear and the Councils request that article 45 excludes trees subject to tree preservation orders.
  - 8.8.2 Article 45(2) (felling and lopping of trees and removal of hedgerows) and 46(2) (trees subject to tree preservation orders) The Councils request that articles 45(2) and 46(2) include an obligation on the Applicant to have regard to the recommendations of the relevant British Standard (BS 3998:2010 Tree Works

- Recommendations) and any advice from the local planning authority in carrying out felling or lopping.
- 8.8.3 Article 45(4) (felling and lopping of trees and removal of hedgerows) Article 45(4) permits the Applicant to remove a) any hedgerows that are set out in Part 1 of Schedule 8; and b) any other hedgerow within the Order limits. The Councils consider that subparagraph b) may give rise to unconsidered vegetation loss and should only be carried out with the approval of the local planning authority.
- 8.9 Hedgerows are not considered in the application.
- 8.10 Changes to some planting mixes and species may be necessary. Plant mixes should reflect the Landscape Character of the areas into which they are being placed as well as the biodiversity considerations noted in section 7.1.3 above and responding well to climate change. Many of the standard mixes used by the Applicant are identified in a standardised specification, LD117. Generally, the specification is not necessarily incorrect, but simply does not allow for enough flexibility for a rapidly changing climate. The points below, derived from the HE551495-ACM-ELS-GEN\_Z\_ZZZ-RP-LE-0001 Outline Landscape and Ecology Management Plan (OLEMP) (APP-234), outline our primary concerns and recommendations within the current specification limitations:

#### 8.10.1 Grasses

(a) Species rich grassland is only proposed in limited areas mainly to the east of the scheme. Species-rich grassland should be the dominant grassland where access is available for mowing. Amenity grass should be used only for verges, sight lines etc.

# 8.10.2 Trees and Mixes

- (a) The Scheme should reduce reliance on birch in the wooded mixes (see section 4.6 of the OLEMP) (APP-234). This is to reflect the fact that birch struggles to survive in the increasingly hot and dry summers being currently experienced. Climate change resilience is sought. Silver birch should not be replaced with alternative birch species such as Downy birch.
- (b) At LE2.1, the Applicant should reduce Silver Birch to 5% and increase the quantum of Field Maple, Bird Cherry and Oak to compensate
- (c) At LE2.2, the Applicant should reduce Silver Birch to 5% and add Hazel (Corylus colurna) at 10% to compensate
- (d) At LE2.4, the Applicant should reduce Silver Birth to 5% and increase the quantum of Prunus spinosa to compensate
- (e) At Table 8 (Shrubs and intermittent trees), a higher % of shrubs and more species are needed. The trees make up 60% of the mix and the proposals contain only 3 shrub species.
- (f) At Table 11 (Individual trees), 30% is too high a proportion for beech unless for a specific feature such as a hilltop beech hangar. The Councils suggest this is amended to 5%. There should also be a lower percentage of beech present in the tree mixes. Beech is not typical of the area in general woodland mixes and is also struggling with the climate.

- (g) Away from the road and or belts of trees, individual trees and trees near water features Salix Alba and/or Salix fragilis should be added as features. These are typical lowland trees in the area. In these areas the Councils suggest 15% of the tree mix is made up of large Willows.
- (h) In relation to the Indicative Scrub Mix LE2.8, Ulex europaeus should be removed from the mix. This is not characterful of the area and will increase fire risks during hot and dry summers. The Applicant should consider a proportion of Crataegus monogyna as a replacement or increase the remaining plants accordingly.
- (i) Different mixes (especially woodland and larger trees) may be needed for engineered embankments when compared with planting in comparatively flat and undisturbed ground.
- (j) All plants apart from standard trees are proposed to be supplied as Bare Root whips. On the A14 scheme all plants were container grown. This is unusual but the Applicant for that scheme believed that this gave a much higher rate of success. It is unclear if container grown plants be used on this scheme. The Councils request that this is clarified by the Applicant.

## 8.10.3 Wetlands

- (a) Typha latifolia should be removed from the planting mix entirely. It will populate on its own and needs no help.
- (b) At paragraph 4.2.20-4.2.21 of the OLEMP (APP-234), wherever possible the wetland and bankside species should contain a wide range of aquatic and marginal plants typical to local wetland. The species list should be based on non-invasive plants that can be controlled.

At paragraph 4.2.39, the Applicant is requested to clarify the need and meaning of "making wetlands invisible to birds from the air". Large water bodies are proposed for this scheme and it is in the Ouse valley. The Councils consider that appropriate wetland and water body planting should be specifically designed to encourage water fowl.

- 8.11 Limited connections are provided between some habitats (specifically near Hen Brook) and should be improved.
- 8.12 The borrow pit remediation should be reconsidered from a landscape perspective. The use of borrow pits is accepted from a landscape perspective but in most cases, the land is being reinstated as landscape or agricultural land. In order to function well in either capacity, the soil structure must not be overly compacted. An engineering-led approach to reinstatement therefore is unlikely to provide the correct soil structure for planting. The DEFRA Code of Practice for the Sustainable Use of Soils on Construction Sites should be quoted within the Methodology which emerges in more detailed design work or an equal specification which outlines the method for reinstating sub and topsoils without excessive compaction and how to repair overly compacted soils.

#### 9. **NOISE**

9.1 The following commitments are required:

Commitment	Why it is required	How it should be secured
		from this must be notified to the Environmental Protection Officer at an agreed number of days prior to the deviating event taking place.
Commitment to continuous noise monitoring (during construction) at fixed locations, representative of receptors at Potten Road (e.g. Rectory Farm Cottage and/or Parkers Farmhouse, Wintringham Park (e.g. Cole Walk), Wintringham Village (e.g. Wintringham Cottages), Cambourne West (eg Oak Tree Cottage) and Eltisley, or where justifiable complaints have been received.	This will be required in order to confirm compliance with agreed/required noise and vibration levels/standards for construction including BS5228. Similarly, vibration monitoring may need to be employed in the event of complaints being received.	As above
Commitment to comply with agreed noise limits at agreed noise sensitive receptors during construction works.	As above	This commitment is required to be added to the First Iteration EMP.
Commitment to noise monitoring after the scheme is completed and is operational.	In addition to overall Scheme predictions, the effectiveness of mitigation installed in respect of operational noise impacts needs to be tested to ensure it performs as expected in the real world, as opposed to just predicted performance. Additional mitigation may be required if found lacking.	Secured by the Third Iteration EMP.
Commitment to provide clear and concise information to keep officers informed as the Scheme's construction progresses. Thus allowing a collaborative approach, which can be secured by following a procedure aligned to the Control of Pollution Act 1974, Section 61 process.	The locations applicable within the Councils coverage are predominantly rural in nature. Background levels are relatively low, particularly at night. If roads are closed background levels will be even lower and intrusive construction noise will need to be adequately attenuated.	The requirement to be contained in the approved noise management plan (1st Iteration then developed into Outline and Final Noise Management Plan) requiring a Control of Pollution Act 1974, Section 61 application and consent process to be followed

Commitment	Why it is required	How it should be secured
Commitment to provide detailed local construction management plans (as required) for specific areas in proximity to sensitive receptors ie existing residential properties	Required by DMRB (REF 11-1) and to confirm BPM and compliance with industry best practice.  Also needed to protect areas with differing environmental characteristics with regard to ambient noise levels and types of property.	Details to be contained in the approved construction management plan (1st Iteration then developed into Outline and Final Noise Management Plan with increasing detail to be provided). Secured by a DCO requirement to produce such a plan and all works to be carried out in accordance with it.
Commitment to providing offsite noise barriers for noise sensitive residential properties such as those close to the Scheme at Potton Road (Parkers Farmhouse (R20) and Rectory Farm Cottage (R21) and Greyholme (R25) and Tithe Farm on Cambridge Road.	Wintringham Cottages (located to the north of the existing A428, close to the Cambridge Road junction) would particularly benefit from this because their back garden directly adjoins the Scheme. The Councils question the Applicant's statement that a roadside noise barrier would not be effective because Wintringham Cottages are too far from the scheme. It may be possible to replace a garden fence with an acoustic fence.	Details to be contained in the approved construction management plan (1st Iteration then developed into Outline and Final Noise Management Plan with increasing detail to be provided). Secured by a DCO requirement to produce such a plan and all works to be carried out in accordance with it.
Commitment is required for the provision of a detailed and comprehensive noise insulation/rehousing policy to be provided, clearly defining which residential properties are predicted to experience noise levels above those trigger levels in BS5228 and the level of mitigation required. These mitigation measures are required prior to the commencement of works.	The impacts on residential properties can be significant if not adequately controlled and there should be fairness and equity as to the availability of noise mitigation measures.	Details to be contained in the approved construction management plan (1st Iteration then developed into Outline and Final Noise Management Plan with increasing detail to be provided). Secured by a DCO requirement to produce such a plan and all works to be carried out in accordance with it.
Commitment is required for construction works that are predicted to generate significant noise levels not to start in the areas identified in the insulation/rehousing	This should be completed as early as possible to allow the timely roll-out of any mitigation required before construction	Details to be contained in the approved construction management plan (1st Iteration then developed into Outline and Final Noise Management Plan with

Commitment	Why it is required	How it should be secured
policy above, until the affected properties are either insulated or residents relocated.	commences near affected premises.	increasing detail to be provided). Secured by a DCO requirement to produce such a plan and all works to be carried out in accordance with it.
Environmental Protection Officer regulatory effort will typically be five days per month during construction, mainly relating to S61 administration, but can be considerably more if complaints are handled.	Responding to requests for S61 deviations and complaints.	Assessment of deviation request and written approval/ rejection provided by Environmental Protection Officer. Ensure complaints are handled effectively and the correct action taken.

- 9.2 The Councils note that the noise assessment does not consider the impacts of the Scheme on the future residents of Cambourne West, as they are not currently insitu and so will not experience a "difference" between the current baseline modelled noise levels and those in the future once the road is open. Therefore, we request that the assessment is updated to include predictions of noise levels that are likely to be experienced by these future receptors of Cambourne West, once the Scheme is in operation.
- 9.3 The Applicant is not proposing to provide mitigation at the eastern end of the Scheme at Eltisley, Cambourne West and some isolated properties (Pastures Farm, The Dovecote at Pastures Farm, Pembroke Farmhouse, The Cow Shed (1 and 2 Pembroke Farm), New Bungalow, Oak Tree Cottage, 1-4 Common Farm Cottages and the Iway Inn) and the Councils did not previously agree with that position. However, further information has since been received, indicating that mitigation is not possible on either engineering or cost grounds. Further justification is required from the Applicant to support this position.

#### 10. AIR QUALITY

- 10.1 The Air Quality Assessment is subject to further revision if any changes are made to the initial Transport Assessment and the estimated traffic flow and traffic data associated with the Scheme. This is particularly important near the junctions and areas where residential dwellings are in close proximity of the road. The revision will ensure that the modelled pollution levels are not subject to any significant changes at sensitive locations.
- 10.2 A local dust management plan during the construction phase should be considered for areas that residential dwellings and sensitive receptors are in close proximity of the Works as set out in the Air Quality Outline Management Plan (OMP), part of the First Iteration Environmental Management Plan (APP-234). These measures should inform the final Management Plan and the relevant DCO Requirements.
- 10.3 As well as decreases in NO<sub>2</sub>, small increases are predicted at a limited number of locations representative of sensitive receptors, however from the information within the assessment and available through our own monitoring, it is considered the

- proposal will not lead to a breach in national objectives or an unacceptable risk from air pollution for the residents of Huntingdonshire. However, this may change if there are changes to the transport assessment.
- 10.4 With regard to the impacts on air quality during the construction phase, the First Iteration Environmental Management Plan (EMP) [TR010044/APP/6.8] (APP-234) includes a range of measures to reduce potential environmental impacts. A Second Iteration EMP will be completed by the Principal Contractor to cover potential environmental impact during the construction phase. The Councils have had meetings with the Applicant where this has been highlighted.
- 10.5 The Councils request a requirement to ensure a Construction Environmental Management Plan is submitted and agreed in writing with the LPA's prior to construction works commencing to ensure all reasonable mitigation measures are utilised during the construction phase.

Commitment	Why it is required	How it should be secured
Commitment to hours of operation of works, and monitoring during construction	To control pollution and enable mitigation to be completed where required	Construction Environmental Management Plan to be agreed with all LA's
Commitment to officer input and control during construction, for example via liaison meetings	To ensure on going control of pollution and enable any issues to be addressed throughout the construction process	Management plan and/or DCO.  All LA's to agree.

## 11. **CONTAMINATED LAND**

11.1 Subject to a commitment and further detail on the approach to backfilling borrow pits, there are no significant concerns with the contaminated land assessment.

## 12. CULTURAL HERITAGE: ARCHAEOLOGY

## 12.1 Baseline evidence

12.1.1 CCC is satisfied that the baseline evidence for Cultural Heritage presented in the DCO application, with particular reference to archaeology, presents a thorough understanding of known and newly found archaeological information along the study corridor of the Scheme. This evidence includes the desk-based assessment of known heritage assets collated in the Preliminary Environment Impact Report, appraising designated (Scheduled Monuments, Listed Buildings, Conservation Areas, Parks and Gardens) and non-designated remains. The evidence is supported by geophysical survey reports, aerial photographic transcription and LIDAR survey reports and a series of archaeological evaluation reports of trench-based work undertaken to validate and verify cropmarked evidence or anomalies from magnetometry surveys, and to search for other evidence not captured in non-intrusive survey.

- 12.1.2 The Scheme's environmental assessment process follows the guidance of the Design Manual for Roads and Bridges Sustainability & Environment Appraisal document: LA 106 *Cultural heritage assessment*, which also provides outline mitigation measures for consideration when designing strategies to mitigate construction impacts on archaeological remains.
- 12.1.3 The compilation of the baseline evidence complies with the Government's policies for the delivery of NSIPs as set out in 'The historic environment' section of National Policy Statement for National Networks (NPSNN) (DoT 2014). These policies broadly replicate the planning policies governing development in England contained in the National Planning Policy Framework (2021) for housing and other development and allow a consistency of approach when determining the impact of development of any kind on the archaeological resource and other heritage assets. Paragraphs 5.126 and 5.127 have regard to the Applicant's Assessment in the NPSNN and are consonant with paragraphs 194-196 of the NPPF.
- 12.1.4 Based on these policies, a scoping response was issued by CCC in May 2019 setting out the types of desk-based and non-intrusive baseline evidence needed and subsequently an Archaeological Evaluation Brief was issued in August 2019 for the acquisition of physical evidence.
- 12.1.5 CCC is satisfied with measures taken by the Applicant to acquire and present a digest of the known archaeological record for the Scheme's study corridor.
- 12.2 Archaeological Mitigation Strategy (AMS)

ES Vol 6 TR010044/APP/6.12 (APP-238)

- 12.2.1 A Joint Authorities' Archaeological Brief for Investigation (JAAB produced by historic environment officers from CCC, Bedford Borough Council (BBC) and Central Bedford Council (CBC) was issued to the Applicant in December 2020, setting out the requirements for the archaeological programme, including a substantial public engagement element, a series of research aims and objectives, guidance for the preparation of the digital and physical archaeological archives, requirements for display and publication of the evidence. This was issued following the submission to CCC of a draft AMS that CCC had not been invited to be involved in the development of which is inconsistent with normal curatorial practices. The JAAB was issued to ensure that local requirements would be met and to retain a consistency with archaeological programmes current on other major development schemes in the vicinity of the Scheme's study area.
- 12.2.2 Some parts of the AMS have conflicting research aims and objectives and this has recently been explained as deriving from the Applicant team's inclusion of a discussion paper and aspects of the Regional Research Framework being too directly applied and unedited (e.g. REF 48 of TR010044/APP/6.12, Vol 6 6.12 Archaeological Mitigation Strategy). That said, much of the AMS can be and has been approved by CCC as consistent with and relevant to the policies for recording archaeological remains contained in NPSNN paragraphs 5.139-5.14, which are similar to those in paragraphs 199-208 of NPPF.

- 12.2.3 However, there are areas of the AMS where opinion has polarised between the Applicant team and CCC, specifically:
  - a) Archaeological site areas that we consider should be included in the investigation scheme, and
  - b) Investigation methodology: including the use of appropriate geoarchaeological techniques to ensure that the relationship of rivers and streams to the archaeological sites located in proximity to them is properly established.
- 12.2.4 Following the return of CCC's review of the AMS listing 76 areas to be addressed in order to agree a suitable, operable archaeological programme, these areas are to be discussed by the Applicant's heritage team and CCC officers in the coming days and weeks. CCC are seeking to ensure that the AMS is suitably scoped and resourced so that scheme programming will not be subject to programme or financial risks owing to any misunderstanding about what will be required in the archaeological investigation programme. CCC require the AMS to contain robust and accurate summaries of the works needed at each of the 31 Cambridgeshire archaeological sites.

## 12.3 Issue 1: Site 18

- 12.3.1 CCC is concerned that insufficient consideration has been given to some areas of archaeological site evidence, such as the part of an Iron Age settlement enclosure and associated evidence in Site 18 (Evaluation Field 74) as reported in ES Appendix 6.7: Archaeological Evaluation Trenching Phase 2 TR010044/APP/6.3 (APP-175) that occurs just inside the Orders Limits and which constitute the earliest, more subtle forms of later settlement, modified and extended in the Roman period with more dominant non-intrusive signatures. CCC believe that unenclosed settlement morphology of the earlier Iron Age period has not been adequately addressed in the areas selected for archaeological investigation that has focused too tightly upon the dominant Roman settlement evidence. The omission of the archaeology of this field is unexplained in the AMS.
- 12.3.2 The archaeological remains are shown on trench plans at Figure 5.3, at text section 5.21, and Table 10.20 of the Phase 2 Evaluation Report (TR010044/APP/6.3) (APP-175) and cropmarked information from air photos is shown at Figure 3 (AP8) of Appendix 6.3: Analysis of Aerial Images TR010044/APP/6.3 (APP-175).
- 12.3.3 NPSNN paragraph 5.140 states (with CCC emphasis):
  - "5.140 Where the loss of the whole or part of a heritage asset's significance is justified, the Secretary of State should require the applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the importance and the impact. Applicants should be required to deposit copies of the reports with the relevant Historic Environment Record. They should also be required to deposit the archive generated in a local museum or other public depository willing to receive it."

12.3.4 While the scale of appropriate investigation proportionate to the importance and the impact can be debated, CCC object to the omission of known, interpretable archaeological content that will be destroyed within the Scheme boundary for the carriageway and advise that the entirety of Field 74 is included in the archaeological mitigation area. See Figure 5.33, Text section 5.21, Table 10.20 of the Phase 2 Evaluation Report and Figure 3 (AP8) of Appendix 6.3: Analysis of Aerial Images TR010044/APP/6.3 (APP-165).

# 12.4 Issue 2: Sites 36-39.

- The Borrow Pit to the NW of Caxton Gibbet roundabout contains a number of known archaeological cropmarked sites found through air photographic transcriptions and geophysical survey (see Fig 8: Appendix 6.3: Analysis of Aerial Images TR010044/APP/6.3 (APP-165); Fig B30: Appendix 6.4: Geophysical Survey Phase 1 & 2 TR010044/APP/6.3 (APP-166)). These are interpreted as Iron Age enclosures and have been verified during the Phase 3 evaluation trenching (Fig 5.19: Appendix 6.8: A428 Phase 3 Evaluation Report Issue 3 TR010044/APP/6.3 (APP-176)).
- 12.4.2 Here, the settlement enclosures occur to the west of the A1198, also known as the Roman Road, Ermine Street (Cambs Historic Environment Record Ref CB15034). They form part of a broadly contemporary group that occur to the south of the A428, west of the junction (Sites 32-34, 36-39 in Fields 94-97), and those present in the current development-led archaeological investigations preceding the expansion of West Cambourne on the southeast side of Caxton Gibbet roundabout, where settlement continuation into the Roman period has been demonstrated.
- 12.4.3 The AMS fragments the Sites 36-39 into individual mitigation areas drawn around their enclosure boundaries, preventing the holistic landscape view of them as part of an extensive settlement complex with numerous core areas and task sites. The archaeological setting of these sites is of considerable interest and has the ability of answering specific questions in the published East of England Research Framework that governs archaeological projects, specifically "LBA-MIA 07: What can we infer about the relationship between open and enclosed settlements?". This research aspect cannot be properly understood by adopting a fragmented approach to investigation in place of a landscape archaeological approach where it is relevant to do so.
- 12.4.4 Non-enclosed occupation evidence, including burials, can be anticipated lying outside the settlement enclosures and much loss of archaeological grain can be expected. The relationship of these sites to the Roman road also requires investigation.
- 12.4.5 Also in this Borrow Pit are the permutations of the parish boundary of Papworth Everard and Caxton. The parish boundaries derived from 'Hundred' boundaries: a hundred, in the early Medieval period, being the unit of land that 100 men could sustain themselves in during times of battle. The former ditched boundary will be destroyed by the Borrow Pit and the origins of the ditched parish boundaries should be included in the investigation programme in accordance with the Joint Authorities' Archaeological Brief. While a 1m wide excavation slot was excavated across one of the parish boundary ditches during the evaluation, finding

- early 18<sup>th</sup> and 19<sup>th</sup> century material, one small slot is considered insufficient to speak meaningfully about this aspect of a long-lived socio-political landscape feature.
- 12.4.6 CCC has advised an alternative strategy that extends and merges the principal clusters in the borrow pit from four to two larger areas that will enable the research questions posed in the brief to be addressed. CCC requests that this alternative strategy is adopted by the Applicant.
- 12.4.7 CCC will remind the Applicant that Policy 21 *The Historic Environment* of the newly issued Cambridgeshire & Peterborough Minerals and Waste Local Plan 2036 (2021) advocates the following in its list of policies:
  - "To assist decision makers, all development proposals that would directly affect any heritage asset and/or its setting (whether designated or non-designated), must be accompanied by a Heritage Statement which, as a minimum, should:
  - (a) describe and assess the significance of the asset and/or its setting to determine its architectural, historic, artistic or archaeological interest;
  - (b) identify the impact of the development on the special character of the asset (including any cumulative impacts); and
  - (c) provide clear and convincing justification for any harm to, or loss of, the significance of a heritage asset (from its alteration or destruction, or from development within its setting)."
- 12.4.8 CCC do not consider that parts (b) and (c) have been suitably addressed in the AMS as the AMS does not give due regard to the unenclosed form of settlement that would demonstrate the presence of earlier occupation evidence or suitably locate aspects of human occupation that lay beyond the settlement boundary such as task sites for industry and craft production or burial evidence/cemeteries. The incidental discovery of a Neolithic Langdale stone axe head found in a Medieval furrow from Field 97/this proposed Borrow Pit indicates the possibility of further, far older prehistoric evidence also being present here (see Archaeological Evaluation Trenching Phase 2 report, paragraph 2.54, TR010044/APP/6.3 APP-175).
- 12.5 <u>Issue 3; Proposal to place a Multiple Purpose Construction Area over vulnerable archaeological remains at Site 17</u>
  - 12.5.1 Although a methodology for the erection of a road embankment over part of the *Cataractonium* scheduled monument during the A1 Dishforth to Barton Improvements scheme has been submitted to indicate how placing a multiple purpose construction area over archaeological remains could be achieved, CCC are not satisfied that the specific site conditions on the Cambridgeshire clays matches that in the area of the River Swale, N Yorks where this method for archaeological protection beneath a permanent embankment has been trialled. An alternative location for this multiple purpose construction area is advised.
  - 12.5.2 The scheduled monument contained building foundations, pottery, glass and bone.

(Ref: SCHEME: A1 Dishforth to Barton Improvements

DOCUMENT TYPE: Methodology

SUBJECT: Preservation in Situ Strategy within Cataractonium Scheduled

Monument at Brompton, and Backfilling of Areas A and B

DOCUMENT REF No: L2B\_12\_01\_ME020

DATE: December 2014.

12.5.3 Two scenarios of change were modelled:

- a) Stress changes from a permanent embankment over archaeological remains:
- b) Stresses caused to archaeological deposits during the construction of the embankment.
- 12.5.4 The model used proxy tests based on the stress test results of older experimental work concerning the burial of replica artefacts in a controlled laboratory setting, concluding there would be <1% chance of pottery breakage occurring beneath the long-term soil load of an embankment.
- 12.5.5 CCC's concern is that the proposal for the temporary multiple purpose construction area will involve both construction and removal impacts along with those that stand to crush and distort artefacts and shallow features that are currently buried beneath shallow soil cover by frequent and heavy vehicle movements, particularly if they involve slewing manoeuvres. The site remains in question are at Site 17 (Field 70) for which no stress tests have been undertaken. The site, like most in Cambridgeshire, lacks robust stone foundations as archaeological buildings are earthen, brick or timber framed in this stoneless part of the county. Consequently, the archaeological evidence is subtle and vulnerable to damage from tracked vehicles and compression.
- 12.5.6 The risk of damage to or loss of vulnerable archaeological remains is very high where vehicle movements to place or access stored materials may affect them though grinding actions or compression. CCC do not accept that the proposal to avoid excavation needs by sealing the archaeological evidence beneath layers of material designed to preserve them in situ is suitable mitigation for the impacts anticipated for this temporary scheme feature. There would be no possibility for a 'Plan B' to excavate remains that might be found to have been damaged during the course of erecting or dismantling the temporary works, as these are likely to have suffered too great a change for them to be interpretable. There has been no physical test, including shear testing, to determine if this form of mitigation would be at all suitable in this specific location where the western edge of Saxo-Norman settlement (late 1st millennium AD) and Late Bronze Age to Early Iron Age settlement (first half of 1st Millennium BC) remains are present.
- 12.5.7 Experience of this aspect of (unapproved) storage of soils and temporary compounds over archaeological sites on the recent A14 Cambridge to Huntingdon Road Improvement Scheme can highlight deep rutting of archaeological remains by both wheeled and tracked vehicles (at sites TEA 7, TEA 10) and removal of archaeological remains or loss of clarity of the deepest remains caused by erection and dismantling of construction compounds (TEA 16).

12.5.8 CCC will continue to recommend total avoidance of impacts to archaeological remains by fencing off areas to keep them safe from all construction impacts if they cannot be excavated in advance and information from them conserved by record for future researchers adding to local/regional knowledge gain.

#### 13. MINERALS AND WASTE

- 13.1 Insufficient detail exists on the borrow pits to meaningfully assess the proposals and impacts that will arise from them, including cumulative impacts and implications for wider specialisms such as cultural heritage.
- 13.2 The works and associated haul routes and other relevant infrastructure should be controlled prior to construction.
- As set out in the Councils' Relevant Representations (**RR-013**, **RR-048** and **RR-100**), the Minerals and Waste Planning Authority (MWPA) has concerns about the proposed borrow pits. A total of four borrow pits are proposed. Two would be located in Cambridgeshire (Sites 3 and 4) in the vicinity of Caxton Gibbet and both are proposed to be restored to agriculture. This representation relates to the two borrow pits within Cambridgeshire and should be read alongside CCC's comments on ecology and biodiversity (section 7) and landscape (section 8).
- 13.4 The MWPA first reviewed the available documentation in April 2021, noting that there was no single section of the documentation addressing the topic of borrow pits. Instead, the available information was located in amongst other topics; consequently, whilst the MWPA had been as thorough as possible, it could not say with certainty that it identified all relevant information at that time.
- 13.5 Since then, the Applicant has prepared a document called "A428 Black Cat to Caxton Gibbet improvements Borrow Pits Excavation and Restoration Report" dated July 2021. This is described as a technical note and will be referred to as the TN hereafter. It is understood that the TN was intended to bring together all the relevant information in relation to the borrow pits and its provision is welcomed. However, it is also noted that the drawings towards the end of the document are dated 17 June 2021 and introduce depth cross sections. This indicates the TN appears to be introducing new information not previously submitted. For the purposes of this representation, the MPWA has assumed that the TN forms part of the DCO application and the Applicant will be seeking to enter it as evidence, if it has not already done so.
- Within TN paragraphs 1.2.19 and 1.2.20 it is stated that "The First Iteration [Environmental Management Plan] EMP (APP-234) will be developed into the Second Iteration EMP by the Principal Contractor, with the assistance of the host authorities, once the detailed design of the Scheme has been finalised"; and "On completion of construction, the PC will prepare the Third Iteration EMP for the operational and maintenance phase of the Scheme, which will be implemented by the authority responsible for the maintenance of the Scheme once open to traffic." The Councils understanding of this statement is that the design and the environment management for the borrow pits is yet to be finalised. The Councils, and specifically the CCC, is working based on the assumption that the Applicant is likely to be seeking to finalise the borrow pit detailed design and EMP after the DCO has been issued.

- 13.7 In Section 1.5 of the TN, an extract from the Policy Considerations section of the Environmental Statement is repeated. This sets out the consideration that the Applicant has given to relevant local policy in relation to the borrow pits, and identifies two policies, MSP9 from the Bedford Borough, Central Bedfordshire and Luton Borough Councils' Minerals and Waste Plan, and Policy 7 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (July 2021) (MWLP). At paragraph 1.5.3 of the TN criteria (a) to (e) of Policy 7 have been briefly, but in the MWPA's view, inadequately addressed.
  - 13.7.1 How much is the shortfall of Class 1 / 2 material at the Caxton Gibbet junction?
  - 13.7.2 Policy 7 states that "in order to pass the "well related geographically" test, the borrow pit must be significantly geographically better located, when taken as a whole, compared with all other relevant allocated or existing operational sites from which the mineral could otherwise be drawn. Factors taken into account to determine this will include, but not necessarily be exhausted by, the following: lorry distance travelled and the associated carbon emissions of such travel; amenity impact of lorries on local communities; and impact of lorries on the highway network more generally, such as increasing/decreasing congestion or safety. A borrow pit simply being physically nearer the named project, compared with an existing operational or allocated site, will not in itself necessarily pass the test." The MWPA requires the Applicant to identify the other potential sources of the relevant material and, taking into account the explanatory text within the policy quoted above, demonstrate why the proposed borrow pits would be well located geographically to the Scheme. Examples of alternative sources of sand and gravel within Cambridgeshire would include Little Paxton Quarry and Marsh Lane Quarry at Hemingford Grey. Given the location of the proposed borrow pits, the search area may need to include sites in Bedfordshire.
  - 13.7.3 No reference is made of MWLP Policy 19 Restoration and Aftercare, which is explicitly referenced in Policy 7, nor is there any reference to the potentially relevant "Development Management" polices such as: Policy 18 Amenity considerations, Policy 20 Biodiversity and Geodiversity, or Policy 24 Sustainable Use of Soils. CCC wishes to emphasise that Policy 19 includes a number of requirements that proposals must, where appropriate, comply with. These include agreed phasing of development, integration with relevant green infrastructure and biodiversity net-gain. CCC is of the view that it has not been demonstrated how the current proposal would meet the above policies and, based on the information provided, the current proposal does not accord with the MWLP.
  - 13.7.4 The MWPA notes that the material that would be used to restore the borrow pits would "be generated from the works across the scheme". This is rather general and as part of the "well located geographically" test it should be shown where within this linear scheme the restoration material would be sourced.
  - 13.7.5 No justification is given for the statement that the borrow pits "would not impact on the wider market". As set out in (b) above, the Applicant has not identified potential alternative sources of material so the absence of significant harm to exiting operational quarries and local markets has not been demonstrated.

- 13.8 It is noted that borrow pit Site 3 would, like Site 11 and Site 14, be restored to enable agricultural at original ground levels "unless otherwise agreed with the landowner and subject to the limits of the dDCO". In order to comply with Policy 7 and Policy 19 a firm restoration proposal is needed with appropriate aftercare. The Applicant's attention is drawn to the Policy 19 requirement that "Where it is determined that restoring the land to agricultural use is the most suitable option (in whole or part), then the land must be restored to the same or better agricultural land quality as it was pre-development." This policy should be complied with, irrespective of the private arrangements agreed with the landowner and should form part of the Scheme.
- 13.9 It is noted that Site 4 would be restored to a condition to enable agricultural use by replacing the stripped and stored subsoil and topsoil without previously using material generated by the Scheme. The final land level would be approximately 1 metre below original ground levels. It is noted that only 1 metre depth of construction material would be taken from Site 4 which would seem an inefficient use of land. The Applicant is requested to provide further information on whether a borrow pit that is smaller in area but which would generate an equivalent quantity of material would have a smaller environmental footprint. Further information is requested on the rationale behind the restoration proposals for the borrow pit and Site 4 and, in particular, whether the current restoration proposal is driven by the landowner's desire for land at a lower level.
- 13.10 The Applicant should consider whether a different restoration strategy for the borrow pits would enable the Scheme to provide the biodiversity net gain that is required by planning policy.
- 13.11 Whilst these deficiencies can be rectified, the borrow pits proposals will need to evolve to meet local policy. Consequently, the Councils would urge the Examining Authority to treat the information presented by the Applicant with an understanding of the uncertainty surrounding it until the further information requested has been provided.
- 13.12 In order to ensure that the proposed development meets local policy, and to accommodate the finalised state of the design, it is requested that an additional Requirement to the effect of the text below is placed within the order:

Plans for each borrow pit shall be submitted to the relevant host mineral planning authority detailing their extents, depths and levels, restoration, monitoring, aftercare and timescales of working. The submission should demonstrate that the proposal would comply with all relevant local policy principally Policy 7 and Policy 19 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021) and any other relevant policies in place at that time. For a submission to be approved it will need to address the above to the satisfaction of the relevant host mineral planning authority and any organisation or authority that will be responsible for long term maintenance. Commencing extraction or preparation works on the identified borrow pits without prior approval from the relevant host mineral planning authority, will be considered a breach of this requirement.

13.13 In order to facilitate the timely provision of borrow pits in relation to the Scheme the host MWPA requests that the Applicant enter into an agreement to establish agreed timescales and payments for the review, approval, monitoring and any other related activities undertaken by the host MWPA, in relation to the requirements requested above.

13.14 In respect of the topic of disruption of amenity, it is the experience of the Councils, that where the principal contractor has a single public point of community liaison in place, that this helps ensure that most concerns raised by the public can be quickly addressed, benefiting both the community and the developer. To that end it is requested that an additional Requirement to the effect of the text below be placed within the order:

A single on-site point of community contact shall be provided by the applicant to respond to any concerns that the community may have.

# 14. FLOODING AND DRAINAGE

- 14.1 CCC is a lead local flood authority (**LLFA**) for its administrative area and has responsibility, along with the UK Government, the Environment Agency and other LLFAs to manage flood risk. CCC notes that the Environment Agency has confirmed that its concerns with the DCO application are largely addressed by email dated 9 June 2021. This is with particular regard to the modelling carried out and proposed flood zone compensation provide within the Scheme.
- 14.2 Protective provisions for the benefit of CCC as LLFA are required and the provisions of the draft DCO are to be discussed with the Applicant. With reference to Part 3 of Schedule 9 of the draft DCO (APP-025), CCC as LLFA requests the following key amendment in particular. At paragraph 20(3)(c) of part 3 of Schedule 9 (Construction of specified works), CCC as LLFA considers that, in the absence of a response to a request for approval, the request ought to be deemed refused rather than approved, with the dispute resolution provisions applying thereafter to ensure that the proposed works are appropriate. The LLFA considers that a longer period for determination should apply to any request for approval.
- 14.3 The following matters are not yet agreed and remain under discussion with the Applicant:
  - 14.3.1 CCC is a "relevant body" for the Applicant's proposed disapplication of section 23 of the Land Drainage Act 1991 by virtue of article 3(2)(d) of the draft DCO (APP-025). CCC is the drainage authority for Hen Brook, Wintringham Brook, Fox Brook, Gallow Brook and West Brook Tributaries as well as any other minor watercourse, ditch, dyke or drain which may be within the boundary of the DCO application. CCC's consent to the disapplication of section 23 in respect of these watercourses is therefore required in accordance with section 150 of the Planning Act 2008, and CCC has not yet provided that consent.
  - Allocation of responsibility for maintenance of ponds and outfalls. The submitted documentation refers to the ownership of certain assets and the relevant body for ongoing maintenance upon completion of the scheme. This includes features such as the attenuation basins and flow controls which are not necessarily draining the proposed carriageway, but include drainage from other surfaces, such as road realignments, access slips and junctions. Some of the assets are labelled as to be maintained by CCC. It is not clear which function of CCC will be responsible for the maintenance, as the LLFA does not have any responsibility as a maintaining body for assets. A written agreement from other parties has not been provided to indicate other departments, such as the LHA, will take on these assets. The ongoing and future maintenance must be agreed and clearly set out within the submitted information.

- 14.3.3 Allocation of responsibility for obtaining necessary consents. The LLFA is opposed to the disapplication of section 23 of the Land Drainage Act 1991, as there are works which are proposed to major watercourses within the scheme. The watercourses impacted by this scheme are major and have historically been sources of flooding to downstream areas. Within the proposed extent of the new carriageway, there are a number of diversions, culverts, realignments and 'stopping up' of watercourses. The LLFA has concerns around the configuration of the watercourse diversions and the proposed culverts on major watercourses such as Wintringham Tributary, Fox Brook and Gallow Brook. The proposed culverts are changing the natural flow of the water by creating sharp bends, which can lead to slowing of water and increased sediment deposition. Due to sensitivity of the watercourses and the downstream impacts of the Scheme, it is important that these works are completed in line with national guidance and best practice with discussion and input from the LLFA.
- 14.3.4 There are concerns with regards to the minimum suggested flow controls from the attenuation basins within the scheme. It is noted that in section 3.3.4 of Appendix 13.3 Drainage Strategy Report (APP-219), the detention basins have been designed using the Qbar runoff rate calculated for their catchments. However, section 3.3.3 recommends the minimum rate of 5 l/s to be applied in any basin where the Qbar rate is below this value to reduce the risk of blockage to the controls. There are concerns around this as this is high value and potentially much higher than the Qbar equivalent. Using a baseline figure of 5 l/s across the scheme could lead to increased risk of flooding as the peak flows and volumes entering the wider system may be greater than the existing. The LLFA agrees that there is a balance required between minimum flow rates and risk of blockage. However, the LLFA's preference for minimised rates is 2 l/s/ha or 75mm diameter flow controls. This finds a suitable balance between the risk of blockage and minimising the discharge rates from the proposed basins. The LLFA has concerns around the wording proposed within section 3.3.3 as this indicates that the flow controls will be defaulted up to 5 l/s. This should be rephrased with reference to the minimum flow rates of 2 l/s/ha.
- 14.3.5 The submitted surface water treatment is provided primarily through the use of the attenuation basins. It is noted that in areas where there is an increased risk of pollution, such as roundabouts, additional treatment is proposed by means of an interceptor, which is classed as proprietary treatment. The LLFA is opposed to the use of proprietary treatment where this is avoidable, as there is an associated and increased maintenance risk with the proprietary treatment prone to failing if not maintained correctly. This would have adverse pollution risks to the surrounding watercourses. Where possible, the surface water runoff from these areas should be treated by natural means, such as inclusion of reed beds at the inlets of the watercourses. This would reduce the risk of failure and wider pollution issues in the surrounding watercourse networks.
- 14.3.6 It is noted that the groundwater monitoring is ongoing, however there are areas of concern which have not been fully addressed within the submission. There are recorded groundwater levels within the Scheme which may have an impact on the cuttings within the Scheme. The method of management of this is currently being left until the detailed design along the areas impacted within Cambridgeshire due to the limited groundwater within the Till deposits. However, consideration should be provided at this

stage to ensure that the dewatering is manageable during construction and into the future.

- Huntingdonshire's Local Plan to 2036 policy LP5 Flood Risk outlines Huntingdonshire District Council's response to flood risk. The purpose of the policy is to set out Huntingdonshire District Council's approach to ensuring that users and residents of development are not put at an unnecessary risk in relation to flooding. This is especially pertinent in that the Great Ouse valley runs through the district. Paragraph 4.69 makes it clear that the district is projected to have increased susceptibility to climate change and that developments should seek to improve the sustainability of flood reduction assets for now and in the future. Paragraph 4.70 of the LP5 also notes that potential opportunities should be explored including the requirement to enhance flood risk management from the site and improving the sustainability of flood reduction assets that the development may rely upon at present and in the future.
- 14.5 Specifically, the National Policy Statement for National Networks requires in paragraphs 5.90 and 5.93 for climate change to be taken into account and that climate change will lead to increased flood risk in areas susceptible to flooding, and to an increased risk of flooding in some areas which are not currently thought of as being at risk.
- 14.6 Taking locally assessed flood risk into account through Huntingdonshire's Local Plan to 2036 and in the context of policy set out in the National Policy Statement for National Networks, it is considered that the Watercourses Technical Note<sup>12</sup> presents outstanding areas of concern that are yet to be addressed. Therefore, further clarification is required on the following issues:
  - 14.6.1 Climate Change Allowances – This is not consistent throughout the mitigation measures proposed in the document. Assessment parameters vary from 1 in 100 year return period storm and a 35% climate change allowance to 65% at other times. Ditches mitigate for a 1 in 100 year return period storm and a 20% climate change allowance and are checked for a 40% climate change allowance. It is considered that all mitigation measures put in place such as overland catchments, ponds and culverts etc. be assessed in the same way. It is suggested that a 1 in 100 year return period storm and a 65% climate change allowance is applied to all mitigation measures; meaning that the requirements for many of the overland catchments, ponds and culverts would need to be amended. The approach to climate change allowances raises concern that lesser allowances could still result in flooding in the future, causing downstream effects and possibly putting agricultural productivity and nearby residential developments at risk.
  - 14.6.2 An assessment of the proposed Scheme simulations for Hen Brook notes in paragraph 4.2.8 b of the Watercourses Technical Notes that "There is a small area where the maximum flood depth increases as a result of the Scheme however this is located within the Order Limits, already floods within the baseline scenario; and is located away from sensitive receptors." It is considered that the Scheme should be striving for betterment in this area in order to reduce or eliminate flood risk. This would enable the development to meet the requirement set out in paragraph 155 of the

<sup>&</sup>lt;sup>12</sup> Full title: Highways England: A428 Black Cat to Caxton Gibbet improvements - Huntingdonshire District Council, Cambridgeshire County Council and South Cambridgeshire District Council Watercourses Overview Technical Note, 25 May 2021 (HE551495-ACM-HDG-GEN\_Z\_ZZZ-TN-CD-0002, P04 S3). Examination library reference number currently not available.

National Planning Policy Framework which asks that "... Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere" (reference to the NPPF with regard to flood risk is supported through paragraph 5.95 of the National Policy Statement for National Networks). Reducing the flood depth at Hen Brook would meet locally specific mitigation measures such as criterion d of Huntingdonshire's Local Plan policy LP 5 Flood Risk which requires that "all reasonable opportunities to reduce overall flood risk have been considered and where possible taken". This approach was supported by the Environment Agency as part of the Local Plan examination. There is no evidence currently to demonstrate that the Watercourses Technical Note has investigated all reasonable opportunities to reduce overall flood risk in this particular matter. This approach should also be applied for all aspects relating to Hen Brook especially as a significant amount of mitigation is required.

- 14.6.3 Wintringham Brook Tributary It is unclear whether alternative measures are to be implemented once the culvert is removed from underneath the farm track as referred to in paragraph 6.2.2 of the Watercourses Technical Note. It is understood that the current culvert restricts flow and can cause flooding, however any remediation should provide improvements and not jeopardise operational efficiency of the agricultural sector and its environs. More information would be required to address these impacts.
- 14.6.4 Wintringham Brook Tributary as mentioned in paragraph 6.2.5 of the Watercourses Technical Note the model reach does not include the upstream extended section of the watercourse. Further evidence is needed to demonstrate there are no downstream flooding issues at Wintringham Brook.
- 14.7 CCC requests further engagement from the Applicant as soon as possible on the design for watercourses and ponds. CCC's preference is for the design to include reed planting instead of treatment plants.
- 14.8 CCC also considers that further evidence is needed to demonstrate there are no downstream flooding issues at Wintringham Brook and that there has been insufficient consideration of the impact of the Scheme on Hen Brook and Wintringham Brook in terms of biodiversity and water quality
- 14.9 If any changes are made to Scheme design parameters then flood modelling impacts on neighbouring communities will have to be reviewed and updated.

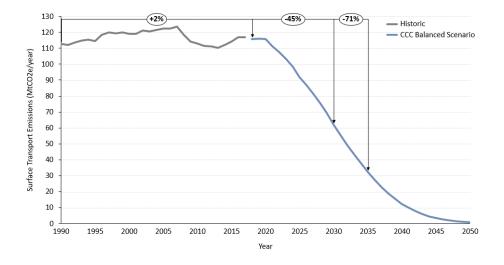
#### 15. **CLIMATE CHANGE**

15.1 The Councils have concerns about the greenhouse gas emissions associated with the Scheme, and the impact of those emissions on the climate. Other matters of particular concern include climate change mitigation measures, planting to offset emissions, sustainable drainage, carbon emissions and active modes of travel.

## Greenhouse gas emissions and impact of the Sixth Carbon Budget

15.2 In April 2021 the Government announced it had legislated to deliver 78% carbon emissions reductions by 2035 compared to 1990 levels as part of its sixth carbon budget Although this has not formed part of the significance testing for the Scheme it is noted that the Environment Statement (APP-083), paragraph 14.2.5 was

- drafted prior to the adoption of the Sixth Carbon Budget by Government. However the Scheme will be in operation during the period covered by that budget, and as such its impacts do need to be considered against it.
- 16. Paragraph 5.16 of the National Policy Statement for National Networks specifically sets out that "The Government has a legally binding framework to cut greenhouse gas emissions by at least 80% by 2050....Emission reductions will be delivered through a system of five year carbon budgets that set a trajectory to 2050. Carbon budgets and plans will include policies to reduce transport emissions, taking into account the impact of the Government's overall programme of new infrastructure as part of that." The Climate Change Act 2008 has now been updated to require net zero carbon by 2050, supported by the Sixth Carbon Budget which was published in December 2020. These targets are enshrined in law and should be used to assess the Scheme as completed<sup>13</sup>. Assessment of the proposed Scheme as set out in the Environmental Statement (APP-083) should take this fully into account to ensure the proposals adequately contribute to meeting the UK's carbon reduction targets. Paragraph 5.5 of the National Policy Statement for National Networks also notes that the geographical extent and distribution of these effects can cover a large area, well beyond an individual scheme. Further analysis of the proposed Scheme against the targets and aspirations of the Sixth Carbon Budget Evidence and justification for action is required extending beyond the project red line boundaries.
- 17. Currently the national carbon emissions impacts that have been assessed are measured against the fourth and fifth carbon budgets which have higher levels of carbon emissions associated with them compared to the 6<sup>th</sup> carbon budget resulting in a lower carbon impact on the national carbon budgets. The emissions from construction will apply into the fourth carbon budget but the operational emissions will impact into the fifth, sixth and further carbon budgets. The lifetime of much of the CO<sub>2</sub> released by the Scheme into the atmosphere will exceed 60 years which means that the correct unit for understanding the impact of the road building scheme is the cumulative emissions over the whole project lifetime as a proportion of a local emission budget. This would then align and be compliant with the Paris Agreement. Figure below shows the surface transport sector has seen a 2% increase in emissions since 1990. This means the transport sector needs to deliver a 45% reduction in emission by 2030 and 71% by 2035, relative to 1990 (47% and 73% respectively compared to today).



<sup>&</sup>lt;sup>13</sup> https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035

- Figure 4: Surface transport GHG emissions since 1990<sup>14</sup> and CCC baseline emission projections<sup>14</sup>.
- 18. The Committee for Climate Change analysis for the 6<sup>th</sup> carbon budget (in figure 2 below) shows meeting this level of emissions change in such a short period will require a significant level of behavioural change. Baseline DfT predictions (black dashed line) for car demand show continued growth (9% by 2030 and 18% by 2040) following past trends driven by increased population and economic activity. The baseline CCC trajectory (yellow line) (used for recommendations and policy setting) shows that these changes are not consistent with meeting net-zero and that the majority of all future growth must be displaced by trip avoidance and modal shift in order to meet existing UK Government climate targets.

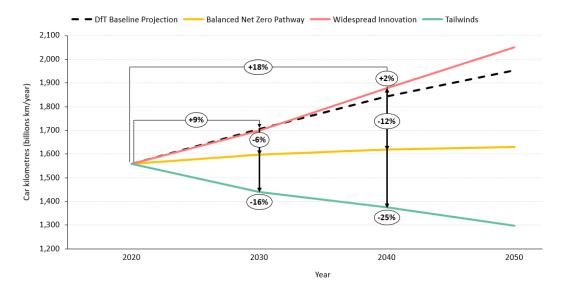


Figure 5: CCC car traffic volume change in each net zero scenario<sup>14</sup> compared to the DfT baseline<sup>15</sup>.

18.1 Reference is made in the ES to the emissions associated with the operational phase only representing less than 0.117% of the total emissions allowed for in the budget period. While these emissions appear small when presented against a national budget, they still represent an increase in emissions. Most importantly these carbon emissions will add to current emissions. It is important to note that the existential costs associated with these emissions for example extracting emissions from the atmosphere to deliver against our legislative target and costs associated with the wider ongoing societal impacts of climate change are not evaluated. The Committee on Climate Change, in their recent June 2021 progress report to parliament have noted that "decisions on investment in roads should be contingent on analysis justifying how they contribute to the UK's pathway to Net Zero. This analysis should demonstrate that the proposals would not lead to increases in overall emissions. Wherever possible, investment in roads should be accompanied by proportionate investment in EV charging infrastructure and in active travel and public transport." As such the Councils consider that it would be prudent for the

<sup>&</sup>lt;sup>14</sup> Climate Change Committee, 2020, Sixth Carbon Budget, https://www.theccc.org.uk/publication/sixth-carbon-budget/

<sup>&</sup>lt;sup>15</sup> Department for Transport, 2018, Road Traffic Forecasts 2018, https://www.gov.uk/government/publications/road-traffic-forecasts-2018

- assessment of significant effects of the Scheme to be updated to include the Sixth Carbon budget, and for the ES or associated documents to be clear on measures that may be required to offset any residual emissions.
- 18.2 The Councils support the wide range of climate change mitigation measures (as set out in the Environmental Statement, APP-083) embedded in the construction programme for the A428 to provide resilience for the Scheme against anticipated conditions as well as to minimise the direct impact of construction works. It is noted that many of the construction stage impacts will be short-term but nevertheless emissions will occur. However, every effort should be made to avoid detrimental impacts, particularly those likely to increase greenhouse gas emissions, before emphasis is placed on then mitigating those remaining. With this in mind the Councils would welcome greater detail on how the assessment of construction stage emissions has been reached. Table 14-9 (Environment Statement, APP-083, page 24) includes a breakdown of emissions by construction activity. At 11,600 tCO2e per km of road, it is noted that the calculation of emissions associated with the Scheme fall below the average benchmark of 19.090 t CO<sub>2e</sub> to 35.900 tCO<sub>2e</sub> per km of road (APP-083, paragraphs 14.7-8), which is to be welcomed. However, in the absence of any further detail as to how this has been achieved it is difficult to verify the figures included in the ES. The Councils recognise that this is a level of detail that is yet to be included in the first iteration of the EMP (APP-234) and would recommend that the next iteration includes further detail and commitments to the measures that will be taken to reduce the embodied carbon associated with materials used for the construction of the Scheme in order that the figures referenced in the ES can be achieved. In addition, it is imperative that the quality of construction materials used is not diminished for short-term cost savings and that the materials selected have demonstrable suitability for tolerance to higher and rapidly fluctuating temperatures. Notwithstanding, the request for further information, the Councils would like to voice their support for the re-use of materials arising from demolition of the existing infrastructure and maximisation of sourcing construction materials from local borrow pits to minimise the emissions from lorry movements transporting materials in the construction phase.
- 18.3 The Councils would support planting of native and climate resilient species to offset emissions associated with both the land use change and subsequent operation of the road scheme as set out in the Environmental Statement (APP-077). The methodology used to calculate the anticipated biodiversity net gain of 20.5% (APP-077, paragraph 8.10.2) gives significant concern and recalculation should be undertaken using the DEFRA Metric 2.0 or 3.0 to ensure a 20% biodiversity net gain can be effectively delivered. Opportunities should be further explored to maximise the potential contributions to the priority schemes within Natural Cambridgeshire's 'doubling nature' aspirations which are supported by the Councils.

#### Points for clarification

- 18.4 The Councils consider that the following topics need to be considered further in the assessment:
  - 18.4.1 Clarity is needed on conflicts within the documents (for example, whether EV are included in the assessment). Paragraph 14.3.33 of the ES (APP-083) notes that the uptake of lower carbon fuels, electric vehicles and increased vehicle technology are only partially accounted for within the assessment of operational greenhouse gas emissions. Elsewhere in the ES however, the report seems to indicate that emissions reductions from technological advancements and decarbonisation have not been taken into

account at all, for example at paragraph 14.6.6. It would be useful to have clarification as to the extent to which technological advancements and the decarbonisation of transport has been taken into account. While we recognise that such advancements are likely to reduce the operational emissions associated with the Scheme, we would recommend that a precautionary approach to such advancements is taken for the purposes of the ES.

- 18.4.2 Linked to this, the Councils note that for the operational phase of the scheme the changing levels of greenhouse gas (GHG) emissions from vehicles moving from petrol/ diesel power to electric is only taken into account up to 2030 and then assumed to remain constant in the modelling undertaken as set out in the Environmental Statement (APP-083, paragraphs 14.9.13-14). Given national policy relating to the phasing out of petrol/ diesel car sales and promotion of electric and other non-fossil fuel based power sources it is noted that the GHG emissions quoted are expected to be the worst case scenario. It is recognised that the Scheme is expected to increase overall GHG emissions once fully operational due to the increase in vehicular miles but that this may be less than anticipated as a result of changing vehicle fuel sources.
- The Councils are also mindful that such advancements should not be to 18.4.3 the detriment of measures to reduce private vehicle trips, for example investment in sustainable transport modes and active modes of travel. All opportunities to promote and incorporate facilities for active modes of travel should be maximised both to reduce the need for vehicular travel, reduce vehicle greenhouse gas emissions and to promote public health and wellbeing. The National Policy Statement for National Networks sets out that 'Across Government, policies are being implemented and considered which encourage sustainable transport modes including public transport. significant improvements to rail capacity and quality, cycling and walking. (page 14). Further, paragraph 3.17 states that 'There is a direct role for the national road network to play in helping pedestrians and cyclists. The Government expects applicants to use reasonable endeavours to address the needs of cyclists and pedestrians in the design of new schemes,' and that applicants should also provide evidence that they have considered reasonable opportunities to deliver environmental and social benefits as part of schemes (paragraph 3.3). In July 2020 the government published 'Gear Change: a bold vision for cycling and walking' described as their most ambitious plan yet to boost these modes of travel for 2020-25. Incorporation of comprehensive NMU route links alongside the DCO scheme would make a significant contribution to delivering this locally. 16 This approach is currently not included within the scheme design (2.6 -Streets, Rights of Way and Access Plans (APP-013)). It is also recommended that the Applicant ensures that suitable routes for nonmotorised forms of transport are provided in close proximity to the route where they do not currently exist to ensure that NMU journeys can be made along the entire length of the DCO route where users wish to. Further detailed representations related to NMUs are included within section 6 of this written representation.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

- 18.4.4 As part of the Councils' comments on the Scoping Report, the need for consideration of climate resilience to include not just impacts on the asset itself, but also on communities adjacent to the asset was raised. This was particularly in reference to the consideration of flood risk, and the Councils would have expected to see this covered in the climate change section of the ES (APP-083), or at the very least, for the climate section to include clear links to consideration of this issue as part of other sections of the ES.
- 18.4.5 Chapter 13 the ES (**APP-082**) and associated Flood Risk Assessment (**APP-220**), gives consideration to flood risk to others. This approach is welcomed and goes some way to address our concerns, although it is noted that the LLFA have requested further evidence to demonstrate that there are no downstream flooding issues at Wintringham Brook, and the need to update flood modelling impact on neighbouring communities in light of any changes that may be made to the scheme.
- 18.4.6 The cumulative impact and relationship of the Scheme with East West Rail / other projects also requires clarification and discussion. While the Councils recognise that schemes are at different stages of development, from a climate perspective, and notably in relation to carbon budgets, it is considered important that the cumulative impacts of these significant infrastructure projects in the area are taken into account. In particular, reducing the construction stage impacts of these projects will become increasingly important as decarbonisation and alternative technologies reduce some of the operational impacts, giving consideration to the embodied carbon associated with such projects. The Councils require confirmation from the Applicant as to how this is being taken into consideration as part of the development of infrastructure plans, and whether there will be any opportunity to update the cumulative impact assessment once greater detail on East West Rail is known.
- 18.4.7 The Councils wish to raise the following additional matters:
  - Sustainable Drainage Systems (SuDs) the Councils note and (a) support the use of SuDS to handle road runoff on the Highways England network (as set out in the Environmental Statement, APP-083, criterion f, page 22) and urge careful consideration of design specifications to ensure that these provide maximum resilience against potential future flood events throughout the anticipated lifespan of the scheme). The use of UKCP18 data with temperatures and precipitation rates at 50% probability is noted (APP-083, paragraphs 14.9.13-16.9), however clarity is required as to whether this is a reasonable approach and how this ties in with mitigation and climate change allowances as identified in the Watercourses Technical Note. It may be that the mitigation measures addressed here and in the Watercourses Technical note should be reflective of each other so that a standard approach is taken across the scheme. With this in mind, permeability of surrounding surfaces should be maximised to reduce the risk of flash flooding from extreme rain events which may have significant socio-economic impacts if the road were to become impassable and may surpass the levels anticipated. Projected changes to precipitation rates identified in the Environmental Statement Appendix 14.1 (APP-227, paragraph 1.26 and Tables 1-3 and 1-4) indicate a significant level of

volatility in long term forecasts and all possible opportunities should be taken to maximise amelioration of the potential impacts of water loss/ evaporation at one end of the impacts and flash flooding at the other through use of permeable surfaces and water retentive planting. It is therefore suggested that the scheme maximises permeable surfaces in proximity to the road carriageway as a priority, particularly where the route crosses existing waterways. This would assist the project in addressing the issues set out in the National Policy Statement for National Networks which notes through paragraphs 5.90 and 5.93 that climate change should be taken into account and that climate change will lead to increased flood risk in areas susceptible to flooding, and to an increased risk of flooding in some areas which are not currently thought of as being at risk.

#### 19. **DIGITAL CONNECTIVITY**

19.1 The Applicant should be required to make passive provision for the installation of a fast fibre broadband connectivity backbone along the length of the corridor to support digital connectivity policy goals.

## 20. **CONCLUSION**

- 20.1 The Councils remain strongly supportive of the Scheme in principle, subject to the satisfactory resolution of the concerns raised in this written representation.
- 20.2 As the Examination progresses, the Councils hope to be able to supplement these representations following the provision by the Applicant of the information requested.