

A428 Black Cat to Caxton Gibbet Road Improvement Scheme

Planning Inspectorate reference: TR010044

Joint Local Impact Report

Submitted by:

Cambridgeshire County Council
Huntingdonshire District Council
South Cambridgeshire District Council

September 2021

Document reference: CLA.D2.LIR

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1. Introduction to the Report and Terms of Reference

- 1.1 This Local Impact Report (LIR) has been jointly prepared by three local authorities; Cambridgeshire County Council, Huntingdonshire District Council, and South Cambridgeshire District Council. This LIR forms part of the local authorities' responses to the A428 Black Cat to Caxton Gibbet Road Improvement scheme.
- 1.2 The LIR is defined in section 60(3) of the Planning Act 2008 as 'a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area)'.
- 1.3 This LIR contains a section on the existing characteristics of the local area on which the scheme impacts. This identifies the local urban and landscape qualities, cultural heritage, ecology, minerals and waste sites, the environment for pedestrians, cyclists and equestrian travellers, watercourses and the air quality and noise environment. The LIR also provides an assessment and considers compliance of the scheme against the local plans and policies and details the history and development of the scheme.
- 1.4 Chapter 7: Local Transport Patterns and Issues describes the local transport patterns and issues on the local roads and routes in the vicinity of the existing A428 and the proposed new route. Chapter 8: Local Impacts contains an assessment of positive and negative impacts, during construction and operation of the scheme, as well as areas where there are missed opportunities for the Applicant to contribute to improving the local area through the Scheme.
- 1.5 The following terms used throughout the document are explained here:
- 'The local authorities' – Cambridgeshire County Council, Huntingdonshire District Council, South Cambridgeshire District Council.
 - 'Applicant' – Highways England.
 - 'Development Consent Order' – Legal order relating to the A428 Black Cat to Caxton Gibbet Road Improvement scheme.
 - 'Environmental Statement' – The Environmental Statement produced by Highways England and submitted to support the Development Consent Order application on 26 February 2021.
 - 'Construction' – Phase commencing in 2022 until 2025/26.
 - 'Operation' – Phase commencing after construction, 2025/26.

2. Executive Summary

2.1 Description of Proposals

2.1.1. The scheme primarily involves the construction of a new 10 mile dual 2-lane carriageway from the Black Cat roundabout to Caxton Gibbet roundabout. It proposes:

- Dual 2-lane carriageway from the Black Cat roundabout to the Caxton Gibbet roundabout, including a bypass to the south of St Neots.
- All movements grade separated junctions from the main A1 carriageway and the new dual carriageway through the Black Cat junction, to the east of the existing Cambridge Road St Neots roundabout, and at Caxton Gibbet.
- De-trunking of the existing A428 between St Neots and Caxton Gibbet, and realignment of the existing road in the vicinity of Cambridge Road St Neots, Eltisley and Caxton Gibbet.
- New crossings to enable the new dual carriageway to cross the River Great Ouse, East Coast Main Line railway, Barford Road, the B1046/Potton Road, Toseland Road and the existing A428 at Eltisley.
- Demolition of Roxton Road bridge and replacement with a new structure to the west to accommodate the realigned A421.
- Junction improvements and the widening of the A1 trunk road between Tempsford River crossing and Wyboston and new local access roads.
- Changes to the local road alignments and connections in the immediate vicinity of the scheme including at the B1046, B1428, Toseland Road, B1040 and A1198.

2.2. The Existing Characteristics

2.2.1. The landscape in this area is varied between the low-lying floodplain of the River Great Ouse in the west, to gently undulating land interspersed with a number of small villages and single farmsteads in the east. To the south are Roxton, Abbotsley, Croxton, Eltisley and Caxton villages, with Toseland, Yelling and the settlement of Papworth Everard to the north. Two towns are affected directly by the route proposals. St Neots, a market town in Huntingdonshire, is situated north of the route at its western end. Cambourne, is a new settlement in South Cambridgeshire, located at the eastern end of the route where it joins the existing, dualled A428 route eastwards towards the city of Cambridge. Both towns are identified as locations for strategic growth in the relevant Local Plans. St Neots and Cambourne both have wide-ranging services, leisure and community facilities, retail and employment offerings.

- 2.2.2. In terms of cultural heritage, of note are the historic moated features within the study area, east of the River Great Ouse. These include moats at Abbotsley Golf and Country Club, Caldecote, Wintringham, Westbury Farm at Croxton, Manor Farm and Jesus College Farm at Eltisle and Pastures Farm near Croxton. Ponds are also associated with the deserted medieval sites, three of which are Scheduled Monuments, and villages of Wintringham and Weald and are scattered throughout the study area within agricultural fields.
- 2.2.3. The ecological character of the area is predominantly rural, comprising mostly arable fields, with a scattering of improved grass fields and a few semi-improved or unimproved neutral grasslands interwoven with relatively intact hedgerows and mature trees, some of which form small blocks of woodland. In addition, there are field ponds and brooks, including tributaries of the River Great Ouse, and ditches. Protected and notable species within the applicable study areas include badger, bats, birds, otter, grass snake and great crested newt (GCN).
- 2.2.4. In terms of the existing noise environment there are some areas along the A428 corridor which have been classified as 'Important Areas' by the Department for Environment, Food and Rural Affairs (Defra) on account of the existing noise environment. These are isolated properties in close proximity to Caxton Gibbet. Traffic noise from the A428 is the main contributor to the local noise environment at these locations.
- 2.2.5. Air Quality Management Areas (AQMAs) exist in Huntingdon, Brampton, on the A14 near Fenstanton, and in South Cambridgeshire along the A14 between Bar Hill and Milton, as well as in Cambridge City Centre. These are areas where the levels of Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀) are above the national objectives set by the European Commission. The three AQMAs in Huntingdonshire and the single AQMA in South Cambridgeshire are mainly caused by heavy traffic flow on the existing A14.
- 2.2.6. No minerals and waste areas fall within the application area, as identified in the Cambridgeshire and Peterborough Minerals and Waste Local Plan (adopted July 2021).
- 2.2.7. There is limited use of the A428 by pedestrians, cyclists and equestrian travellers. There are several locations where public bridleways and footpaths join the A428, but are not widely used due to the conditions on the A428 for modes other than motor vehicle. Most of the A428 within the scheme area does not have a footway.
- 2.2.8. There is currently very limited provision for travel between settlements along the A428 corridor other than by motor vehicle. There are no suitable parallel routes available for cyclists and equestrians to use as alternative. The nearest Public Bridleways, Byways or country lanes running east-west are a minimum

of 2.5km from each side of the existing A428 between Eltisley and St Neots. A summary of the Public Rights of Way is contained in Table 18.

2.3. Compliance with local plans and policies

2.3.1. There are several local development plans and policies that apply to development in the local area. These are listed and assessed for compliance in Chapter 4 and Appendix A.

2.4. Traffic and Transport patterns

2.4.1. The stretch of the A428 under consideration is part of the Strategic Route Network and links the A1 Trunk Road at Wyboston (and the A421 Trunk Road at Black Cat via the A1) to the existing dual carriageway section of the A428 at its junction with the A1198 at Caxton Gibbet. The existing dual carriageway then continues to Cambridge, where it ends at a junction with the A14 Trunk Road and M11 motorway at Girton.

2.4.2. The current A428 has evolved and been upgraded over a prolonged period of time. It is used as a strategic through-route across Cambridgeshire by regional and national traffic, as well as being used as a local connecting road meeting local access needs. As a consequence, the standard of design varies widely, with significant design shortcomings in respect of current good practice, as set out within the current Design Manual for Roads and Bridges (DMRB).

2.4.3. The traffic and transport patterns across the local area are identified in Chapter 7. In summary, the existing A428 between Black Cat and Caxton Gibbet is used by a mixture of local traffic and strategic traffic, and is well known for congestion and delay. In addition, the traffic flows on the A428 include a high proportion of Heavy Goods Vehicles (HGVs). There are often long delays at peak times which causes traffic to reroute to alternative and less suitable routes. The current level of delay and the lack of resilience means that if there is an incident the impacts on local roads are worsened by traffic using alternative routes.

2.4.4. The junctions at B1428 Cambridge Road and B1040 at Eltisley have accident rates that are higher than the national average. These are considered to be impacted, in part, due to lower design standards and a congested road that has design limitations and in proximity to busy junctions.

2.4.5. The particular characteristic of the A428 which makes these incidents and accidents more problematic is the lack of resilience. The lack of resilience on the A428 is caused by the lack of additional or spare capacity in the width of the road and by the limited number of viable alternative routes.

2.5. Local Impacts

- 2.5.1. The Councils' key concerns are highlighted below, before a series of tables summarise the local impacts of the scheme.
- 2.5.2. With regards to traffic and transportation, the Councils are broadly content with the Applicant's methodology and conclusions on the dual carriageway, and the traffic numbers used within the economic assessment of the scheme. It has become apparent however that the modelling of the local roads and junctions to be adopted by the County Council has used a non-standard method, and remains not agreed at this point. As a consequence, the local road design cannot be approved as the Council hasn't been able to agree the relevant traffic flows and impact, and therefore confirm whether the local roads have been designed with the right size and capacity. The Councils have received information from the Applicant during August 2021 which is still under review. The County Council considers that it is reasonably seeking to understand the detailed operation of its future asset, and be confident that the design is appropriate.
- 2.5.3. The County Council's position on the design of the local roads and junctions is that it requires the normal standards for highways, the Design Manual for Roads and Bridges to be used for the design of any asset it is to adopt, and the Council requires a robust approval process for the design to be secured through the Development Consent Order and a legal agreement.
- 2.5.4. The Councils have expressed concerns about the range and quality of the ecological surveys undertaken for the Application and are not confident that the impact of the scheme can be fully assessed, with particular reference to habitats and areas of local significance. Clarity would be welcomed on whether the Applicant intends to undertake further ecological surveys. The Applicant's assessment of Biodiversity Net Gain has been questioned by the Councils and there are concerns that using the standard metrics for this does not give an accurate picture of the impact of the project. The Councils are keen to explore this with the Applicant to ensure that the scheme delivers the maximum possible benefits for biodiversity.
- 2.5.5. The Councils are keen that all development in the area provides safe and extensive opportunities for cycling, walking, and other active travel uses. The Councils are not convinced that the local roads within the scheme provide good connectivity to all surrounding villages, or that the level of provision is in accordance with the latest policy guidance. The Councils are keen that all opportunities are taken to deliver high standard facilities for active travel users.

- 2.5.6. Given the extensive period of construction the Councils are concerned about the volume, duration, and control of construction traffic, routing and diversions, and the impacts on our communities. Additional information and commitment to mitigate impacts secured through the draft Development Consent Order would be welcomed, given the nature and location of the routes that have been identified for use.
- 2.5.7. The Councils are concerned that there is limited information on borrow pits and their management and remediation within the Application.
- 2.5.8. Notwithstanding the above, the Councils have responded to the information in the Application. The following tables set out a summary of the positive and negative local impacts of the scheme by theme, as well as any missed opportunities. Further detail of the local impacts of the scheme can be found in Chapter 7.4 for Transport and Connectivity, and Chapter 8 for other matters.

Transport and Connectivity

- 2.5.9. Within the Written Representations and responses to the First Written Questions the position is set out with regard to the status of the traffic modelling and highway design. This makes it difficult to assess and evidence within the LIR an accurate picture of traffic impacts and the impact of the Council of the asset it will be adopting. Nevertheless an assessment has been made using the information available.

Table 1: Summary of Local Impacts - Transport and Connectivity

Positive
<p><i>During operation</i></p> <p>Re-routing of traffic onto the new dual carriageway will see a large reduction in the number of vehicles using the current A428 to the east of St Neots, bringing benefits to the local area</p>
<p><i>During operation</i></p> <p>The existing congested and unreliable conditions on the current A428 will be improved with traffic moving to a more suitable strategic route, particularly in the centre of St Neots and Eltisley.</p>
<p><i>During operation</i></p> <p>Completion of a 'missing link' in the strategic road network, facilitating longer distance journeys and meeting infrastructure requirements identified as part of the Ox-Cam Arc.</p>
Negative
<p><i>During construction</i></p> <p>Extensive (and currently not fully modelled by the Applicant) traffic disruption, diversion routes and impacts on residents and businesses for long periods.</p>

<i>During construction</i> Closure or diversion of Rights of Way.
<i>During construction</i> Impacts on the County Council's highway asset from construction or re-routing traffic.
<i>During construction</i> De-trunked assets potentially handed to the County Council of uncertain condition currently without clarity about liabilities.
<i>During operation</i> Reduced volumes of traffic on the existing A428 but increased speeds, making this unattractive to non-motorised users, emphasising the need for segregated provision.
<i>During operation</i> Unclear impacts from traffic re-routing along adjacent and connecting routes.
<i>During operation</i> Uncertainty relating to the performance of the local road network in St Neots (Cambridge Road and Great North Road) due to the fact that the model indicates significant increases in traffic but adjacent junctions have not been assessed.
<i>Missed opportunity</i>
The modelling of the local roads and junctions to be adopted by the County Council has used a non-standard method, and remains not agreed at this point.
The design of the local roads and junctions and associated infrastructure has not been agreed with the County Council, and isn't in accordance with the Design Manual for Roads and Bridges.
A robust approval process for the design has not been secured through the Development Consent Order and a legal agreement.
The Councils are not convinced that the local roads within the scheme provide good connectivity for non-motorised users to all surrounding villages, or that the level of provision is in accordance with the latest policy guidance.
Lack of consideration in any detail in the transport modelling of the interaction of the scheme with East West Rail and Cambourne to Cambridge, and the opportunities for interchange from the A428, particularly for trips into Cambridge.
The Councils are keen that all opportunities are taken to deliver high standard facilities for active travel users.
Agreement of detrunking, asset, boundary and related matters not completed in advance of the Application being submitted.

Landscape

Table 2: Summary of Local Impacts - Landscape

Positive
<i>During operation</i>

<p>The reduction in traffic on the existing A428 will improve the quality of environment for settlements and habitats, such as established tree belts and wooded parkland, that have arisen along the route.</p>
<p><i>During operation</i> As stated in the Landscape and Visual Impact Assessment [APP-076], the route of the new A428 will have a negligible impact on existing main residential settlements.</p>
<p><i>During operation</i> New planting areas will enhance some aspects of the scheme, helping in places to break up the appearance of the road corridor and screen traffic. In areas it is considered that the planting could help to integrate the scheme into the landscape.</p>
<p>Negative</p>
<p><i>During construction</i> The temporary displacement and storage of land used for agriculture, as part of construction works, material storage and soil mining (borrow pits) causing a disturbance to soil structure, natural soil formations, agricultural use and landform. These effects will be to both landscape character – a negative impact on landform, landscape pattern and land use – and on landscape fabric, i.e. the materials that make up the landscape, as described above.</p>
<p><i>During construction</i> Views, as well as sound, dust and vibrations, of heavy construction plant and materials, major earthworks and temporary traffic management. These will form a major detractor in views, particularly to receptors at close proximity to the works, though these effects will be temporary in nature.</p>
<p><i>During construction</i> The major earthworks (including excavation of drainage lagoons, ecological ponds, SuDS features and creation of bunds and cuttings) vegetation and removal, and associated heavy construction plants and materials will also have widespread adverse and often permanent landscape effects, effecting several key areas of landscape character; vegetation, enclosure, scale, views, pattern, land use and tranquillity, as well as permanently affecting landscape fabric.</p>
<p><i>During construction</i> Plans do not propose a sufficient level of protection, including root protection, to nearby trees subject to Tree Preservation Orders. Insufficient protection of existing retained vegetation has the potential to considerably increase the severity of landscape and visual effects, should retained vegetation become damaged and/or die.</p>
<p><i>During operation</i> Irreversible displacement of land use for the operation of the A428 and its permanent disruption of Landscape Character.</p>
<p><i>During operation</i> There will be a period of time during operation where new mitigation planting and replacements will not have matured when visibility of the scheme within the landscape will be higher and more significantly adverse and it will be less well integrated into the host landscape (end of Construction to +15years).</p>

<p><i>During operation</i></p> <p>The size/scale of junctions and interchanges and associated lighting will have a negative visual effect on the rural nature of the existing landscape as they will add new visual detractors to surrounding visual receptors.</p>
<p><i>During operation</i></p> <p>Areas of bare ground are proposed to be left for colonisation by locally found flora. It is likely that the colonising species would be opportunistic weeds rather than locally found specialist species. It is the locally found specialist species that would bring greater biodiversity and landscape character benefits. Where bare ground has been left in conjunction with public footpaths it is considered that the proposals create a hostile environment for non-motorised users and should be enhanced with planting to detract from and soften dominant and elevated traffic.</p>
<p><i>During operation</i></p> <p>Areas which have temporarily been used as borrow pits are likely to have diminished quality when ultimately reinstated for agriculture. This can lead to temporary and/or longer term changes in landscape character due to the diminished capability of the soil as a growing medium for crops, leading to areas of bare ground or indeed level changes resulting from the potential for soil to collapse.</p>
<p><i>During operation</i></p> <p>Large open areas of the road corridor would contribute to the openness, visibility of intrusive development and lack of intimate scale in the Huntingdonshire District Council South East Claylands Landscape Character Area, which historically is a consequence of insensitive development and loss of hedgerows and trees due to agricultural pressures. Given the addition of a new detractor in the landscape, the proposed A428 itself, this would contribute to the incremental degradation of the character of the South East Claylands.</p>
<p><i>During operation</i></p> <p>The introduction of new highway infrastructure and traffic will cause adverse effects on visual amenity and tranquillity to rural and agricultural landscapes and landscape character. The nature of the change is permanent and irreversible, though somewhat mitigated over time as proposed vegetation established (+15 years)</p>
<p><i>Missed opportunity</i></p> <p>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.</p>
<p>Long stretches of hedgerows should include more trees and more copses of trees to better break up, soften and filter views of the road, traffic, and associated infrastructure such as gantries and signage.</p>
<p>There is an opportunity to contribute to the aims of the Huntingdonshire District Council Landscape Character Assessment (2007) to plant trees and woodland belts along road</p>

<p>corridors to help screen intrusive development at settlement edges and restore a higher quality landscape.</p>
<p>Attenuation features in the vicinity of existing riparian corridors and their immediate and wider settings should be designed, planted and managed to create new wetland habitats as identified in the Cambridgeshire Green Infrastructure Strategy.</p>
<p>The current species mix contains a significant amount of non-native trees which would fail to respond positively to the local landscape character. Species within planting mixes should reflect the local planting patterns and include climate resilient modifications.</p>
<p>It would be beneficial to include additional off-site planting to increase provision of native and diverse hedgerows and tree planting.</p>
<p>The proposed new route will diverge from established highways, introducing noise and fast moving traffic into rural areas which previously enjoyed higher levels of tranquillity.</p>
<p>The Landscape and Visual Impact Assessment or scheme design does not discuss or consider possibility of the new East-West rail. The current “emerging preference” route alignments for East-West rail, (route 1 and route 9) closely follow the approximate alignment of the proposed A428. This is a major missed opportunity because it completely neglects to consider the possibility of shared supporting infrastructure (bridges, tunnels, water management, access roads between any stations and the A428, integrated, larger scale and better connected, landscape, ecological and visual mitigation. There would also be the opportunity to minimise the landtake of the two projects by considering the transport corridor as a single entity, reducing the extent of landscape and visual effects.</p>

Cultural Heritage

Table 3: Summary of Local Impacts - Cultural Heritage

<p>Positive</p>
<p><i>During operation</i></p> <p>There is a significant Public Archaeology and Community Engagement strategy outline in Appendix E of ES 6.12 Archaeological Mitigation Strategy (TR010044/APP/6.12) (APP-238).</p>
<p><i>During operation</i></p> <p>The location, survey, recovery and conservation of listed mile markers will occur with local community involvement. Their relocation to an approved and appropriate place along their roads will ensure their continued relevance.</p>
<p><i>During operation</i></p> <p>The Archaeological Mitigation Strategy indicates that six areas of archaeological settlement will be preserved in situ (by avoidance): Sites 12, 16, 21, 25, 35, 40.</p>
<p>Negative</p>
<p><i>During construction</i></p>

There will be an unrecorded loss of archaeological information for some archaeological sites owing to the delineation of restricted excavation areas and field excavation strategies that reduce the amount of investigation on some of the identified sites. Sites: 10, 11, 13, 14, 18,19, 23, 24, 28, 33, 34, 36, 37, 38, 39.
<i>During construction</i> Adverse impacts and risk of total loss of non-designated heritage assets at Site 17 Field 70 where proposals to place a Multiple Purpose Construction Area on a geotextile membrane over vulnerable remains relating to the deserted Medieval village of Wintringham and earlier occupation is planned without prior excavation.
<i>During construction</i> Securing experienced and trainee field archaeologists is proving problematic in the UK. Insufficient numbers of trained field workers could seriously affect programme delivery.
<i>Missed opportunity</i>
The location and general design of a specific field-based archaeology compound.
Identification of a community space(s) where volunteer community groups could safely engage with specified archaeological tasks.
Lack of integrated engagement with the Local Authority Archaeologists in the development of the archaeological mitigation design.
Engagement with CCC Museums Liaison Officer to discuss strategies and initiatives for integrated archaeological interpretation and displays of the scheme’s evidence within local museums and galleries for which funding would be required.

Ecology

Table 4: Summary of Local Impacts - Ecology

Positive
<i>During operation</i> Reduction in the incidences of road traffic accidents (RTAs) for badgers and other terrestrial animals on existing A428.
<i>During operation</i> Reduction of indirect impacts to biodiversity (noise, air pollution, vibrations) on existing A428.
<i>During operation</i> Proposed new habitats will provide more biodiverse habitats than the monoculture arable fields which currently cover much of the site.
<i>During operation</i> Net gain in tree cover with creation of over 60 ha of woodland.
<i>During operation</i> Net gain in grassland habitat with increase of 134 ha semi-improved grassland.
Negative
<i>During construction</i>

Loss / disturbance of bat habitats around Eversden and Wimpole Woods SAC, particularly affecting Barbastelle bats.
<i>During construction</i> Disturbance to all bat species through increase in lighting, affecting foraging and roosting.
<i>During construction</i> Loss of great crested newt breeding ponds and direct mortality to the species.
<i>During construction</i> Loss of priority habitats including arable field margins, hedgerows, lowland meadow/lowland calcareous grassland, ponds and waterways.
<i>During construction</i> Potential loss of irreplaceable habitats (veteran English Elm tree).
<i>During construction</i> Impact to Protected Road Verge S8 Brockley Road cannot be determined due to the lack of survey data.
<i>During construction</i> Net increase in hard surfaces (more than 59 ha) which will have no biodiversity or ecological value.
<i>During construction</i> Temporary disturbance to species through noise, vibration, increased air pollution and temporary habitat removal/destruction.
<i>During construction</i> Impacts to farmland birds due to disturbance / habitat loss, and potential impacts to other species. Unable to determine impacts due to lack of survey information.
<i>During operation</i> Loss of field margins and hedges negatively impacting farmland birds (priority species) and wintering birds.
<i>During operation</i> Loss of standing deadwood and elm in hedgerows and field margins negatively impacting deadwood and other specialist invertebrates.
<i>During operation</i> Temporary disturbances of species through noise, vibration, increased air pollution, temporary habitat removal/destruction. All disturbances to protected species should be known and undertaken with licencing in place, where required.
Missed opportunity
Scheme does not use the accepted DEFRA metric and so does not assess baseline data adequately, thus is likely to result in net biodiversity loss, rather than the reported 20.5% biodiversity net gain.
Scheme lacks mitigation strategy for arable field margins which are a priority habitat and provide a wildlife corridor and resources for farmland birds (priority species).
Scheme design does not include restoration for the borrow-pits which could compensate for loss of great crested newt habitats and priority habitats.

Scheme does not include the creation of wildlife ponds which would greatly enhance biodiversity.

Noise and Vibration

Table 5: Summary of Local Impacts - Noise and Vibration

Positive
<p><i>During operation</i></p> <p>Major and moderate decreases in day and night time traffic noise levels are predicted at properties in the north and west of Eltisley. These decreases result from traffic no longer predicted to use St Neots Road and The Green to access the B1040 once the Scheme opens, with this traffic accessing the B1040 via Potton End instead. It is considered that the major and moderate decreases in noise at these properties are likely to result in a significant beneficial effect at these properties.</p>
<p><i>During operation</i></p> <p>The residential buildings situated alongside the current A428 in Eynesbury would experience a negligible reduction in road traffic noise due to the majority of vehicles using the new road some 1km further back, in particular the dwellings off Buttercup Avenue and Caernarvon Road. The remaining residents of St Neots would experience a negligible increase in road traffic noise both with or without the Scheme.</p>
Negative
<p><i>During construction</i></p> <p>Of the 45 selected construction noise assessment locations:</p> <ul style="list-style-type: none"> a) 36 are predicted to experience construction noise levels which are at or above the Lowest Observed Adverse Effect Level (LOAEL) during the daytime period in one or more months, of which 14 would also be at or above the Significant Observed Adverse Effect Level (SOAEL). b) For the evening/weekend period, 22 receptors are predicted to be at or above the LOAEL, of which 8 would also be at or above the SOAEL. c) For the night-time period, 33 receptors are predicted to be at or above the LOAEL, of which 22 would also be at or above the SOAEL.
<p><i>During construction</i></p> <p>As a result of construction traffic movements there are moderate increases in predicted road traffic noise on the following routes during construction:</p> <ul style="list-style-type: none"> a) Bourn Road, Caxton between Caxton Road and Royston Road (Phase 4). b) Main Street, Caldecote between B1046 and approximately New Barns Farm, Caldecote (Phase 3 and Phase 4). c) Caxton Road between Alms Hill, Caxton End and Bourn Road, Caxton (Phase 3 and Phase 4). d) B1046 Meadow Road, Great Gransden (Phase 3 and Phase 4).
<p><i>During construction</i></p> <p>Disruption to all Public Rights of Way (PROWs) due to temporary closure with negative impacts on noise, views and amenity for those paths that remain open or the agreed</p>

temporary alternative routes. This is likely to decrease usage locally with potential impacts on health and well-being.

During construction

Most of the Scheme construction will take place in a rural environment with just a few properties being affected by construction noise. There are two main areas that will be affected by construction noise; the Potton Road junction and the Cambridge Road junction. Both junctions will see new stretches of local road bridging over the new A428. The following dwellings are likely to experience a significant adverse effect during the day and night: Parkers Farm, The Bungalow at Parkers Farm, Rectory Farm Cottage and 1-2 Rectory Farm Cottage at the Potton Road junction, and Greyholme (Cambridge Road) and Wintringham Cottages (Wintringham Road - A428) at the Cambridge Road junction. The village of Wintringham may also experience a significant adverse effect during the night-time.

During construction

Significant adverse construction vibration effects are identified at the following locations where either moderate or major adverse vibration annoyance impacts are predicted to occur:

- a) 64 to 68 Great North Road (alongside southbound A1).
- b) Parallel to both sides of the A1 between The Lane and Black Cat junction.
- c) Along parts of The Lane, Nags Head Lane and Chawston Lane in proximity to the Roxton Road Link between Roxton Road and The Lane.
- d) Where the new Roxton Road re-alignment ties into the existing Roxton Road.
- e) Greenacres.
- f) Kelpie Marina.
- g) At the new turning head on School Lane.
- h) To the north east of the new alignment of Barford Road.
- i) Along Potton Road in proximity to the new Scheme alignment.
- j) At the southern alignment of the new Cambridge Road junction.
- k) At the junction between Cambridge Road and Toseland Road.
- l) Along the A1198 to the north of the new Caxton Gibbet junction (Iway Inn)

During operation

Minor increases in traffic noise are predicted on The Lane in the vicinity of the junction with Roxton Road. Moderate increases in traffic noise are also predicted to occur at a number of properties fronting St Neots Road in Eltisley and moderate/minor border are predicted at properties to the east of Eltisley.

During operation

Minor or moderate increases in traffic noise are also predicted at North East Farmhouse, 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, the Iway Inn and Swansley Wood Farmhouse.

During operation

Increases in traffic noise are predicted in the area of the Cambourne West development, with moderate increases in noise predicted in the areas close to the Scheme.

<p><i>During operation</i></p> <p>Routes predominantly in the vicinity of the west and eastern extents of the Scheme are predicted to experience a minor increase in traffic noise levels in the short term. These increases are a result of traffic being drawn to the Scheme, including the A421 to the west of Roxton, the existing A428 east of Caxton Gibbet and routes through Caxton.</p>
<p><i>During Operation</i></p> <p>A number of rural dwellings to the south of St Neots will experience a major increase in traffic noise due to the Scheme. These include The Range (five properties), Orchard House, Rectory Farm Cottage, Parkers Farm, The Bungalow at Parkers Farm, The Bramleys and Glen Eden on Potton Road which are located between 100m and 300m from the Scheme. Similarly, a major increase in traffic noise would occur at Tithe Farm on Cambridge Road (although this will reduce to a “moderate increase” in the long term) and 1-2 Wintringham Cottages on Wintringham Road (the A428) (although the southern façade will experience significantly lower noise levels due to much lower traffic flows on the existing A428).</p>
<p><i>Missed opportunity</i></p>
<p>Ensure cooperation with developers of new development sites (Cambourne West) to ensure mitigation is appropriate.</p>
<p>Monitor noise levels at locations where a residual impact remains to ensure they do not exceed threshold for qualification for noise insulation / further mitigation for example, at Rectory Farm Cottage, Potton Road, Oak Tree Farm and Eltisley.</p>

Air Quality

Table 6: Summary of Local Impacts - Air Quality

<p>Positive</p>
<p><i>During operation</i></p> <p>The Scheme has the potential to affect air quality during operation with both increase and decrease in the annual average concentration of Nitrogen Dioxide (NO₂) within the study area. However, the majority of changes are insignificant and the predicted pollution levels remain below the National Air Quality Objectives.</p>
<p>Negative</p>
<p><i>During construction</i></p> <p>The construction dust risk potential is considered ‘large’ due to the large scale of the works proposed. However, any effects on human health related to air quality would be temporary (i.e. during the period of the construction works only) and could be suitably minimised by the application of industry standard mitigation measures. This will be addressed by the best practice mitigation measures presented in the first iteration of the Environmental Management Plan for the scheme. These measures need to be considered in more detail in the second iteration.</p>
<p><i>Missed opportunity</i></p>
<p>No enhancement measures relating to air quality have been incorporated into the design of the scheme. This could have been achieved through provision of</p>

infrastructures to facilitate more sustainable modes of transport for the future particularly through the provision of Electric Vehicles Charging Stations.

Pedestrians, Cyclists and Equestrian travellers

Table 7: Summary of Local Impacts - Pedestrians, Cyclists and Equestrian travellers

Positive
<p><i>During operation</i> Public Rights of Way currently little used due to severance issues because of having to cross the existing A428 will become more popular when most traffic transfers to the new A428 (for which grade separated crossings will be provided).</p>
<p><i>During operation</i> A new public footpath linking Abbotsley Public Footpaths 1/9 and 1/17 will be provided enabling circular walks.</p>
<p><i>During operation</i> The connection between Abbotsley bridleways 1/12 & 1/18 which egress onto the A428 60 metres apart will be improved and made safer by providing a roadside Non-Motorised User provision of and space off the road to wait before crossing.</p>
<p><i>During operation</i> The scheme aligns with part of the plans for the revision of public rights of way at Wintringham development.</p>
<p><i>During operation</i> The DCO proposes to upgrade the provision between Caxton Gibbet North roundabout and Brockley Road, Elsworth, to bridleway status, which will accommodate a greater variety of highway users and provide an improved link between the A1198 and the former A428 at Elsworth leading towards Cambourne.</p>
<p><i>During operation</i> Provision of off-road NMU facilities at the proposed Eltisley Link Road will improve the safety and accessibility of the NMU network in the immediate Eltisley area.</p>
<p><i>During operation</i> Some movements for NMU traffic at Caxton Gibbet roundabout will be safer and easier as a result of the proposed off-road provisions at the improved junction. This will enhance opportunities for future NMU connections in this area, including access to business sites in the locality and the Cambourne West development.</p>
Negative
<p><i>During construction</i> Disruption to all PROWs due to temporary closure and negative impacts on noise, views and amenity for paths that remain open or the agreed temporary alternative routes. This is likely to decrease usage locally with potential impacts on health and well-being.</p>
<p><i>During construction and operation</i> Risk of flooding and damage to surface of PROW in close proximity to the A428 construction works.</p>

<p><i>During operation</i></p> <p>Abbotsley Footpath 1/16 realignment drops into the A428 cutting and back out again adding additional height change to the route and closer to the new A428 with no amenity benefit.</p>
<p><i>During operation</i></p> <p>New and improved existing links to create opportunities for local people to commute from A to B on safe NMUs and provide opportunities to improve pedestrian, cycle and horse-riding experience have not been provided fully in accordance with National and Local Policies.</p>
<p><i>During operation</i></p> <p>The A1198 will be difficult to cross at Caxton Gibbet without an NMU underpass / bridge or signalised crossing due to the increased number of lanes of traffic (proposed 3 southbound and 2 northbound lanes), and increased traffic levels as a result of the scheme. NMU users at the New Caxton Gibbet junction will be required to cross the new A428 slip roads without a signalised crossing facility.</p>
<p><i>Missed opportunity</i></p>
<p>All NMU provision should include equestrians in accordance with CCC ROWIP and Highways England's own <i>Accessibility Strategy</i> and <i>Connecting Our Customers 2021</i> policy.</p>
<p>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.</p>
<p>The draft DCO does not include any provision for NMU facilities alongside the sections of the former A428 that are to be detrunked. For the section between Eltisley and Caxton Gibbet North Roundabout this will create a 600m gap in what is a critical connecting NMU link.</p>
<p>The request for the upgrade of Abbotsley FP1/17 to Bridleway status, included in our Supplementary Consultation response, and the associated improvements to the proposed NMU bridge over the new A428, has not been incorporated into the draft order.</p>
<p>Re-aligned Potton Road B1046 over the new A428, has no space available for NMU users off-carriageway. This creates a risk for on-road NMUs and prevents future potential for providing safe NMU provision along this route.</p>
<p>The existing A428 to be de-trunked has no NMU facilities: this will inhibit the creation of an active travel corridor between St Neots and Cambridge. Leaving the NMU provision to a Designated Funds application leaves the provision at risk of not being delivered;</p>
<p>Croxton-Eltisley: Current NMU facilities along the existing A428 that connect these two communities are sub-optimal and should have been identified for improvement as part of the DCO in accordance with Highways England's own <i>Accessibility Strategy</i>.</p>
<p>Toseland Road: No off-carriageway NMU provisions are provided northwards to link the new works at Toseland Road with Toseland Footpath 237/7</p>

Yelling FP7 diversion: The route north of the Toseland Road bridge could have been diverted east-west along an existing farm track which would be 170 metres further away from A428 than the existing proposal.
Eltisley northern bypass (existing A428): Improved equestrian crossing facilities have not been provided at Eltisley, where Eltisley bridleway 74/6 crosses the existing A428.
Eltisley Link North roundabout: This should facilitate cyclists who wish to continue northwards on the B1040 with a suitable transition from off to on road.
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.
Caxton Gibbet Junction South Roundabout: The NMU southwards along A1198 should be on the eastern side of the road. This would then 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.
Connectivity Caxton Gibbet Junction to Cambourne Junction: 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.

Climate

Table 8: Summary of Local Impacts - Climate

Positive
<i>During construction</i> From a climate change mitigation perspective, there are considered to be no positive impacts, as the scheme results in an increase in emissions.
Negative
<i>During construction</i> The ES indicates that there will be an 208,380 tCO _{2e} increase in emissions during the construction phase. While this represents a relatively small proportion of the relevant national carbon budget, this still represents an overall increase in carbon emissions, and as such is considered to be a negative impact.
<i>During operation</i> The ES indicates that there will be a 35,280 tCO _{2e} increase in operational emissions from the do-nothing scenario whereby no works to improve the A428 are carried out, to the do something scenario in the year of opening (in other words following the completion of the dualling of the A428). This increase is due to an increase in miles travelled.
<i>Missed opportunity</i>
Specific opportunities to use materials and construction techniques with lower embodied carbon should have been identified in detail at this stage in order to inform comments on the Scheme.
Opportunities to enhance infrastructure to support low emissions vehicles alongside the route of the Scheme have been missed (for example provision of ultra-rapid

chargepoint provision across motorways and A-roads, in line with commitments made in Decarbonising Transport, page 98, first bullet point).

Flooding and water

Table 9: Summary of Local Impacts - Flooding and water

Positive
<p><i>During operation</i></p> <p>Utilisation of attenuation basins promotes water quality and therefore will reduce the pollution risks in the future to the surrounding watercourses.</p>
Negative
<p><i>During construction</i></p> <p>Risks around the safe management of sediment and hazardous pollutants during construction is considered high. The First Iteration Environmental Management Plan covers parts of the mitigation, however this appears to be more around the monitoring of the water bodies and watercourses. It is noted that this will likely be considered in more detail later on, however, there must be a plan for controlling sediment loads, retaining hazardous pollutants and mitigation around the control of these potentially hazardous substances from entering the surrounding watercourses.</p>
<p><i>During operation</i></p> <p>The works around the watercourses, with regards to the diverting and culverting of watercourses have the potential to increase sediment deposition and flood risk as they are proposing to culvert by shortest distance as opposed to the desired option, keeping the flow of water as natural as possible.</p>
<p><i>During operation</i></p> <p>The use of interceptors on the higher pollution risk areas are a maintenance liability and generally the Lead Local Flood Authority (LLFA) is opposed to proprietary treatment. Consideration has not been given to more natural methods of treatment, promoting biodiversity.</p>
<p><i>During Operation</i></p> <p>The option to use a minimum 5 l/s flow control from the proposed scheme would increase the downstream flood risk, as this would be increasing the discharge rates above the natural greenfield rates for the catchment draining to the flow controls.</p>
<p><i>During Operation</i></p> <p>There is not a clear guide to the ongoing maintenance of the drainage features once they have been installed, which could lead to a lack of maintenance, in turn leading to increased pollution and flood risk.</p>

Mineral and Waste

Table 10: Summary of Local Impacts - Mineral and Waste

Positive
<p><i>During construction</i></p>

<p>Fill material is being sourced, and waste is being disposed of, on site where possible, which should limit the wider impact on existing waste and minerals sites, associated transport movements and their associated impacts.</p>
<p><i>During construction</i> The developer is seeking to minimise waste generation during construction.</p>
<p>Negative</p>
<p><i>During construction</i> Temporary negative onsite impacts include disruption of existing site use (agriculture); potential disruption to wildlife, and the water table; and the destruction of archaeology.</p>
<p><i>During construction</i> Temporary off-site impacts centre around amenity, particularly in relation to noise, dust and light from on-site and transportation activities.</p>
<p><i>During construction</i> The current proposals are not compliant with Policies 7 or 19 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021) owing to lack of detail and not according with the policy in respect of restoration (see missed opportunities). This undermines confidence that the developer respects local priorities.</p>
<p><i>Missed opportunity</i></p>
<p>The proposals involve returning the borrowpits to their original use as part of restoration. This is a missed opportunity to provide on-site biodiversity net-gain or mitigation for climate change, which would assist in the proposal complying with local policy.</p>
<p>No assessment has been undertaken to establish if it may be more sustainable to acquire the required materials from local quarries, and aid in their restoration by disposing of inert materials at those locations. Nor has there been an assessment of the impact of the timing of extraction from the borrowpits on local quarries.</p>

Social and Community Matters

Table 11: Summary of Local Impacts - Social and Community Matters

<p>Positive</p>
<p><i>During operation</i> There is reduced journey time for commuters along the route who may no longer experience congestion delays at peak times.</p>
<p>Negative</p>
<p><i>During construction</i> Potential for poor communication between construction and local residents leading to increased stress and poor mental health (as experienced with A14 upgrade). A robust community communications plan must be in place.</p>
<p><i>During construction</i> As the existing A428 will experience closures for 43 months between August 2022 and March 2026 there been no assessment of the impact the diversion routes will</p>

have on villages, local residents, access to emergency services following the night closures.
<p><i>During construction</i></p> <p>Increase in local traffic wishing to avoid delays as a result of construction – leading to increased traffic on rural roads (as witnessed throughout A14 construction) leading to increased risk of collision/ road safety and stress/decline in mental wellbeing.</p>
<p><i>During operation</i></p> <p>There appear to be no embedded mitigation measures proposed to address any impacts of the impacts on human health.</p>
<p><i>During operation</i></p> <p>The permanent changes to the local landscape through earthworks and engineering operations will negatively impact upon the local amenity value of the existing rural landscape which could result in stress/decline in mental wellbeing. to local amenity.</p>
<p><i>During operation</i></p> <p>Potential increase in suicide as a result of increased presence of bridges.</p>
<p><i>During operation</i></p> <p>Potential severance of remote dwellings to their local community.</p>
<p><i>Missed opportunity</i></p>
<p>Opportunities to provide significant improvements to the Public Rights of Way network have not been seized.</p>

Economy

Table 12: Summary of Local Impacts - Economy

Positive
<p><i>During construction</i></p> <p>There will be direct and indirect benefits to employment linked to the project including training and apprenticeship opportunities.</p>
<p><i>During construction</i></p> <p>There will be employment opportunities for local residents and additional economic benefits via the spend of the construction workforce on elements such as food and accommodation for workers who are not local to the scheme.</p>
<p><i>During construction</i></p> <p>Tier 1, 2 and 3 construction companies in the local area will have the opportunity to obtain work from the appointed main contractor.</p>
<p><i>During construction</i></p> <p>A limited number of businesses are located in the immediate vicinity of the route. The level of business disruption is therefore less than it might be in other locations.</p>
<p><i>During construction</i></p> <p>Highways England has developed a process to upskill construction businesses who may be interested in joining its supply chain.</p>
<p><i>During operation</i></p>

<p>Reduced congestion, resulting in faster and more reliable journey times between Cambridge, Bedford, Milton Keynes (M11, A1, M1) Key corridor - OxCam Arc resulting in improved access to existing and future employment sites.</p>
<p><i>During operation</i> Reduced congestion, resulting in faster and more reliable journey times to St Neots Mainline Railway Station for North South travel.</p>
<p><i>During operation</i> Potential for improved NMU provision between St Neots and Cambourne to facilitate active travel connecting existing and new communities with current and future employment sites such as Cambourne West, Cambourne Business Park, Bourn Airfield, Papworth Industrial Estate.</p>
<p>Negative</p>
<p><i>During construction</i> There will be a greater potential of traffic disruption and longer journey times close to St Neots East which is an important access point to St Neots mainline station and north south rail travel. There is also potential for disruption to access for the businesses located at the service area at Caxton Gibbet and others in the local vicinity.</p>
<p><i>During construction</i> Longer and disrupted journeys will have a negative impact financially and on the productivity of local business.</p>
<p><i>During construction</i> The costs associated with the disbenefits of construction according to HE economic assessment amount to £35 Million.</p>
<p><i>During operation</i> Loss of direct access from the main carriageway for the businesses located at the service area at Caxton Gibbet, could be potentially detrimental to business.</p>
<p><i>Missed opportunity</i></p>
<p>COVID may have presented a perfect opportunity to provide the space and time to align closer with East-West Rail. Indeed, there is still time to align thinking on a number of economic themes including legacy.</p>

3. Context

3.1. Role of the A428 in the Local Transport Network

- 3.1.1. The A428 is one of four east-west routes that pass through Cambridgeshire that are part of the Strategic Route Network or Major Road Network linking the A1 with the East of England. It connects communities between St Neots and Cambourne and links the East of England to important regional, national and international hubs such as Felixstowe and Harwich ports. The route also connects Bedford, Milton Keynes and the M1 motorway to Cambridge and the M11 motorway, and is used by both local and long distance traffic.
- 3.1.2. The A428 between the Black Cat and Caxton Gibbet is the only stretch of single carriageway on the route between the M1 and Felixstowe and Harwich. Motorists are subject to regular delays and congestion on this section of the A428 which affect journey times. There are also a high number of road traffic incidents along the route.
- 3.1.3. Journey times between the existing Black Cat roundabout and the existing Caxton Gibbet roundabout are significantly longer in peak periods than in off-peak periods. This is a consequence of road sections and intermediate junctions operating at or exceeding capacity, which results in delays along the existing A428.
- 3.1.4. The Black Cat roundabout experiences significant queuing on all approaches to the junction and long traffic queues regularly form on the A428 between St Neots and Caxton Gibbet.
- 3.1.5. The (then) Highways Agency undertook a high-level options identification and assessment for possible improvements to this section of the SRN in 2014. The following problems were identified along the existing A428:
- a) It carries twice the amount of traffic it was designed for.
 - b) It has safety and maintenance issues, e.g. the Black Cat roundabout has been identified as having safety problems (69th highest number of accidents nationally).
 - c) It has one of the least reliable journey time sections nationally.
 - d) It was identified as having peak hour speeds of less than 40mph with link delays in the top 20% nationally (between Wyboston interchange and the existing Caxton Gibbet roundabout).
 - e) It was identified as being within the top 25% of highway links nationally for casualties per billion vehicle miles (between Wyboston interchange and the existing Caxton Gibbet roundabout).
- 3.1.6. The Department for Transport outlined in its Road Investment Strategy: for the 2015/16 – 2019/2020 Road Period (Ref 1-1) (RIS1) the case for “improvement

of the A428 near St Neots, linking the A421 to Milton Keynes with the existing dual carriageway section of the A428 to Cambridge... The scheme is expected to include significant improvements to the Black Cat roundabout, where the A1 currently meets the A421”.

- 3.1.7. Significant traffic growth is predicted on the road network, with potential developments in surrounding areas expected to contribute to an increase in future traffic flows on the existing A428. Without improvement, these developments are likely to exacerbate the current problems of safety, congestion and journey reliability on the route and could inhibit growth in homes and jobs along the St Neots – Cambridge corridor.

3.2. National Growth

- 3.2.1. In March 2019, the Ministry of Housing, Communities and Local Government published The Oxford –Cambridge Arc: Government ambition and joint declaration between Government and local partners. In it the A428 is described as forming a crucial part of the eastern section of the Oxford to Cambridge Arc.¹ As such, improvements to this part of the route will assist in delivering the government’s growth aspirations in the Arc and improve connectivity between major centres of business innovation and research. According to the paper, the scheme has the potential to make a significant contribution to national growth in this critical corridor by providing a safer, more reliable route and facilitating greater local level connectivity for non-motorised users.

- 3.2.2. The National Infrastructure Delivery Plan 2016 (NIDP) (Ref 4-4) brings together the government’s plans for economic infrastructure with plans to support the delivery of housing. Improvement of the road infrastructure would improve the quality of the Strategic Road Network (SRN) by addressing congestion, connectivity, reliability, accessibility, safety, resilience and capacity issues on the existing A428 between St Neots and Caxton Gibbet.

3.3. Local and Regional Growth

- 3.3.1. Together, national government and local partners have ambitious plans to build on the existing strengths of different communities along the Arc including in science, technology, high-value manufacturing and educational institutions. Alongside this sits the ambition for delivery of up to one million new homes in the Arc by 2050.
- 3.3.2. At the local level, within Huntingdonshire and South Cambridgeshire the A428 Black Cat to Caxton Gibbet improvement scheme will contribute to the

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799993/OxCam_Arc_Ambition.pdf

delivery of the St Neots East strategic expansion location and the Cambourne West and Bourn Airfield developments. The relevant local plan policies that detail these developments are set out in the appendix. Delivery of these allocated sites has already started; with St Neots East expected to deliver 3,820 new homes and 22ha of employment land across the next 20 years. Cambourne West and Bourn Airfield will deliver 2,350 residential units and up to 6.25 ha of employment and 3,500 homes respectively.

- 3.3.3. Given the location of the route as part of the Oxford Cambridge Arc, it is anticipated that the significant development along the route will come forward, in line with the government's objectives of one million homes by 2050.² the proposed scheme will facilitate a positive impact on the local and regional economy, improving connectivity and accessibility which will foster long-term future growth.

3.4. Lack of resilience to incidents and accidents

- 3.4.1. The current A428 has evolved and been upgraded over a prolonged period of time through its use as a key route through Cambridgeshire as well as connecting roads designed to meet local access needs and those of the wider region. As a consequence, the standard of design on the existing road varies widely, with significant shortcomings in respect of current good practice, as set out within the current Design Manual for Roads and Bridges (DMRB)³.
- 3.4.2. A particular characteristic of the A428 which makes incidents and accidents more problematic is the lack of resilience caused by the absence of additional capacity in the width of the road and by the limited number of viable alternative routes.

3.5. Historical Context

- 3.5.1. After the 2013 Spending Review, the Government announced its plans for large scale upgrades of the strategic roads network (SRN). The, "Road Investment Strategy for the 2015/16 - 2019/20 Road Period" set out details of the programmes of infrastructure investment, which included over £15 billion of capital investment into the road building program between 2015 and 2021 with annual funding on enhancements tripling to over £3 billion annually by 2020/21.⁴

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799993/OxCam_Arc_Ambition.pdf

³ Design Manual for Roads and Bridges (DMRB), Department for Transport (DfT)
<http://www.standardsforhighways.co.uk/dmr/>

⁴ [Road Investment Strategy: for the 2015/16 – 2019/20 Road Period \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799993/Road_Investment_Strategy_for_the_2015_16_-_2019_20_Road_Period.pdf)

3.5.2. In April 2014 Highways England published its evidence reports for the 18 Route Based Strategies (RBS) which collectively cover the SRN. The full RBSs were published in March 2015. The Felixstowe to Midlands Route Strategy is pertinent to this study.

3.5.3. The A428 forms part of the Felixstowe to Birmingham corridor which is an important strategic link connecting seaports on the east coast of England to the Midlands, is part of the trans-European network, and intersects with other major north-south road corridors. The A428 is also a strategic route for vehicles travelling east-west between Oxford and Cambridge, via urban settlements including Milton Keynes and Bedford.

3.5.4. The A428 was identified as experiencing significant junction capacity issues; specifically, Highways England's Felixstowe to Midlands Route Strategy⁵ highlighted the following issues and opportunities:

- Junction capacity improvements at the Black Cat Roundabout
- Severe lack of capacity (links and junctions) on the A428 between the A1 and A1198
- Creating an expressway by 'filling the gap' between the Black Cat Roundabout and A428/ A1198 Caxton Gibbet Roundabout.

⁵ [Felixstowe to Midlands Final.pdf \(publishing.service.gov.uk\)](#)

4. Policy Context

4.1. Historic Policy Documents (superseded)

- 4.1.1. The Road Investment Strategy: for the 2015/2016 – 2019/30 Road Period included the A428 Black Cat to Caxton Gibbet Road Improvement scheme as a scheme programmed for delivery and funded by Central Government through Highways England.
- 4.1.2. The first Local Authority policy document to include the A428 scheme was the Huntingdonshire Local Development Framework: Core Strategy (September 2009), which included the scheme as a “possible future improvement” and was underpinned by an Economic Impact Report⁶.

National Policy

- 4.1.3. The following national policy documents are relevant to the scheme:

Table 13: National policy documents relevant to the scheme

Plan/Policy	Relevance to the scheme
National Policy Statement for National Networks (2015)	The NPS sets out general policies in accordance with which applications relating to national networks infrastructure are to be decided.
National Planning Policy Framework (2021)	<p>The NPPF outlines Government’s core planning principles which seek to ensure that development plans and decisions taken on planning applications contribute to the delivery of sustainable development. The scheme supports the delivery of the NPPF’s objectives as it would provide the necessary highway infrastructure to support the growth of Cambridgeshire’s economy.</p> <p>Para 100 requires that planning policies and decisions should protect and enhance PROW and access, including taking opportunities to provide better facilities for users. The scheme directly affects PROW and has a critical opportunity to improve the local network for the benefit of residents and user groups.</p>

⁶ A428 Upgrade Caxton Common - A1/ Black Cat Roundabout Economic Impact Report (Mott McDonald on behalf of Cambridgeshire Horizons, 2008)

Plan/Policy	Relevance to the scheme
Road Investment Strategy: for the 2015/16 – 2019/20 Road Period (2015)	The scheme is identified as a 'Committed Scheme: Newly announced in this Investment Plan' and as part of the 'Oxford to Cambridge Expressway'.
Interim Report: Cambridge – Milton Keynes – Oxford corridor, National Infrastructure Commission (2016)	The scheme is identified within the report as a route that, without intervention, would be operating beyond capacity by 2035.
Partnering for Prosperity: A new deal for the Cambridge-Milton Keynes-Oxford Arc, National Infrastructure Commission (2017)	Final Report commissioned by the Government on the Cambridge – Milton Keynes – Oxford corridor. The Report notes the potential opportunities created by improving east-west road connections.
Government response to 'Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes–Oxford Arc', HM Treasury (2018)	Response from the Treasury to the National Infrastructure's Final Report on the Cambridge – Milton Keynes – Oxford corridor. The Response notes the Government's investment into high-quality east-west roads, including the scheme.
Industrial Strategy: Building a Britain fit for the future, Department for Business, Energy & Industrial Strategy (2017)	This white paper sets out a long-term plan to boost the productivity and earning power of people throughout the UK, including the Cambridge-Milton Keynes-Oxford Arc.
The Oxford-Cambridge Arc: Government ambition and joint declaration between Government and local partners, Ministry of Housing, Communities & Local Government, 2019	The scheme is identified under 'Policy Pillar 3: Connectivity' as part of the infrastructure and better connectivity that will play an important role in achieving the economic ambitions of the Arc.
Infrastructure and Projects Authority: Annual Report on Major Projects 2020-21 (2020)	The scheme is identified as green in the Delivery Confidence Assessment for all three years it has been identified in the report.
Creating a vision for the Oxford-Cambridge Arc consultation document 2021	Phase One consultation to develop a spatial plan for the Oxford – Cambridge Arc. This will eventually form part of national planning policy. The Scheme runs through the Oxford – Cambridge spatial area.
Highways England 'Connecting Our Customers 2021'	Statements on improving how Highways England's roads connect with other transport modes and networks by providing more sustainable options for our customers

Plan/Policy	Relevance to the scheme
Highways England 'Accessibility Strategy' ⁷	Guidance covering Public Sector Equality Duty and includes statements that HE will be inclusive of vulnerable users in designing new schemes as well as in network maintenance. HE will build effective partnerships with stakeholders including councils
Department for Transport: "Gear Change " (2020)	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.'
Department of Transport Local Transport Note (LTN 1/20)	'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.'
National Institute for Clinical Excellence (NICE), Walking and Cycling Guidance (PH41, NICE, 2012)	<p>Among the key actions are:</p> <ul style="list-style-type: none"> Ensuring there is a network of paths for walking and cycling between places locally Reducing road danger and perception of danger Ensuring other policies support walking and cycling
DEFRA Rights of Way Circular (1/09) ⁸	Local highway and planning authorities and others are required to comply with this guidance, which specifically covers PROW and NMU access. pp23, 46-48
Department for Transport (2021). Decarbonising Transport: A better, greener Britain	Sets out governments plans and commitments to decarbonise the entire transport system in the UK.

4.2. Assessment of scheme against policy and guidance

Local Policy

⁷

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/526226/S150749_Accessibility_Strategy_4pp_V3.pdf

⁸ [Defra Rights of Way Circular 1/09](#)

4.2.1. An analysis of the impact of the of proposal against local policies for Cambridge County Council, Huntingdonshire District Council and South Cambridgeshire District Council is set out in Appendix A of this report.

5. Local Growth and Development: development proposals not commenced or completed

5.1. Relevant Planned Developments

- 5.1.1. Application of the government's standard methodology for housing growth gives rise to the need for 111,600 new homes up to 2040 across Cambridgeshire and Peterborough. This would result in a 25% population growth reaching a total of 1,078,030 by 2040. This level of growth will result in a complementary scale of need for employment growth.
- 5.1.2. Local Plans have given a current housing commitments figure of 76,545. Replacement Local Plans are in early stages of consultation and will increase this figure and extend the time period over which allocations are provided increasing certainty for investors. Investment in transport infrastructure is critically important to help sustain this growth and economic prosperity.
- 5.1.3. In addition, the Government is progressing a spatial plan for the Oxford – Cambridge Arc which will form part of National Planning Policy and is intended to guide the future growth of the area to 2050. It will set out national policy including, but not limited to how land is used; how the environment is protected and enhanced; where and what type of new development happens; and what infrastructure should be provided. It is expected that the spatial plan will identify further broad locations for development and housing numbers. Currently, potential housing numbers are unknown, but the prospect of future growth along the Arc should be considered when assessing future road capacity and sustainable travel options for non-motorised users from any new housing-led development that may be created along the A428 corridor as a result of the Spatial Plan.

Huntingdonshire District

St Neots East

- 5.1.4. St Neots East is a strategic allocation (SEL 2) in Huntingdonshire's Local Plan to 2036. The 226-hectare site is allocated for sustainable development to comprise:
- approximately 3,820 homes (approved through 13/00388/OUT & 17/02308/OUT);
 - approximately 22ha of employment land (class 'B');
 - a local centre of some 3ha containing offices (class 'B1a' uses), approximately 4,000m² of gross retail floorspace (class 'A1') including a supermarket (class 'A1') with a maximum retail floorspace of 3,000m² and other retail and food and drink uses (classes 'A2' to 'A5') and

ancillary uses appropriate to the scale of development within the centre;

- a neighbourhood centre of some 0.3ha containing approximately 800m² of floorspace for retail, service, food and drink and community uses (class 'A1' to 'A5' and 'D1' and 'D2');
- specialist accommodation for older people equivalent to at least a 120-bed space care home;
- educational and community facilities appropriate to the scale of development, including primary schools and day care/ nursery provision;
- indoor and outdoor sports facilities appropriate to the scale of development;
- transport infrastructure improvements proportionate to the scale of development; and
- strategic green space and open space.

5.1.5. Reserved Matters approval has been granted for 750 dwellings (18/02708/REM, 18/02719/REM & 20/01507/REM). Construction has started on site with 50 dwellings completed and 111 under construction as of 31 March 2021.

5.1.6. Part of the site falls within the Scheme boundary. It is noted that some land will be taken from the southern end of the development, although that land will be returned and left in a state which would in fact speed up development in that area when the time comes. The temporary land-take would also not affect the delivery of this allocation as this is likely to be the last phase of development.

Loves Farm Reserved Site, St Neots

5.1.7. Loves Farm Reserved Site (SN 2) in Huntingdonshire's Local Plan to 2036 is located east of the East Coast Main Line and St Neots railway station and to the North of strategic allocation St Neots East. The site is 1 hectare, allocated for residential development and in proximity to the existing A428 and proposed Scheme. Reserved Matters approval has been granted for 41 dwellings (19/00384/REM).

Cromwell Road Industrial Estate & Little End Road / Alpha Drove Business Park

5.1.8. Cromwell Road Industrial Estate & Little End Road / Alpha Drove Business Park are not allocated for specific development within Huntingdonshire's Local Plan to 2036. However, policies such as LP18 Established Employment Areas allows for the safeguarding and enhancement of Established Employment Areas (EEAs) by supporting development within EEAs and on land immediately adjoining the EEAs.

5.1.9. Although not in proximity to the revised A428 route these EEAs are immediately North of the existing A428 and the development consent order boundary.

South Cambridgeshire District

5.1.10. A development of 2,350 homes along with employment and community facilities including a secondary school is proposed on land to the west of Cambourne, now known as Cambourne West. This area sits to the east of the existing Caxton Gibbet junction, immediately beyond the services location. In close proximity is the Bourn Airfield development proposed beyond Cambourne itself to the east. In 2018 Bourn Airfield was allocated in the South Cambridgeshire Local Plan for the development of a new village of approximately 3,500 homes. In 2019 South Cambridgeshire District Council adopted the Bourn Airfield New Village Supplementary Planning Document.

5.1.11. Although it is anticipated that the local employment provision and planned community facility provision for these developments will be beneficial, there is an inevitable degree of additional local traffic that will be generated onto the highway network.

5.1.12. In addition to the development noted above, proposals for a further expansion of Cambourne (1,950 dwellings by 2041), have been included in the Greater Cambridge Local Plan - First Proposals, which were published on the 31st August 2021.

6. Existing Local Area Characteristics

- 6.0. The proposed route is partly within the county of Cambridgeshire and districts of Huntingdonshire and South Cambridgeshire, as covered by the DCO application. The proposed route runs between St Neots in Huntingdonshire and Cambourne in South Cambridgeshire. This section identifies and provides detailed explanations of the key existing characteristics of this area. These include landscape, cultural heritage, noise, vibration, air quality, minerals and waste, public rights of way, economy and social and community aspects that contribute to the make-up of the area.

Landscape

- 6.1.0. The proposed route of the A428 Black Cat to Caxton Gibbet improvement scheme runs through a predominantly rural area other than where it aligns closely to St Neots. St Neots is the principal settlement near the route. The southern edge is influenced by industrial and commercial activity both within St Neots and Wyboston which falls within Bedford Borough. Several villages are also located along or very close to the proposed route including Roxton, Little Barford, Croxton and Eltisley. Just beyond the limits of the proposed scheme lie Tempsford, Papworth Everard and Cambourne.
- 6.1.1. At the western end of the scheme land to the east of the Black Cat junction has recently completed mineral extraction and several large bodies of water now sit to the west of the River Great Ouse. The landscape at this end of the route is dominated by the River Great Ouse which sits in a well-treed corridor adjoined by its surrounding floodplains. Land uses are strongly influenced by transport infrastructure including the A1, A421, A428 and East Coast mainline railway. Around the eastern side of St Neots the landscape is gently undulating and intersected by a series of small watercourses such as Hen Brook and Wintringham Brook. Land use in this area is primarily arable with several farmsteads and interspersed by blocks of woodland.
- 6.1.2. Heading east from the crossing with the existing A428 the proposed route crosses slightly more elevated countryside heading to a plateau section to the north of Croxton where the designated historic park and garden of Croxton Park forms a major landscape feature. This section contains a higher proportion of blocks of woodland which form important landscape and wildlife features but otherwise is almost entirely arable with scattered farmsteads. East of the B1040 the proposed route rejoins the existing A428 route to connect to the Caxton Gibbet roundabout reducing further landscape impacts.
- 6.1.3. There are a limited range of formal designations which are relevant to landscape and visual impact. Sites of Special Scientific Interest are situated at Papworth Wood and Elsworth Wood, and County Wildlife Sites at the River Great Ouse, Croxton Park and Eltisley Wood. Traces of three deserted

medieval villages can be seen at Wintringham, Weald and Croxton all of which are designated as scheduled monuments. Ancient woodland is found at Sir John's Wood to the south east of Little Barford and at Eltisle Wood. A registered park or garden is found at Croxton Park which is also designated as a county wildlife site.

- 6.1.4. The section of the proposed route within Huntingdonshire falls wholly within the South East Claylands landscape character area as defined in the Landscape and Townscape Supplementary Planning Document (2007). The key characteristics of this area include subtle variation in topography with gently sloping valley sides and plateau, tall hedgerows with frequent hedgerow trees and heavy clay soils supporting arable farming. Deciduous woodland is commonly found on the tops of slopes enhancing the undulating topography. The landscape character area is sparsely settled with few villages that vary between nucleated and linear forms. Evidence of historic settlement is widespread with deserted villages, moated site and green lanes being widely found.

The Route:

- 6.1.5. The existing A428 runs from the newly upgraded junction at the A14/M11/Huntingdon Road interchange and slopes gently southwards to more or less follow the former Cambridge Road/A1303 at Madingley. The roadway is cut into the surrounding landscape and heavily vegetated which makes for an attractive route. Once parallel with the A1303/Cambridge Road, the route becomes wider in aspect and the vegetated boundaries become thinner, allowing glimpses of acoustic fencing atop bunds or cuts in the landscape. As the Dry Drayton junction is approached the view opens out further and allows some intermittent views of fields and landscape well beyond the edges of the roadway. Noise barriers are also more prominent as they are closer to the roadway. Extensive pedestrian and other overpass bridges cross the roadway. Some bridges, painted sky blue, are quite prominent and visible, particularly from the north of the A428. The roadway then emerges into a much wider landscape with long low embankments which are grass covered. Signposts and lighting columns become more prominent and visible. The roadway continues this way, becoming more open to the south as the road skirts north of Caldecote Highefields and approaches Cambourne. At Cambourne, an unattractive water tower, just north of the roadway serves as a local landmark for a rather straight and monotonous section of road. Between Cambourne and the Caxton Gibbet roundabout, the road is quite prominent in the flat and open landscape. Little mitigation planting screens the road.
- 6.1.6. At Caxton Gibbet, the A428 ceases to be a 4-lane, dual carriageway. The junction has small services area with petrol and takeaway food and drink located for the convenience of users along the A428.

- 6.1.7. Beyond the Caxton Gibbet roundabout the road becomes a 2-lane, single carriageway more in context with its rural location. The roadway is edged by field boundary hedging and trees and a variety of residential, farm and commercial properties are accessed directly off the road. Pockets of very open fields are characteristic allowing for long, wide views to the north and south.
- 6.1.8. Localised widening of the carriageway occurs at key junctions such as the B1040 to prevent traffic from building up during peak flow time.
- 6.1.9. The route continues through open and well-vegetated sections until it reaches a much more heavily tree planted section at Croxton. The road curves gently through a well wooded landscape, associated with historic parkland.
- 6.1.10. Beyond the wooded area, the outlook again opens to wider views of the surrounding countryside. Beyond the roundabout at the edge of Wintringham, the road turns towards the southwest and continues through an open agricultural landscape until reaching the outskirts of St Neots.
- 6.1.11. Screening vegetation limits views towards the built-up area nearby.
- 6.1.12. After crossing over the low level bridge at the Great River Ouse, the route passes through an area of wetlands and floodplains before joining the A1 southwards towards the Black Cat Roundabout. This section of road is more intensely developed with businesses accesses and back garden fences adjacent to the roadway along with sections of screening vegetation and hedges. The A1 is a more disturbed and heavily trafficked section of roadway.
- 6.1.13. The Black Cat roundabout has undergone significant change over the past few years and a new layout has yet to mature into its surrounding. Significant bunding has been put in place to screen areas to the east of the roundabout.
- 6.1.14. Land use within the study area comprises:
- Agricultural farmland (predominantly large scale arable fields);
 - Natural features (river Great Ouse, various other smaller watercourses, water meadows, and woodlands);
 - Major highway infrastructure including the A1 and the existing A428 and A421;
 - East Coast mainline railway east of the River Great Ouse;
 - Residential
 - Commercial, including Caxton Gibbet services and Black Cat services, Colmworth Business Park, Laing O'Rourke large plant hire

- Recreational sites such as Wyboston Lakes and Croxton Park
- Historic sites such as Croxton Park

Settlements

6.1.15. The largest settlement in the vicinity of the proposed route is St Neots in the western extents of the study area. Both the existing and new routes pass at generally the same location. The new route however, ventures deeper into the countryside north of the existing route between Wintringham (Cambridge Road, St Neots) and Caxton Gibbet and east of the existing route between Wintringham (Cambridge Road, St Neots) and the Black Cat Roundabout.

6.1.16. The existing route passes just north of the villages of Eltisley and Croxton. It passes through the southernmost extents of St Neots both east and west of Wyboston Lakes. The A1 passes through the village of Wyboston, which has been radically altered by the presence of the A1.

6.1.17. The proposed route will move the A428 to the north of the established route east of Wintringham, from the proposed new double roundabout at the London Road junction. The shift will move the route away from Eltisley and Croxton. As the road bears south from the proposed London Road roundabouts, the route alignment will be eastward of the existing A428, creating a greater distance to the settlement at Wintringham, and remain east of the River Great Ouse until it bears west, crossing the East Coast Mainline railway route, the River Great Ouse and finally reaches the junction with the Black Cat roundabout. This will move the route away from the centre of Wyboston and away from the southern extents of St. Neots. The route will become equidistant from Little Barford as the A1 but on the east side of the village.

Landscape Pattern

6.1.18. The landscape west of Cambridge and east of the Black Cat is predominantly gently undulating with opportunities for expansive views. The majority of the land is large-scale, intensive arable farmland, divided by sparse trimmed hedgerows, open ditches or streamside vegetation. The scattered and fragmented woods, some of which are designated as ancient, form important landscape and wildlife features.

6.1.19. The isolated farms scattered throughout the area surrounding the scheme are often in sheltered places with tree cover. Small grass paddocks typically occur on the edges of villages, sometimes as part of parkland. Church spires and towers, wind turbines and water towers often form distinctive local landmarks.

6.2. Cultural Heritage

Setting

6.2.1. The A428 scheme footprint crosses undulating land comprised of several geological facies and sedimentary deposits from west of the River Great Ouse valley to the boulder clays (Glacial Till) of Caxton Gibbet in the east. Numerous river tributaries: Hen Brook, Wintringham Brook, Gallow Brook and unnamed small streams of the Great Ouse river catchment were essential resource areas and provided the setting for all periods of occupation but were particularly important for the siting of, initially, pioneer Middle Iron Age to Roman settlement followed by small Saxo-Norman villages and scheduled Medieval moated manorial sites in the countryside outside the nearest town of St Neots in this south-western part of the county.

The evidence base

6.2.2. Managed by the County Council's Historic Environment Team, the Cambridgeshire Historic Environment Record is a dynamic, comprehensive source of information on non-designated heritage assets (archaeological sites, buildings and find spots or field surface scatters) and designated heritage assets (Listed Buildings, Scheduled Monuments, Conservation Areas and registered parks and gardens). Holding over 27,000 monument records and over 6,300 investigation events of physical fieldwork results or non-intrusive surveys, it was the primary source of existing evidence used in the development of the A428 Preliminary Environmental Information Report and the Desk Based Assessment provided by the Applicant [TR010044/APP/6.3]. This evidence has been duly expanded by the archaeological evaluation phase of the A428 scheme footprint from twenty-two sites known along its route to forty-six areas being located through a combination of geophysical and air photograph transcription surveys and trench-based evaluation. Thirty-one of the sites are in Cambridgeshire and will be subject to construction impacts. Considerable grain was, therefore, added to the archaeological record from the evaluation of the scheme.

6.2.3. The fulsome evaluation programme demonstrated the presence of settlement sites of various characters including Roman and Medieval roadside settlement, including important remains at Site 17 in Field 70 where the previously unknown western part of the Deserted Medieval Village of Wintringham is located. Only part of the Wintringham DMV is scheduled (NHLE reference 1006815) although earthworks and other elements are known from around the present hamlet and to the immediate east of Field 70 (CHER ref MCB1642). Heterogeneous enclosed and open Iron Age farms, a series of Iron Age enclosures of potentially different functions strung along sinuous boundary ditches that seem to enclose territories, Roman villa rustica, industrial areas, field systems (prehistoric to Post-Medieval) and cultivation

evidence attesting to the land use order controlled by Medieval manorial and other landlords are also present. While some sites were previously known from cropmarks, new occupation sites have materialised in the scheme corridor that expand the density of closely spaced settlement that largely originated with pioneering Iron Age communities seeking new opportunities on the clay plain.

6.2.4. A series of Roman roads are present in the scheme area. Some may have Iron Age origins, at least in part, as has been established at Loves Farm and along the current line of the A428 between Cambridge and Caxton Gibbet (e.g. MCB1633, Margary road no. 231). The SSW-NNE aligned Sandy to Godmanchester Roman Road (MCB17569, Margary road no. 22), marked by field boundaries and paths in the present landscape, will be crossed by the new A428 Cambridge Road junction. Many footpaths in the scheme have ancient/historic origins. The relationship of ancient roads to the settlements and field patterns of the Late Iron Age and Roman periods will be a focus of investigation, while the distinctive siting of Medieval manorial sites at one mile intervals (Pastures Farm: NHLE 1019177; two scheduled moated manors: Pond Farm, Manor Farm and one non-designated moat – Jesus Farm at Eltisley; Croxton DMV and Post-Medieval Park and Garden NHLE1006783; Weald DMV NHLE1006849; Wintringham (10086815, MCB1642) along the former Roman Road between Ermine Street at Caxton Gibbet (Margary 231), now Cambridge Road, and extending southwards along the Sandy to Godmanchester road (Margary 22) demonstrates the importance of these long-lived communications in the locality, along which closely spaced Medieval villages thrived.

Investigation standards and methodology

6.2.5. Major development schemes bound the west and east ends of the Cambridgeshire section of the A428 road improvement scheme, notably Wintringham Park and Loves Farm town expansion sites on the east side of St Neots and the West Cambourne town expansion site west of Cambourne. The archaeological programmes designed for these major development schemes have all adopted Cambridgeshire County Council's standards for archaeological investigation programmes as set out in archaeological briefs prepared by the Cambridgeshire Historic Environment Team (CHET) who are archaeological advisors to the District, County and Minerals & Waste planning authorities in the county. The CHET briefs are developed to some extent in partnership with the archaeological contractors but draw significantly upon the expertise and knowledge of the local archaeological resource of the CHET development management archaeological officers. CHET briefs also follow regional models for excavation strategies and section 3 of the Chartered Institute for Archaeologists' Standard and guidance for archaeological advice by historic environment services (2020). Normally ensuring compliance and consistency with NPPF paragraph 205:

“Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible”,

6.2.6. In the context of the road scheme the first half of NPSNN paragraph 5.140 is relevant and comparable:

“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.”

6.2.7. “Proportionate to the importance and the impact” does not mean the deletion of areas of archaeological evidence from the excavation programme as this would represent the wholesale unrecorded loss of archaeological evidence, yet this is what the Archaeological Mitigation Strategy (**APP-238**) proposes to do at paragraph 9.2.7:

“Archaeological remains will be investigated and recorded in line with the aims of this mitigation strategy and as detailed in the SSWSI. Not all features will require excavation and some features will only be recorded in plan.”

6.2.8. We advise that this approach should be removed from the Archaeological Mitigation Strategy to ensure compliance with that proposed in the Joint Authorities’ Archaeological Brief (JAAB), which sets out for example, excavation intensities of between 30% and 10% of settlement-related or field boundary ditches respectively, rather than 10% or no excavation accordingly. Following the methods outlined in the JAAB would also allow the strategy to be consistent with the methods and procedures that are carried out in advance of the major developments in the region, allowing greater capacity for comparative analysis to be undertaken across a range of archaeological sites. Doing far less, or nothing, is not an option for consideration.

Research Objectives

6.2.9. Framing archaeological investigation programmes with pertinent research objectives ensures that it follows up to date thinking on particular themes including, for instance, on landscape and context, social organisation, settlement origins and their morphological change through time to abandonment, religion and ritual and the treatment of the dead, economy, industry and trade. The eastern region benefits from the recent online publication of a revised East of England Regional Research Framework which contains specific questions and challenges surrounding methodological

approaches. For example, the Late Iron Age & Roman Research Agenda section discusses the need to consider alternative methods of investigation to avoid repetitive data sets being obtained by adopting the same approaches for each site's investigation which risks "information redundancy". This has been interpreted in the Archaeological Mitigation Strategy as permission to exclude certain aspects of archaeological evidence from the fieldwork programme. We counter this position by emphasising that repetitious post-fieldwork analysis programmes can be the source of repetitious interpretations of evidence of the past and that it is imperative to gain data from appropriate fieldwork programmes that include excavation strategies supported by scientific sampling and spatial recording in order to make the interpretive changes.

6.2.10. 'Information redundancy' in this response is not explained unless it refers to identical assemblage repertoires and settlement plans (this is not usually evidenced). The response and challenge to this problem is to find other methods for seeking difference or further detail from sites, and to understand what it is that makes the sites so similar (social organisation of pioneering communities) - not to prevent their excavation, which has been considered unnecessary repetition. The A428 Research Agenda, as set out in the Archaeological Mitigation Strategy [APP/6.12] draws heavily on a section written by an external specialist and the author of the Late Iron Age and Roman Research Agenda for the East of England but interprets the rallying cry to provide an opportunity to dig less and adopt a strategy that focuses on settlement cores. This is unacceptable. Where, for instance, Iron Age sites are clustered in Borrow pit 3 at Caxton Gibbet where major adverse effects (total destruction) of archaeological remains will occur, an expected approach would be to conduct a landscape archaeology approach to their investigation, ensuring that the unenclosed elements found in the evaluation trenches of that former habitation area would be included in the excavation strategy. Instead, the proposed excavation is to focus only on four discrete enclosed settlement cores themselves, preventing any understanding of how they interconnected and operated in a wider shared landscape. This is an old-fashioned methodology that shies away from the possibility of discovering the task sites and burial grounds that were located away from the enclosed house plots and requires revision. Localised excavation areas also focus on single phase occupation evidence rather than embracing the challenges posed by the presence of later archaeological remains associated with the adjacent Roman Road (Ermine Street / A1198) and the dating the various permutations of the parish boundary (often Saxon in origin).

6.2.11. Proposals for mitigation areas published in the Archaeological Mitigation Strategy (**APP-238**) were not suitably addressed prior to the submission of the DCO application and we recommend that the alternative areas for excavation that have been provided to the Applicant by the Councils are adopted.

6.3. Ecology

- 6.3.1. The majority of the application site consists of arable fields; however, many of the fields provide local Priority habitats such as field margins, which are important for arable weeds, and hedgerows which provide food sources for birds in both summer and winter, and important deadwood habitats for invertebrates.
- 6.3.2. There are several woodlands either within or adjacent to the application site, these are generally characterised as mixed deciduous woodlands, many are plantation woodlands, but some are primary and secondary growth ancient/wild wood habitats. These woodlands provide many habitats for birds, large and small mammals, invertebrates, and hold veteran trees.
- 6.3.3. The woodlands and river valleys also provide resources for local bats species such as the western barbastelle bat. A rare UK species of bat for which this area of Cambridgeshire is a stronghold. The local Special Area of Conservation (SAC), Eversden and Wimpole Woods, is designated for its maternity colony of this species, with many roosting males found in satellite woodlands up to 10 km from the SAC. This species will use the hedgerows and river valleys to commute and forage, travelling up to 25 km a night. As well as old growth woodland, this species will use caves, basements, and old houses as hibernation roosts.

6.4. Noise and vibration

- 6.4.1. Environmental noise mainly consists of noise from transport sources such as road, rail and aviation. Communities exposed to the highest levels of traffic noise are often found close to and along established heavily trafficked roads within cities, other developed areas and along major strategic road transport networks such as the A428.
- 6.4.2. The impact of road noise on nearby residents can vary depending on the nature of building's construction and location / orientation (including external amenity areas) and the separation distance from the source, traffic volume, speed and type, road gradient and surface finish, driving conditions, and physical barriers or topography between the source and receptor, and the sensitivity of residents.
- 6.4.3. Traffic noise is usually loudest closest to the road source, reducing with distance separation. Up to 600m is generally considered the distance that receptors are likely to be most sensitive to and directly affected by traffic noise. Beyond this noise levels tend to be less discernible or are masked by other noises. However, under certain metrological conditions distant diffuse

traffic noise (often described as a distant rumble) can be audible at times at distances of 1 to 2 km from the carriageway.

- 6.4.4. Existing traffic noise levels varies widely across the scheme area and is currently high at a number of residential noise sensitive premises close, and immediately adjacent, to the existing A428.
- 6.4.5. Chapter 11 of the Environmental Statement (**APP-080**) reports that there is an estimated total of 7,371 residential properties located within the study area, of which 3,049 are within the calculation area, and 4,322 are within 50m of affected routes outside the calculation area. A total of 20 non-residential sensitive buildings are located within the calculation area, consisting of schools, community facilities, a medical facility, places of worship and hotels. A further 58 non-residential sensitive buildings are located within 50m of affected routes outside the calculation area.
- 6.4.6. The Environmental Noise (England) Regulations 2006 (as amended) implement nationally the EU directive. In January 2014 the Department for Environment Food and Rural Affairs (DEFRA) published its Noise Action Plan: Road (Including Major Roads) in response to the Regulations, which defines Important Areas. Noise Action Plans and associated noise mapping are used to estimate the number of people exposed to various levels of environmental noise and the identification of long-term strategies for managing environmental noise.
- 6.4.7. DEFRA noise mapping identified and designated areas of land as Important Areas (IAs) “noise hotspots” for the purpose of noise action planning and this includes noise sensitive residential receptor locations along and immediately adjacent to the exiting A428. The population at these locations is likely to be at the greatest risk of experiencing a significant adverse impact to health and quality of life as a result of their exposure to road traffic noise. Important Areas typically include 1% of the population affected by the highest noise levels (typically 75 dB (A), LA10,18h or higher and not less than 65 dB(A), LA10,18h). This is effectively the worst-case scenario.
- 6.4.8. Highways England (HE) and Cambridgeshire County Council (CCC) as relevant highway authorities responsible for transport, are defined as “Noise Making Authorities” under noise action planning, They are expected to examine each ‘Important Area’ (IA) with regard to noise mitigation and form a view about what measures / actions, if any, may be taken in order to assist with the implementation of the Government’s policy on noise which aims to promote good health and quality of life (wellbeing) through effective management of noise. “Noise Receiving” authorities are those local authorities in which the IAs are located and for this scheme this is either Huntingdonshire District Council (HDC) or South Cambridgeshire District Council (SCDC).

6.4.9. According to Defra’s Noise Action Planning Support Tool one designated ‘Important Areas’ is likely to be affected by the scheme:

Table 14: Road Important Areas - Defra's Noise Action Planning Support Tool the ‘Important Areas’

Road Important Areas- Defra’s Noise Action Planning Support Tool the ‘Important Areas’			
IA Number	Indicative Location	Noise Making Authority	Noise Receiving Authority
IA5134	Oak Tree Cottage, St Neots Road, Cambourne, CB23 3PH	HE	SCDC

The existing noise environment in settlements along the route

6.4.10. Most of the existing noise climate is dominated by road traffic noise, predominantly from the A1, the existing A428, A1198, A421 and associated junctions. Other sources of road traffic noise which contribute to existing noise levels include the B1428, B1043, B1046, and B1040, and a number of minor roads, in particular those in St Neots. The main exception where background noise levels are relatively low are isolated properties located between Barford Road and Potton Road, for example (from west to east) Rectory Farm and Hills Farm in Bedfordshire and The Range, Parkers Farm and Rectory Farm in Huntingdonshire.

6.4.11. Rail noise from the East Coast Main Line railway influences the noise climate in rural locations to the south of the new dual carriageway and to the east of St Neots. Recreational aircraft flying out of Bourn (approximately 3.9 kilometres from the Scheme), Gransden Lodge (approximately 4.8 kilometres from the Scheme) and Little Gransden airfields (approximately 6.9 kilometres from the Scheme) are also intermittent contributors to the noise environment. Other noise sources include general urban and rural activities, for example those associated with agricultural operations.

6.4.12. Receptors identified within the study area that are sensitive to changes in noise include the following:

- a) Residential properties in the settlements of St Neots, Tempsford, Roxton,
- b) Chawston and Wyboston, Little Barford, Wintringham, Croxton and Eltisley.
- c) Individual dwellings located within the rural environment, for example properties located to south-east of St Neots.

6.4.13. The following table gives a summary of the baseline monitoring results and the main noise contributors affecting the monitoring locations along the scheme’s route.

Table 15: Summary of baseline noise monitoring results

Ref.	Description	Measured	Predicted	Comments
		L _{A10,18h} dB	L _{A10,18h} dB	
M1	Park Road, Roxton	51.3-54.2	53.6	Local major and minor roads are main contributors to acoustic environment
M2	Bedford Road, Roxton	64.2-64.7	59.3	Local major and minor roads are main contributors to acoustic environment
M3	School Lane, Roxton	48.0-49.3	52.5	A1 and local roads main contributors to the acoustic environment. Garden enclosed by fencing, the latter which is not included in noise model.
M4	Roxton Road, Chawston	55.3-58.6	55.7	Local major and minor roads are main contributors to acoustic environment
M5	Riverside Farm, Chawston	57.9-62.1	59.2	A1 main contributor to acoustic environment
M6	Rectory Farm, Barford Road, Little Barford	48.7-51.4	45.6	Located away from roadside. A number of other noise sources – agriculture, rail and corona discharge from overhead power lines – contribute to acoustic environment.
M7	Rectory Farm, Potton Road, St Neots	52.6	47.1	Equipment issues resulting in one complete day of measurements. Thus not considered representative.
M8	Wintringham Hall, Cambridge Road, St Neots	67.2-68.6	66.5	Existing A428 is dominant noise source. HAPMS records identify low noise surfacing materials installed in 2010
M9	High Street, Croxton	73.0-76.2	71.0-74.0	Existing A428 is dominant noise source.

Ref.	Description	Measured	Predicted	Comments
		L _{A10,18h} dB	L _{A10,18h} dB	
M10	St Neots Road, Eltisley	62.3-66.8	62.3	Existing A428 is dominant noise source.

6.4.14. It can be seen the predicted noise levels slightly underestimate the noise levels actually measured, but overall, the comparisons between measured and predicted noise levels provide confidence that the noise model developed to estimate the traffic noise impacts of the scheme is a reasonable approximation.

6.5. Air Quality

6.5.1. The main air quality issues within Huntingdonshire relate to NO₂ from vehicle emissions. Huntingdonshire currently has four Air Quality Management Areas (AQMA's), Huntingdon (declared in 2005 and amended in 2007), St Neots (declared in 2005 and amended in 2007), Brampton (declared in 2006 and amended in 2007), and the (old) A14 Hemingford to Fenstanton (declared in 2006). All are relating to the NO₂ annual mean. The closest AQMA to the scheme is within the centre of St Neots. Nitrogen Dioxide results within all the AQMA's have been in line with national trends and shown a predominantly year on year reduction with widespread compliance with the air quality objectives within Huntingdonshire in 2020. In St Neots monitoring has indicated that there have not been any breaches of the air quality objectives since prior to 2011. The highest recent figures measured in St Neots were along the High Street, with an annual mean result of 29µg/m³ in 2019 and 20.4µg/m³ in 2020, both well within the 40µg/m³ limit. Evidence from continued monitoring and information from a modelling exercise completed in 2017 (prior to the A428 proposals) is being utilised to support the proposed revocation of the St Neots AQMA, along with the Fenstanton and Brampton AQMA's, a position supported by Defra due to continued compliance.

6.5.2. South Cambridgeshire District Council has one AQMA within the district.

6.6. Climate

6.6.1. The impacts of climate change during both construction and operation phases of the scheme must be considered in their local context and in that of their contribution to national level carbon reduction targets. A range of climate change impacts will affect the design specification of the scheme, including hotter summers and wetter winters, increased flood risk, and increases in air and water pollution which will have adverse effects on human health.

6.6.2. With regards to existing characteristics related to climate and emissions associated with transport in the Cambridgeshire area, the Initial Recommendations report of the Cambridgeshire and Peterborough Independent Commission on Climate Change (CPICC) provides useful context for emissions across the Cambridgeshire and Peterborough Combined Authority Area (CPCA). From the latest national data estimated at local authority level, total CO₂ emissions in the CPCA area in 2018 were 5521 ktCO₂ (excluding peatlands). This equates to per capita emission of 6.46t, almost 25% above the per capita figure across the UK as a whole (5.19). Of this, emissions from surface transport are high (2.9tCO₂ per capita across CPCA, compared to 1.9 tCO₂ per capita for the UK).

6.6.3. Looking at more detail, the report notes that transport emissions across CPCA were 2,449 ktCO₂ in 2018, which is 50% higher than the average across the UK as a whole, reflecting relatively high levels of traffic for cars, vans and HGVs (only 3% of emissions were from rail):

- Car mileage in 2019 was around one-third higher than would be expected purely on the basis of population.
- Light van mileage in 2019 was 38% higher than expected based on population.
- HGV mileage in 2019 was more than double the level expected purely on population.

6.6.4. With economic growth and population growth, traffic is expected to rise further. CPICC note that without policy intervention, the number of daily journeys in the region is projected to increase by around 20% from 2015 to 2031. Emissions from surface transport in the CPCA area have been rising in recent years and in 2018 were 12% above their level in 2012. This is a greater level of increase than in the UK as a whole, where emissions rose 4% over the same period. Increases in vehicle-miles driven have outweighed the improved efficiency of vehicles.

6.6.5. In order to reduce the impacts of transport, the CPICC report includes a range of recommendations. The CPICC recommends a reduction in car miles driven by 15% to 2030 and call for “alternatives to road investment to be prioritised for appraisal and investment – from active travel and public transport options, to opportunities for light rail and bus rapid transit or options to enhance rail connections”. This recommendation has been accepted by the Greater Cambridge and Peterborough Combined Authority.

6.7. Existing conditions for Pedestrians, Cyclists and Equestrian travellers

Conditions for Non-motorised users on the A428

- 6.7.1. The current A428 within the scheme area is not suitable for journeys on foot, by bicycle or horse due to high traffic levels, speed, and high proportions of Heavy Goods Vehicles (HGVs).
- 6.7.2. There is limited use of the A428 by pedestrians, cyclists and equestrian travellers. There are several locations where public bridleways and footpaths join the A428 but are not widely used due to the inhospitable conditions on the A428 for modes other than motor vehicle. Most of the A428 within the scheme area does not have a footway. See Table 18 in Chapter 7 for further details.
- 6.7.3. There is currently very limited provision for travel between settlements along the A428 corridor other than by motor vehicle. There are no suitable parallel routes available for cyclists and equestrians to use as alternative. The nearest Public Bridleways, Byways or country lanes running east-west are a minimum of 2.5km from each side of the existing A428 between Eltisley and St Neots.
- 6.7.4. All except one (St Neots FP55-Abbottsley FP9) of the public rights of way that cross the existing A428, do so at grade and without any crossing protection. This creates a significant barrier to pedestrian, cyclist and equestrian movement.
- 6.7.5. Policy LP 16 of Huntingdonshire's Local Plan to 2036 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 proposed development 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 A428 development proposal.

6.8. Flooding and Water

- 6.8.0. Flood history shows that Huntingdonshire has been subject to flooding from several sources of flood risk, with the principal risk from fluvial sources.
- 6.8.1. The key watercourse flowing through the study area is the River Great Ouse and its tributaries. The River Nene flows through a small area in the north of the district; however, the level of risk in the district from the River Nene is relatively low as it flows through a predominantly rural area. The majority of recorded fluvial flood events are associated with the River Great Ouse and its tributaries but there are numerous ordinary watercourses and awarded watercourses also within Huntingdonshire, with which recorded fluvial flood events are associated.

- 6.8.2. The primary fluvial flood risk is associated with the River Great Ouse and its tributaries. The main urban areas are located along the River Great Ouse corridor; however, they are afforded some protection by flood defences.
- 6.8.3. In South Cambridgeshire, The River Cam flows in a south to north direction through the area and runs through the centre of Cambridge; various tributaries to the Cam such as the River Rhee and the River Granta flow through the southern half of South Cambridgeshire District. The River Great Ouse is located to the north of South Cambridgeshire District and eventually flows into the Wash. South Cambridgeshire District is predominately rural and a number of its settlements such as Little Shelford, Great Shelford, Sawston, Duxford, Ickleton, Waterbeach and Linton are adjacent to the River Cam. Fenlands can be found in the northern part of the South Cambridgeshire District.

6.9. Minerals and Waste

- 6.9.1. A small part of the Scheme falls within a Minerals Safeguarding Area (MSA) for Sand and Gravel, where the route crosses Hen Brook to the east of St Neots.
- 6.9.2. In Cambridgeshire, whilst the Scheme falls within an MSA, it does not cross the boundary of an existing minerals site or an associated permitted reserve, and is not within a Minerals Consultation Area (MCA).

6.10. Economy

Huntingdonshire District

- 6.10.1. The Huntingdonshire District economy is valued at approximately £10 Billion p.a. There are three main sectors which account for approximately 50% of the HDC economy: Manufacturing, Utilities & Construction. Huntingdonshire possesses an agglomeration of over 150 Advanced manufacturers including Bosch Rexroth and significant businesses in IT / Data security and Construction in St Neots.
- 6.10.2. HDC's Local Plan to 2036 sets out an ambition to create 14,400 new jobs. There are 800 businesses in St Neots, which is forecast to rise to over 900 by 2026, and there are 7 major industrial estates and business parks.
- 6.10.3. A further allocation of 22ha of employment land allocated has been made as part of the St Neots East strategic expansion.

South Cambridgeshire District

6.10.4. During the last 30 years, the Cambridge Sub-Region has developed into one of the premier locations for high technology research and development in Europe with the economy of South Cambridgeshire intrinsically linked to this. South Cambridgeshire's Economic Development Strategy seeks to maintain a progressive, modern, innovative, balanced and resilient economy based on sectors such as renewable technologies, ICT, digital, health/bioscience, high-technology manufacturing, professional business services, tourism and leisure.

6.10.5. South Cambridgeshire has a range of successful business and research parks including Cambridge Science Park, Granta Park, and the Babraham Institute. In close proximity to the A428 scheme is the Cambourne Business Park which would benefit directly from the improved connection between Bedford and Caxton Gibbet.

6.11. Social and Community

6.11.1. Huntingdonshire and South Cambridgeshire are mostly rural authorities characterised by villages.

6.11.2. Huntingdonshire's population has grown by around 20% over the past 20 years, partly in response to housing market pressures in and around Cambridge. 64% of the district's economically active residents live and work within Huntingdonshire. Recent housing and employment growth has been concentrated in and around the district's main towns, and to a lesser extent at the larger villages. St Neots Town Centre is the largest town located in close proximity to the A428 proposals⁹.

6.11.3. South Cambridgeshire is surrounded by a ring of market towns just beyond its borders, which are generally 10–15 miles from Cambridge. South Cambridgeshire has long been a fast growing district and in 2011 had a population of 146,800 persons (bigger than Cambridge itself) and has become home to many of the nationally-significant clusters of high technology research and development in the Cambridge Sub-Region.

6.11.4. The South Cambridgeshire Local Plan and the Huntingdonshire Local Plan to 2036 both seek to protect and improve rural services, in order to support existing communities within their respective districts. The health of people living in this area is generally better than rest of England according to the Local Plans. However a key objective in both districts is for development to facilitate opportunities for people to pursue a healthy lifestyle, actively participate in their community and have a high quality life¹⁰.

⁹ <https://www.scambs.gov.uk/media/17789/south-cambridgeshire-local-plan-2018-chapter-1-introduction.pdf>

¹⁰ <https://www.huntingdonshire.gov.uk/media/3872/190516-final-adopted-local-plan-to-2036.pdf>

7. Local Transport Patterns and Issues

7.1. This chapter describes the local transport patterns and issues on the local roads / routes in the vicinity of the existing A428 and the proposed new route. It identifies the main routes used by car drivers, buses and freight carriers as well as non-motorised users in the local area. The chapter also identifies the existing issues on local routes for people travelling on these routes.

The A428 between St Neots and Cambridge

Capacity for motor vehicles including HGVs

7.1.1. The section of the A428 trunk road between Cambridge and St Neots is well known for congestion and delays. Partially improved to dual-carriageway standard in 2007, the road was not designed to accommodate the daily volume of traffic that now uses it. Up to 33,000 vehicles currently use the road every day and a large number of heavy goods vehicles (HGVs) rely on this important strategic route. Road users regularly experience long delays and unpredictable journey times on this section of road and there are safety concerns due to the volume and density of traffic. The effective capacity of the existing A428 is limited by a number of factors, including:

- the high percentage of HGVs, which take up more road space than other vehicles;
- the number of roads with direct access to the A428, which results in conflicts as traffic enters and leaves the main carriageway; and
- junctions along the route with significant volumes of joining and exiting traffic which result in slowing and stop-start delays reducing effective capacity and causing knock-on frustrations.

7.1.2. Congestion on the A428 trunk road has already become a constraint to housing and employment growth in the St Neots area. Local and regional businesses need access to a large and diverse labour market, requiring many people to commute into and out of the area each day. The quality of life for those who live in and between Cambridge and St Neots is diminished by congestion, primarily on the A428, which can cause driver stress and can contribute to other factors affecting wellbeing, safety and health. Without improvement, the situation is expected to get worse.

Other modes

7.1.3. There are several locations along the A428 where local roads, bridleways or footpaths join the A428, however these connections are not widely used. Access to bus stops on the A428, between St Neots and Caxton Gibbet, is difficult and hazardous, and bus services between St Neots and Cambourne

suffer from the same congestion experienced by general traffic, with no priority past queues or through junctions.

7.1.4. There is a network of public rights of way throughout the area¹¹ but historic works to the A428 have truncated some routes with public rights of way now terminating at the existing trunk road and with no means to extend walking, cycling or equestrian journeys.

Local Roads around St Neots

7.1.5. St Neots and the surrounding area suffer from heavy traffic flows, especially during peak hours, as shown in the figures below. While this is not uncommon for a busy market town it is considered that these are disproportionately affected by current A428 capacity issues.

Summary of key Non-motorised user routes in the area

7.1.6. There are no National Cycle Network (NCN) Routes or Distance Walking Trails in the area.

Table 16: Important Non-motorised user (NMU) routes in the area

NMU Route	Description / Importance
Abbotsley Public Footpath No. 9 & St Neots Public Footpath No. 55	This route follows Hen Brook and provides a connection between the eastern edge of the St Neots urban area to St Neots Rd Abbotsley. The path traverses the East Coast Mainline and the existing A428 via underpasses and it is the only PRow to provide a grade separated crossing of the A428. Western section within the emerging Wintringham Park development is to be upgraded to public bridleway as part of approved planning permissions.
Abbotsley Public Footpath No. 20	Cross field footpath from Hail Lane (Roman Road) to A428. Embankment of A428 with no means of access, restricts the accessibility of this path.
St Neots Public Footpath No. 53	Continuation of Abbotsley FP20 on north-western side of the A428. Embankment of A428 with no means of access, restricts the accessibility of this path.
Abbotsley Public Footpath No. 19	Cross field and field edge footpath from Hail Lane (Roman Road) to A428. Embankment of A428 with no means of access, restricts the accessibility of this path.

¹¹ Rights of Way Improvement Plan, Cambridgeshire County Council (2005)

NMU Route	Description / Importance
St Neots Public Footpath No. 54	Continuation of Abbotsley FP19 on north-western side of the A428. Embankment of A428 with no means of access, restricts the accessibility of this path.
Abbotsley Public Footpath No. 17 & St Neots Public Footpath No. 52	The route follows Wintringham Brook between the eastern edge of the St Neots urban area and Hail Lane (Roman Road) via Wintringham Farm. Second of two PRoWs to traverse the East Coast Mainline via grade separation (underpass). Users are required to cross the A428 at grade.
Abbotsley Public Footpath No. 16	Spur footpath from Abbotsley FP17 cross field to A428 boundary. Footpath on western side of A428 recently stopped up as part of Wintringham development. The lack of continuation into the Wintringham development and provision of similar alternative path diminishes the importance of this path.
Abbotsley Public Footpath No. 13	Provides sole link from Wintringham Hall, Lodges and Cottages into wider PRoW network to the south, including Hail Lane (Roman Road)
Abbotsley Public Byway No. 7 & Abbotsley Public Bridleway No. 18	Hail Lane (Roman Road). Historically significant route. Part of the wider Roman Road that (within Cambridgeshire) provides NMU connectivity between Drewels Lane in the south to Godmanchester in the north.
Croxton Public Footpath No. 1 & Yelling Public Footpath No. 7	Sole public footpath linking the villages of Croxton and Yelling. Existing users have to cross existing A428 at grade.
Eltisley Public Bridleway No. 6	Sole NMU route linking the villages of Eltisley and Yelling. Existing users have to cross existing A428 at grade.
Cycleway between A1198 Ermine Street and Brockley Road	Key Off-carriageway NMU link between the A1198 and Brockley Road providing a vital link between Papworth Everard and Cambourne.

7.2. Impact of the A428 Black Cat to Caxton Gibbet scheme on local traffic

7.2.1. Highways England (HE) have developed a bespoke traffic Model which is based on the South East Regional Transport Model (SERTM). The validation of the model is set out in the Local Model Validation Report (LMVR) (APP-

252). The LMVR for the stage 3 Model indicates that the model validates well against DMRB Guidance.

7.2.2. HE provided Cambridgeshire County Council (CCC) with a cordon from the stage 3 model that covered the whole of Cambridgeshire, this was provided in February 2020. CCC undertook an independent Review of the Stage 3 model as supplied. There were a number of issues raised during this process but adequate Information was provided to CCC to enable confirmation that the 2015 Base Year and the 2025 and 2040 future years are suitable for use in the assessment of the strategic impacts of the scheme.

Local Impacts

7.2.3. In order to understand the operation of the local road network, CCC looked in detail at the SERTM. This highlighted a number of areas that needed further investigation, including:

- St Neots
- Toseland
- Yelling
- Eltisley
- Cambourne
- Dry Drayton
- Madingley
- Coton

7.2.4. CCC has considered the impact of the scheme in these locations in the 2040 future year. The impact of the scheme on these areas are set out below:

St Neots

7.2.5. The modelling indicates that the Great North Road arm of the Wyboston Roundabout shows increases in traffic in both directions in the AM and PM peak periods. This increase is due to traffic rerouting in St Neots away from the town centre and on to Great North Road to access either the A1 or the old A428. CCC have raised this issue with HE and requested additional analysis be undertaken to assess whether the adjacent junctions on Great North Road between Nelson Road and the Wyboston Junction can accommodate the predicted level of additional traffic as this impact is directly related to the scheme. To date this information has not been provided which means CCC are not able to confirm the impact of the scheme on the local road network at this location.

7.2.6. Due to rerouting as a result of the scheme the amount of traffic using the B1428 Town Bridge shows a significant reduction in traffic as do other roads in the town centre as traffic reroutes from roads in the town centre to use the old A428 for east-west movements. This impact is welcomed and is as

expected. However, the impact of the scheme in this location will need to be monitored after construction to ensure that the expected rerouting occurs.

7.2.7. The B1428 Cambridge Road also shows an increase of approximately 200 vehicles in both peak hours due to the rerouting of traffic to access both the old and new A428 at the new Cambridge Road junction. CCC needs confirmation that the junctions on the B1428 Cambridge Road from Station Road to the existing junction with the A428 can accommodate the predicted level of additional traffic. To date this information has not been provided and therefore CCC is not able to confirm the impact of the scheme on the local road network at this location.

Toseland

7.2.8. The scheme is shown to significantly reduce traffic through the village in all time periods as traffic reroutes to use the old A428 as congestion is removed. This impact is welcomed and is as expected however, the impact of the scheme in this location will need to be monitored to ensure that the expected rerouting occurs.

Yelling

7.2.9. The scheme is shown to significantly reduce traffic through the village as traffic reroutes to use the old A428 as congestion is removed. This impact is welcomed and is as expected however, the impact of the scheme in this location will need to be monitored after construction to ensure that the expected rerouting occurs.

Eltisley

7.2.10. The model indicates that the scheme removes significant volume of traffic from the village. This impact is welcomed and is as expected however, the impact of the scheme in this location will need to be monitored after construction to ensure that the expected rerouting occurs.

Cambourne

7.2.11. The model shows increases in traffic on the A1198 south of the A428 and on School Lane both of these will need to be monitored as the School Lane impact in particular is not something that would be expected as a result of the scheme.

Dry Drayton

7.2.12. The model indicates that the scheme adds approximately 70 vehicles to Scotland Road. This is not something that would be expected and therefore, the impact of the scheme in this location will need to be monitored

and mitigated if it is shown to be happening in the real world as this rerouting shouldn't really be occurring as a result of the scheme.

Madingley

7.2.13. The model indicates that the scheme adds approx. 170 vehicles to The High Street. This is not something that would be expected and therefore, the impact of the scheme in this location will need to be monitored and mitigated if it is shown to be happening in the real world as this rerouting shouldn't really be occurring as a result of the scheme.

Coton

7.2.14. The model indicates that very little traffic uses M11 J13 to access the M11 but instead traffic is using Cambridge Road and Brook Lane to access the M11 at Junction 12. Investigation of the model indicates that this is due to congestion on the mainline M11 in the base year model which is magnified in the future years.

7.2.15. CCC have undertaken an analysis of the available count data at the A1303 Madingley Road/Cambridge Road Junction and confirmed that the model is significantly overestimating the amount of traffic making this movement in the base year and that this is then exacerbated in the future year scenarios. This impact is thought to be as a result of the coding in the model rather than something that is likely to actually happen in the real world. Therefore, the impact of the scheme in this location will need to be monitored and mitigated if it is shown to be happening in the real world as this rerouting shouldn't really be occurring as a result of the scheme.

7.2.16. Where traffic needs to be monitored during construction and afterwards, in the operational phase of the scheme the Councils would welcome engagement and discussion with the Applicant about suitable mitigation if required as a result of the impact of the scheme.

Local Junction Impacts

7.2.17. HE undertook a number of junction assessments that have been used to assess the operation of key junctions both directly on the scheme and in more removed locations. The main scheme junctions are included in the Transport Assessment (APP 241 and APP 242). During consultations with HE CCC requested additional junctions off the main line of the scheme to be assessed, these are included in the Transport Assessment Annex (APP 243).

7.2.18. The junction models were undertaken using a variety of software packages which are agreed as being appropriate for the assessment of the junctions tested. On the whole the junction models are well built however,

there are some issues with the inputs, particularly with the geometries for the junctions modelled in ARCADY, and with some of the parameters used in the VISSIM models. These issues have the potential to affect the performance of the junctions, and need to be adequately addressed.

- 7.2.19. The key issue for CCC with the local junction modelling is that the traffic flows have been taken directly from the Strategic Model without any reference to observed count data. Whilst it is acknowledged that this is an acceptable practice if there is no other alternative, it is not best practice as strategic models are not validated to individual turning movements. HE claim that they have followed best practice due to the major changes being made to several of the junctions (especially those on the scheme) meaning that it was not possible to provide validated base models. This point is not supported by CCC as none of the new junctions in Cambridgeshire are providing for any movements that are not currently possible but are instead separating out local and strategic traffic so in the opinion of CCC it would be beneficial to include validated base models for all junctions using traffic data that is already available from 2015 and 2016 (which matches the base year of the model which is 2015).
- 7.2.20. As stated above the approach taken by HE in extracting the flows directly from the strategic model is an acceptable methodology if there is no other alternative. However, in order to make this approach acceptable it is important to verify how the turning proportions in the models compare to any available observed count data. This is required to enable a check to be made as to the turn proportions within the strategic model. HE have agreed (as of the 11th August 2021) to provide the data that was used in undertaking this work. This information was received from HE on the 17th August.
- 7.2.21. CCC have undertaken a review of the information provided in support of both Technical Note 73 and Technical Note 81 (which the Councils understand was submitted at Deadline 1), the result of this review CCC are of the opinion that the turn proportions and magnitude of some turning movements at key junctions both on the scheme and on the local road network in the Base Year Saturn model do not accurately represent the observed turning proportions from the available count data. These differences are exacerbated in the future year models and therefore, CCC are of the opinion that the approach followed HE is not appropriate for the assessment of the scheme on the local road network. As set out above, it is difficult to comment on the impacts.
- 7.2.22. The example below shows the comparison of the Saturn Base Year flows compared to the observed count data as set out in Technical Note 81.

Figure 1: Comparison of Saturn Base Year flows to observed count data

From/To	SATURN Flows (2015)					Survey Flows (2016)					Difference (SATURN - Survey)				
	A1198 Ermine Street (North)	A428 (East)	A1198 (South)	A428 Cambridge Road (West)	Total	A1198 Ermine Street (North)	A428 (East)	A1198 (South)	A428 Cambridge Road (West)	Total	A1198 Ermine Street (North)	A428 (East)	A1198 (South)	A428 Cambridge Road (West)	Total
A1198 Ermine Street (North)	0	404	263	0	667	1	420	166	185	772	-1	-16	97	-185	-105
A428 (East)	568	0	22	1221	1811	724	0	70	1039	1833	-156	0	-48	182	-22
A1198 (South)	307	2	0	27	336	152	159	1	105	417	155	-157	-1	-78	-81
A428 Cambridge Road (West)	0	744	26	0	770	15	611	197	1	824	-15	133	-171	-1	-54
Total	875	1150	310	1248	3583	892	1190	434	1330	3846	-17	-40	-124	-82	-263 (-7%)

7.2.23. HE are arguing that this shows that the use of the Saturn model flows in the junction models without any adjustment is acceptable as the flows are within 7% of each other. However, CCC are concerned with the turn proportions of the Saturn Model compared to the Count data, the table below shows this information:

Figure 2: Comparison of Saturn Base Year flows to observed count data (percentages)

From/To	SATURN Flows (2015)					Survey Flows (2016)					Difference (SATURN - Survey)				
	A1198 Ermine Street (North)	A428 (East)	A1198 (South)	A428 Cambridge Road (West)	Total	A1198 Ermine Street (North)	A428 (East)	A1198 (South)	A428 Cambridge Road (West)	Total	A1198 Ermine Street (North)	A428 (East)	A1198 (South)	A428 Cambridge Road (West)	Total
A1198 Ermine Street (North)	0.0%	60.6%	39.4%	0.1%	100%	0.1%	54.4%	21.5%	24.0%	100%	0%	6%	18%	-24%	0%
A428 (East)	31.4%	0.0%	1.2%	67.4%	100%	39.5%	0.0%	3.8%	56.7%	100%	-8%	0%	-3%	11%	0%
A1198 (South)	91.4%	0.6%	0.0%	8.0%	100%	36.5%	38.1%	0.2%	25.2%	100%	55%	-38%	0%	-17%	0%
A428 Cambridge Road (West)	0.0%	96.7%	3.3%	0.0%	100%	1.8%	74.2%	23.9%	0.1%	100%	-2%	23%	-21%	0%	0%
Total	24.4%	32.1%	8.6%	34.8%	100%	23.2%	30.9%	11.3%	34.6%	100%	45%	-9%	-6%	-30%	

7.2.24. From this table it is possible to see that whilst the overall difference in the number of vehicles using the junction may be very small, the turn proportions do not accurately reflect the observed situation with the A1198 southern arms showing very different turn proportions in the model to that seen in the count data.

Construction traffic

7.2.25. A revised version of the strategic model has been used to assess the impact of construction traffic. This has been undertaken using the 2025 future year model as this best reflects the likely timescale for construction of the scheme.

7.2.26. The trips associated with construction traffic has been included in the model by the creation of 2 new use classes specifically for construction traffic one for workers and one for heavy vehicles. The routes that HE have decided should be restricted for construction traffic have had time penalties added to them in the model to prevent use by HGV traffic, although in the information provided for review there is no information as to the nature of the time penalty

used nor its effectiveness in preventing construction traffic using undesirable routes.

- 7.2.27. The other element to the construction impact is that caused by other traffic rerouting due to the construction of the Scheme. In the modelling undertaken to date no restrictions have been placed on this traffic. The methodology used to assess the impact of construction traffic is set out in TN43 which forms appendix 9.1 of the TA (APP 241). This document states that the construction of the scheme has been modelled by introducing the reduced speed limits, the haul road crossings and the construction compound site access junctions.
- 7.2.28. The Transport Assessment (APP 241) presents the information as 2 way Annual Average Daily Traffic (AADT) flows and this indicates that the impact of the construction of the scheme will be wide spread over the whole county meaning that almost every settlement in the county is affected to some degree by at least one phase of construction with some being impacted by several phases.
- 7.2.29. CCC are of the opinion that the traffic management of the scheme should be designed in such a way as to cater for all the traffic wishing to use the A428 during construction. Traffic speeds on the A428 were (pre-COVID) significantly lower than the 40mph constraint modelled by HE. This was due to the high levels of congestion on the route, and therefore it is likely that less traffic will route away from the A428 during construction than is predicted by the strategic model.
- 7.2.30. Nonetheless, if the level of rerouting during construction of the scheme indicated by the model is realised, this would have the potential to create very large impacts over a wide area and could potentially cause significant problems, especially in places like Toseland and Yelling which are shown to experience significant increases in traffic in some phases of construction. This is an issue due to the nature of the road through these locations which have traffic calming in place to discourage rerouting from the existing A428 and to the fact that there are a number of pinch points along this road that mean that the levels of traffic predicted could not be realistically accommodated especially as the phases of construction when this impact is recorded lasts for more than 12 months.
- 7.2.31. The key areas impacted by the construction of the scheme vary over the different phases of development. Phase 1 has a very small impact on the road network managed by CCC, but phases 2 , 3 and 4 have much more significant impacts. The table below shows the settlements with the largest impact as a result of each phase of construction.

Table 17: Settlements impacted by construction

Settlement	Construction Phase (Increase in AADT)		
	2	3	4
Abbotsley	275	516	602
Broadway, Bourn Airfield	734	977	1004
Cambourne	2447	1627	2306
Caxton	173	535	530
Coton	-382	-458	466
Elsworth	361	516	535
Eltisley	-511	-463	1756
Eynesbury Hardwicke	2178	2420	2515
Gamlingay	531	511	618
Great Gransden	1210	2131	2182
Highfields Caldecote	673	861	901
Knapwell	420	717	718
Little Gransden	684	841	851
Madingley	429	455	455
Toseland	742	1622	1523
Waresley	884	527	498
Yelling	482	1405	1335

7.2.32. From the table above it is possible to see that the model indicates significant increases in traffic during the different phases of construction. The roads through these settlements are on the whole unsuitable for the scale of increases suggested by the modelling.

7.2.33. The Areas of particular concern are those such as Caxton where traffic should be using the A1198 round the village rather than going through it, Toseland and Yelling where traffic calming is already in place to control traffic speeds and discourage rerouting away from the existing A428.

7.3. Model Validation Methodology

7.3.0. The Strategic model is suitable for use in the assessment of the strategic impacts of the scheme. The validation of the junction models used in the assessment of both the scheme junctions and the local junctions is not agreed due to the issues set out above relating to the traffic flows used in the models.

7.3.1. The modelling of the construction impacts indicates that the construction of the scheme will have wide ranging impacts on settlements in the County, measures will be needed to minimise and mitigate these projected impacts.

8. Local Impacts

8.0.1. This Section identifies the local impacts for the local area during construction and operation of the scheme. The impacts are categorised as occurring during construction or during operation of the scheme. The section draws upon the impacts already identified by the Applicant and highlights where impacts are of particular importance to the local authorities or where impacts have not been classified as significantly as the local authorities feel they should be. The impacts are assessed in terms of positive and negative for the local area and missed opportunities are identified where the Applicant could enhance the positive impacts or reduce the negative impacts of the scheme.

8.1. Landscape and Visual Impact

Positive impacts

During operation

Reduction in traffic on old A428

8.1.1. The provision of a new and modern A-road to replace the current A428 will improve the quality of the landscape along the old corridor. It is predicted that there would be a significant reduction in traffic flow along the de-trunked A428 and a substantial reduction in lorry traffic, which would potentially cause beneficial effects on the landscape character. In some areas, there will be significant improvement to landscape character for the settlements which currently exist along this corridor.

Negligible Impact on Settlements

8.1.2. The route of the new A428 moves the heavily trafficked portion of the old A428 further to the north of existing settlements and designated areas along the route of the existing A428. The new location of the proposed route places it in generally open countryside, distant from most settlements or groups of settlement in the area. The route placement will therefore have negligible impact on those sensitive receptors and in that regard is found to be positive.

Significant new planting areas

8.1.3. Extensive areas of mitigation planting will be established along the route which will enhance the local and national landscape character, reconnect some areas of fragmented woodland, and provide structure and screening for the route in the long term.

Negative impacts

During construction

Displacement of land

8.1.4. The construction of a new A-road has a significant land take which is permanent in nature. Large areas of agricultural land will be taken out of use permanently. This will dramatically alter the landscape character of these areas. This has been identified as adverse within the provided reports (Landscape and Visual Impact Assessment [APP-076]) and mitigation is proposed by planting to screen, filter and/or provide a setting for the road. The existing A428 is not going to be removed but will be detrunked and returned to the Local Highway Authority for management and maintenance. Ultimately, there is no mitigation for the loss of agricultural land. The existing A428 is not going to be removed but will be detrunked and returned to the Local Highway Authority for management and maintenance.

Views, sound, dust and vibrations, of heavy construction plant and materials, major earthworks and temporary traffic management.

8.1.5. During construction there would be major disruption to a large part of the Western Claylands (SCDC), Southeast Claylands (HDC), Great Ouse Clay Valley (BBC) and Biggin Wood Clay Vale (BBC) local character areas, with major earthworks and construction, including haul routes, borrow pits, storage piles, compound areas and the presence of heavy plant.

8.1.6. The scheme would introduce new bridges, embankments, drainage lagoons, cuttings and other landforms, as the route progresses from Caxton Gibbet in Cambridgeshire through Huntingdonshire to the Black Cat Roundabout in Bedfordshire. This would cause permanent and large-scale change to the landscape character of the LCA's and the quality of visual amenity.

8.1.7. Construction traffic would be restricted to existing highways and the scheme footprint. Soil storage areas would be situated at intervals along the scheme alignment as would the presence of borrow pits. These features in addition to construction activity and major earthworks for the construction of over bridges and environmental bunds would cause large scale damage to the existing landscape character.

8.1.8. Extensive excavations of four borrow pits along the route are proposed. Two will lie roughly adjacent to the Caxton Gibbet roundabout and two others will lie roughly adjacent to the Black Cat roundabout. The borrow pits will be accompanied by several soil storage areas and earthworks for the construction of over bridges, roundabout interchanges, bridleway bridges and footbridges would cause large scale damage to the character of the previously mentioned local character areas.

8.1.9. There will be large scale removal of vegetation including trees with Tree Protection Order status in both South Cambridgeshire District and Huntingdon District as well as field boundaries, ditch edges, along the River Great Ouse at the crossing, around borrow pits and storage areas. It should also be stated

that the route is placed in such a way that it avoids the vast majority of woodland blocks within the vicinity of the route. Loss of vegetation would cause landscape effects during construction and would in most cases be permanent, although proposed planting would help to restore the landscape fabric in the longer term (from circa 15+ years post planting)

- 8.1.10. Notably, the loss of hedgerows within the project limits has been identified in the Biodiversity Net Gain calculations. Without additional mitigation planting comprising hedgerows and hedgerows with trees, the loss will have a negative impact on wildlife, biodiversity and general landscape character as hedges are a prominent feature of all Clayland character areas. It is considered that this planting could be provided along, for example, to define transitions between woodland and grassland, and to enclose larger areas of grassland, to the edges of the DCO area, and with trees to the tops of embankments.

During operation

Removal of Trees and Vegetation

- 8.1.11. There will be a period of time during the operation of the new A428 when new mitigation landscape planting and other ecological features will not have matured enough to affect the visibility of the scheme within the landscape. During this time the impacts of the road will be higher and more significantly adverse. This will generally align with the completion of planting to at least year-15 post planting. It should be noted that failure of planting within the first five years carries a reasonable expectation as time of planting, weather, and maintenance are not always timed suitably, so the time to maturity could extend as much as 20 years if areas of planting have to be replanted within the 5 year establishment period.

Displacement of Land

- 8.1.12. During the operational phase of the new A428, the land used upon which the new roadway and associated infrastructure is built, will permanently be removed from any other use. Most of the compounds, storage areas, borrow pits and other construction phase features will have been reinstated as landscape of some sort, such as agricultural use, drainage and flood control or planting. This is an improvement on the construction phase but still constitutes a permanent and negative loss of landscape currently in use as agricultural land.

Increased scale at junctions/lighting

- 8.1.13. The imposition of large, engineered bridges, roundabouts, embankments, roadways and lighting columns into the rural landscape of the new route alignment will be a dramatic change for the very rural landscape into which it they are being placed, will cause a dramatic change to

tranquillity, pattern and scale of the landscape. During the operational phase of the scheme the impact is generally irreversible and at odds with the scale, appearance and cultural aspects of the landscape and adversely affecting historic landscape patterns and visual amenity. All these impacts will likely be reduced as mitigation planting matures, but will not remove it entirely.

Bare Ground

- 8.1.14. Within the First Iteration Environmental Management Plan (1.10.24), it is stated that some areas of land will be retained as bare ground to allow for natural colonisation of land with local flora. Much of the bare ground is proposed around embankments to the road along agricultural landscapes, bare land is only suitable in areas where there is sufficient host material to colonise from. Areas of bare ground may colonise with only adventitious weeds such as nettle, bramble and rosebay willowherb rather than more desirable native/local flora.
- 8.1.15. Bare ground areas will look barren and unfinished and possibly incongruous for a number of years post completion and may always be more populated with undesirable weeds rather than a complex grass, herb, and/or shrub ecosystem. The colonisations by adventitious weeds, as mentioned above, will bring no advantages in terms of visual amenity or to enhance landscape character.
- 8.1.16. In places, such as east of St Neots (Sheet 8 and 11 of 16 of the Environmental Master Plan [APP-091]) the bare ground is associated with footpath connections, creating a poor user experience for footpath users, that would be dominated by the fast moving traffic on elevated ground. The bunds and the dominance of the road should be softened by vegetation, such as grassland with trees and hedgerows to define transitions.

Suitability of reinstated Borrow Pits

- 8.1.17. In the South Cambridgeshire District Area, two borrow pits will be used in the vicinity of Caxton Gibbet roundabout to the east and west of the northbound A1198.
- 8.1.18. Following reinstatement, the quality of soil, drainage and levels at the borrow pits may not be fit for purpose. Uneven settlement, drainage problems or poor soil structure or quality will cause future agricultural or landscape uses to struggle to establish or fail outright.
- 8.1.19. Reinstatement will be both return to agriculture as well as landscape mitigations to the edges of the new road/roundabout. Agricultural land will likely return to expected visual maturity within 2-5 years, while any other planted areas will be expected to mature as per any other planting at circa 15-

20 years depending on maintenance and the need or lack of replacement planting.

New highway infrastructure

8.1.20. During operation there will be adverse impacts on landscape character and particularly on visual amenity on all sections of the road that is off the current road layout as it traverses rural, mainly open, agricultural land. It will also diminish the current rural character of the public rights of way in the vicinity. Acoustic fencing and/or bunds, if required, will also have a negative visual impact. All these impacts will be somewhat reduced over time as mitigation planting matures, and begins to fulfil its screening and integrating purposes. It is notable that some portions of the roadway will be formed in cuttings assisting in mitigating views from earlier stages of maturity of the surrounding planting.

8.1.21. The most significant concentration of changes occurs at all the major junction points such as the roundabout and slip road arrangement at Caxton Gibbet, Cambridge Road and Black Cat roundabouts, and major new crossings (such as bridges and viaducts) enabling the new road to cross the River Great Ouse, East Coast Main Line railway, Barford Road, the B1046/Potton Road, Toseland Road and the existing A428 at Eltisley. These will significantly alter the local, rural character of the areas at present (except Black Cat). In addition, drainage reservoirs, balancing ponds and other highway drainage features will form uncharacteristic features in the areas. Additional bridges, lighting, gantries and signage would also intensify the presence of the highway infrastructure.

8.1.22. Over time, and as the mitigation planting matures the effects are predicted to decrease to predominantly low and moderate (significant) adverse landscape and visual impact, according to the submitted Landscape and Visual Impact Assessment [APP-076]. However as detailed in this document it is felt that much more can be done to reduce the significance of the landscape and visual effects.

Reduction in levels of tranquillity

8.1.23. The proposed new route will diverge from established highways, introducing noise and fast moving traffic into rural areas which previously enjoyed higher levels of tranquillity. This will, overall, have an adverse impact on local landscape character.

Missed Opportunities

8.1.24. Long stretches of road side hedgerows should include more individual tree planting to improve canopy cover across the project area, create a more

diverse habitat mosaic, and create Hedgerow Regulations 1987 specific hedgerows.

- 8.1.25. More tree planting should be provided around major settlements to help screen visually intrusive development from the surrounding countryside, specifically around St Neots, in line with the HDC Landscape and Townscape aspirations.
- 8.1.26. Species mixes within the planting types/mixes should reflect the local planting patterns of the area and allow for climate resilient modifications.
- 8.1.27. Overall a lack of some very typical species such as *Tilia x europaea* and *Carpinus betulus* are missing from the planting plans and uncharacteristic species have been added such as *Populus tremula* and *Crataegus laevigata*.
- 8.1.28. The Cambridgeshire Green Infrastructure Strategy identifies St Neots as a GI Strategy target area, specifically noting the opportunity to create wet woodland and wet meadow to enhance biodiversity, and the implementation of species rich grasslands to enhance landscape character. It is felt that areas around attenuation lagoons, particularly around the St Neots fringe, do not currently make the most of these opportunities, more information of the proposed plant mixes within the lagoons and proposed ground levels for proposed surrounding woodlands, as well as detailed mixes for wet woodland are required to better understand whether or not this is being provided. Additionally, amenity grassland is proposed within the immediate vicinity of the attenuation features, and it is not clear what the rationale is for this, as opposed to species rich grassland or wet meadow which would help to contribute towards the GI strategy.

8.2. Cultural Heritage

Positive impacts

During operation

- 8.2.1. There is a significant Public Archaeology and Community Engagement strategy outline in Appendix E of ES 6.12 Archaeological Mitigation Strategy (TR010044/APP/6.12) (**APP-238**). This is consistent with the County requirements for public engagement and outreach and is expressed in the Joint Authorities' Archaeology Brief (section 7.2). This is supported and, if conducted from the outset of the scheme, will provide a major public benefit and leave a significant heritage legacy in the area. The excavations will produce huge assemblages from which representative items will be displayed and interpreted for public interest, which will also enhance heritage sector tourism opportunities.

- 8.2.2. The location, survey, recovery and conservation of listed mile markers will occur with local community involvement. Their relocation to an approved and appropriate place along their roads will ensure their continued relevance.
- 8.2.3. The Archaeology Mitigation Strategy (ES 6.12 – **APP-238**) indicates the intention to avoid construction impacts to six archaeological areas that occur at the edges of the Orders' Limits (OL) in locations where scheme impacts can be altered to enable the preservation of archaeological remains. While the setting of these non-designated sites would irrevocably be harmed, their survival is considered to outweigh that harm given the case made for the public benefit of the road scheme.
- 8.2.4. The Archaeological Protection Areas are:
- Site 12, Field 56: Iron Age boundary ditch of a site beyond the OL (AMS p.151/228).
 - Site 16, Field 66: Roman roadside settlement by Cambridge Rd roundabout, St Neots (AMS p.161/228).
 - Site 21, Field 59: Iron Age and Roman settlement area in Urban and Civic's Wintringham Park development zone (Site 1) and A428's major compound area (AMS p.173/228).
 - Site 25, Field 85: High Hayden Farm. Reduction of spoil heap area to safeguard the remains (AMS p.183/228).
 - Site 35, Field 96: Roman roadside settlement remains to be saved in an area of the Orders Limits that is no longer needed for construction (AMS p.206/228).
 - Site 40, Field 99: Borrow Pit 4 will be reduced and fenced off around an Iron Age enclosed settlement in the north east part of this quarry (AMS p.219/228).

Negative impacts

During construction

- 8.2.5. According to the National Policy Statement for National Networks (NPSNN) paragraph 5.139, investigation and recording components of archaeological resource or heritage assets prior to their loss is not as valuable as retaining the asset. If the mitigation strategies and areas selected by the Applicant's archaeology team do not change to reflect the requirements of the Joint Authorities' Archaeology Brief, the investigation of sites will not conform to County standards that seek to redress this loss nor with NPSNN policy at 5.140 and 5.142. County standards and research objectives are expressed in all development led archaeology investigation briefs in Cambridgeshire and developers routinely meet these in work led by policies in NPPF, specifically at paragraph 205. The A428 Archaeological Mitigation Strategy provides for the intentional loss of evidence from the finite archaeological resource without

record in some parts of the scheme owing to unacceptable proposals for no or low intensity excavation in the AMS (TR010044/APP/6.1 - ES Ch 6 Cultural Heritage 6.8.10 and 6.8.13 c, see also General Methodology 9.2.7)(**APP-075** and **APP-238**). A specific example of proposed evidence loss includes the eastern part of Site 18 in Field 74, where large enclosure ditches are located that define the northern edge of the enclosed form of a substantial Iron Age settlement that is mostly located to the south of the Orders Limit. The unenclosed components of this occupation site occur within the scheme's boundary but are unacceptably omitted from the mitigation response. This will fail to respond to the policies of NPSNN and to the prescribed County standards.

8.2.6. Other sites that have an insufficient area shown for excavation in the DCO or do not include a sufficient excavation buffer include:

- Site 10 Field 53 – Boundary too tight to Iron Age enclosure boundary – i.o.e. does not reach the brook. Nonconformity to brief.
- Site 11 Fields 54 and 56 – Large buffer required around the enclosed Iron Age site to allow its external task sites to be located.
- Site 13 Field 58 – minor amendment advised to avoid an existing service.
- Site 14 Field 59 – This is in Wintringham Park development area for which an area for excavation had been agreed with the developer Urban & Civic. A428 area for excavation does not match CCC excavation area.
- Site 18 Field 74 (described above) – Area too short on east side. Omits unenclosed Iron Age evidence.
- Site 19 Fields 58 and 62 (straddling Hen Brook) – Area too short on south side. New haul route is showing on General Arrangement Plans for which a mitigation strategy is yet to be devised.
- Site 23 Field 80 – Isolated excavation box does not include known site evidence gained from evaluation well, nor buffer it with contemporary evidence to allow interpretation. Focused on a specific feature (here a single prehistoric round house), it contradicts the rationale published in the Archaeological Mitigation Strategy and required by the Joint Authorities' Archaeology Brief to situate the evidence into their landscape context.
- Site 24 Fields 83 and 84 – The Iron Age 'string boundary with off-set enclosures will not be adequately investigated in the proposed excavation areas that are tightly focussed on specific features.
- Site 28 Field 90 – This Iron Age string boundary with off-set enclosures has a tight excavation boundary that excludes known evidence north of Cambridge Road and other anomalies seen on the geophysical survey. This site area on the west side of St Ives Rd, Eltisbury, has a relationship with evidence on the east side but the mitigation strategy prevents coherent examination of this archaeological landscape area.

- Site 33 Field 94 – The excavation area is insufficiently buffered around an Iron Age enclosure.
- Site 34 Fields 94 (east edge) and 95 – The proposed excavation area for Field 95 excludes Roman evidence on the east side, to the south of the Roman road (current line of A428 Cambridge Rd) and parish boundary ditches sharing the alignment.
- Sites 36-39 Field 97 Borrow Pit 3 – Discrete areas are marked for excavation around Iron Age enclosures on the west side of Ermine Street (Roman Road) but prevent their hinterland evidence to be addressed. Two areas advised by CCC would enable this and also investigate Roman road side areas and the parish boundary to determine the origins of all the ditches shown on that alignment.

8.2.7. There is a risk of loss of integrity of the archaeological investigation strategy if sites are subject to piecemeal excavation responding to separate aspects of the scheme need – i.e. sites will need to be stripped and excavated as entities in advance of any construction for a haul road, bridge abutment, carriageway, embankment, flood compensation area, soil storage heap or other scheme feature. Appropriate programming is required and should be discussed with and approved by CCC well in advance of the implementation of fieldwork.

8.2.8. Adverse impacts and risk of total loss of non-designated heritage assets at Site 17 Field 70 where proposals to place a Multiple Purpose Construction Area on a geotextile membrane over vulnerable remains relating to the deserted Medieval village of Wintringham and earlier occupation is planned without prior excavation (TR010044/APP/6.12, 11.3.1) (**APP-076**). Compression studies and modelling have not been undertaken at this or any of the A428 sites so we cannot know if the movements over a membrane to prevent loss of evidence through de-watering of organic contents or through compaction and displacement/distortion of evidence due to compression and subsequent removal of the storage area would preserve or harm archaeological evidence. Proxy evidence has been cited, but this is for areas in north Yorkshire, not the Cambridgeshire clays that have shown to be unforgiving in terms of vehicular movement and load. This was often seen during work on the recent A14 construction programme.

8.2.9. Securing experienced and trainee field archaeologists is proving problematic in the UK. Insufficient numbers of trained field workers could seriously affect programme delivery.

Missed opportunities

8.2.10. The location of a specific field-based archaeology compound should have been identified - one that is suitably set up with washing and drying facilities to enable environmental sample processing to occur on the scheme where it is easy to discard mass silt residues and reduce the carbon impact

from the transit of large amounts of soil samples to off-site offices. Artefact washing and drying would also ideally occur in such a facility.

8.2.11. There has not been any provision for a community space(s) where volunteer community groups could safely engage with specified archaeological tasks identified in the programme without being subject to overly restrictive H&S requirements. Local groups have expressed interest in assisting with artefact processing. As part of the 'Lesson Learned' from the A14 scheme, and shared with the A428 Applicant's Team, a dual-purpose compound was discussed early in the planning for this project. It is disappointing not to see positive commitment in the DCO which instead states that the "Archaeological Contractor should consider the option of initial processing to be undertaken on site or in a nearby compound/facility" rather than this being a work asset supplied within the scheme footprint by the Applicant/Main Contractor.

8.2.12. Integrated engagement to include the Local Authority Archaeologists and community groups with the academic steering group to develop an innovative, inclusive, intelligent and inspiring programme of archaeological investigation that would be able to acceptably meet the curatorial and management needs of the local archaeological resource did not occur.

8.2.13. Engagement with CCC Museums Liaison Officer to discuss strategies and initiatives for integrated archaeological interpretation and displays of the scheme's evidence within local museums and galleries for which funding would be required has not taken place.

8.3. Ecology

Positive impacts

During Operation

8.3.1. The anticipated reduction in the use of the old A428 will reduce the incidences of RTAs that occur in relation to badgers and other terrestrial animals. It will also reduce indirect impacts on ecology and biodiversity in that area such as from noise, air pollution, and vibrations.

8.3.2. The proposed new habitats will provide more biodiverse habitats than the monoculture arable fields (276.52 ha) which currently cover much of the site.

8.3.3. The route has been designed to avoid the removal of woodland where possible, resulting in net positive woodland cover. Appendix 8.19 (**APP-206**) shows that pre-construction woodland cover is 4.42 ha within the redline boundary, whereas post construction there will be 61.82 ha of woodland. 2.69 ha of broad-leaved semi-natural woodland and 0.2 ha of coniferous plantation woodland will be lost due to construction. However, the creation of over 60 ha

of broad-leaved and mixed plantation woodland should mitigate for the woodland lost and provide a positive gain in woodland cover. Disagreements in typology of tree mixes still exist but the net gain in tree cover should be a positive.

- 8.3.4. There will be a net increase in grassland habitat. Appendix 8.19 (**APP-206**) states that pre-construction there is a total of 39.9 ha of grassland within the redline boundary of the scheme. Post construction figures show 180.94 ha. There will be a loss of 9.85 ha of poor semi-improved grassland; however, an increase in 133.93 ha of semi-improved grassland will mitigate for its loss. Disagreements in seed mixes, location and extent, and management of grasslands still exist; however, increases in grassland cover should be a positive.

Negative impacts

During construction

- 8.3.5. The presence of Barbastelle bat maternity roosts in Eversden and Wimpole Woods is the reason the site is of international importance and designated as a Special Area of Conservation (SAC). The scheme will result in loss / fragmentation of habitat used by the male barbastelle bats which forage and roost in satellite woodland in the surrounding area, and by the females outside of the breeding season. Studies have shown that this species is highly sensitive to disturbance. There must be reasonable certainty of the predicted likely impacts on the Barbastelle bat population, so the Councils would expect evidence that there will be no negative impact on the Barbastelle bat population to be provided. The Councils welcome the additional surveys agreed between the Applicant and Natural England.
- 8.3.6. There may be disruption of flight lines (such as hedgerows) for all species of bats through an increase in lighting at new and retained junctions and new bridges, although the Impact Assessment (Environmental Statement, Chapter 8) (**APP-077**) has stated that there will be no significant impact. The Applicant has not presented any evidence to support this statement.
- 8.3.7. Section 5.6 of the Biodiversity Supplementary Planning Document Consultation Draft July 2021 section 5.6 illustrates the indicative functionally linked habitat around Eversden and Wimpole Woods SAC. This shows hedgerow adjacent to the proposed route which falls within the SAC's 10 km sustenance or wider conservation area identified by Natural England.
- 8.3.8. There must be reasonable certainty of the predicted likely impacts on the bat populations (all of which are European Protected Species), so we would expect an outline lighting strategy to be submitted or evidence that there will be no lighting of hedgerows or tree belts.

- 8.3.9. Loss of breeding ponds and terrestrial habitat and direct mortality will impact Great Crested Newt (GCN). The scheme does not include measures to protect GCN during the construction phase or provide compensatory habitat within the Order Limit.
- 8.3.10. There are 6 ponds within the Order Limits which have records of GCN. Two of these will be retained and enhanced and will have GCN translocated into them; two will be retained, but essential surrounding terrestrial habitat will be decreased making them unsuitable for GCN; and two will be lost.
- 8.3.11. There are welfare issues for GCN which are translocated into ponds with an existing population. This is due to a lack of carrying capacity i.e. not enough space and resources.
- 8.3.12. Natural England's Standing Advice for GCN states that if a developer cannot avoid destroying a GCN breeding pond they should, replace it with 2 new ponds on the development site; make sure the new ponds are ready for GCN before they destroy the old pond; safeguard or replace other ponds which may be used by GCN within 500m.
- 8.3.13. The Applicant has not provided evidence that the scheme will be eligible and that there is capacity within Natural England's GCN District Level Licencing (DLL) scheme in Cambridgeshire to off-set the impacts of the scheme.
- 8.3.14. Therefore, the scheme will have a negative impact and potential adverse impact on the favourable conservation status of the local population of this species. Under the Conservation of Habitats and Species Regulations 2017 (as amended), the favourable conservation status of European Protected Species should be protected as part of the scheme.
- 8.3.15. The scheme will not adequately avoid / mitigate / compensate for the loss of priority habitat. It is also noted that the junction designs may have been over-engineered (depending on the accuracy of the submitted traffic modelling data) which would result in unnecessary land-take and loss of habitat. See Chapter 7 for further information.
- 8.3.16. The adverse impact to priority / irreplaceable habitats does not accord with South Cambridgeshire Local Plan policy NH/4, Hunts Local Plan 2019 policy LP 30 and Cambridgeshire & Peterborough Mineral and Waste Local Plan 2021 policies 19 and 20 (borrow-pits) or NPPF 2021.
- 8.3.17. Arable field margins of district importance (A29 and A30) will be permanently / temporarily lost to the scheme. The survey work was undertaken outside of the optimal season and did not identify the exact

locations of this habitat, so the full level of impact cannot be determined. Given no mitigation is proposed, we expect that the scheme will have an impact of Moderate (adverse), leading to a significance of Moderate (adverse) effect.

- 8.3.18. 87 of the 93 hedgerows will be fully/partly lost to the scheme, including hedgerows of district/county importance. New hedgerow will be planted, but they will not include key features (e.g. elm & deadwood) and, therefore, will be of lower quality. In addition, the lack of connectivity over the road (e.g. green bridges), will result in a permanent impact on hedgerow connectivity of moderate (adverse) effect, leading to a significance of moderate (adverse) effect.
- 8.3.19. Appendix 8.19 shows that 0.82 km of hedgerow will be permanently lost due to the scheme (please note that the figures are listed in a column headed "Area (ha)"; whereas hedges should be measured in km, therefore, we assume these are km (please see Biodiversity Net Gain Missed Opportunities section regarding the use of a bespoke Biodiversity Metric for further details).
- 8.3.20. Potential lowland meadow /lowland calcareous grassland will be lost / directly impacted by the scheme. No surveys have been undertaken of unimproved grassland to confirm presence / absence of this priority habitat and its condition and therefore, the impact on grassland priority habitats is unknown.
- 8.3.21. There will be loss / fragmentation of standing open water habitat (ponds) and watercourses. Survey work for fish and aquatic invertebrates is considered out-of-date / surveyed in suboptimal conditions, with surveys being conducted in a particularly dry season (2018). It is expected that there will be some enhancement of watercourse through the Water Framework Directive (WFD) assessment, but no information has been provided. Therefore, the level of impact (whether positive or negative) cannot be determined.
- 8.3.22. A single veteran English Elm tree (irreplaceable habitat) of county importance is located within a landscape area. No evidence has been provided to demonstrate the assumption that the tree will not be impacted during (landscape) construction works (para 8.9.33, ES) (**APP-077**).
- 8.3.23. Protected Road Verge S8 (Brockley Road) is designated as one of the best quality grasslands in the local road verge network. However, no survey work has been undertaken to determine its condition. The assessment fails to consider the direct impact as a result of the construction of the proposed alignment of junction with the new road (Work No. 109c on work plan) and does not take into account previous degradation and loss of the southern

section of the Protected Road Verge (PRV) as a result of the previous A428 improvement works (Cambourne). Therefore, the level of impact of the scheme cannot be determined.

8.3.24. Major habitat loss will be unavoidable during construction, but much of this will be temporary with new habitats to be created post construction. However, there will be a net increase in hard surfaces (+59.14 ha) which will have no biodiversity or ecological value.

8.3.25. Much of the farmland birds' (priority species) preferred habitat (field margins and hedges) will be removed and not replaced. Most of the grassland mixes currently proposed by the Applicant do not represent the magnitude of the removal of semi-improved grassland field margins. A majority of the "open- grassland" habitat to be created will contain no flowering plants or arable weeds. The loss of 0.82 km of hedgerow will have consequences for the provision of winter berries and summer fruits, impacting both farmland birds and wintering birds.

8.3.26. Insufficient information regarding terrestrial invertebrates has been submitted to fully measure the impact of the scheme. Seven surveys are recommended under industry guidance, but no nocturnal surveys for flying insects were undertaken, and only pit fall trapping was used as systematic methodology. All other instances of observation were undertaken through direct or sometimes incidental observation.

8.3.27. The surveys to date have identified invertebrate assemblages of county importance (saproxylic or deadwood specialists) and local importance (elm specialists). The scheme will result in loss of both standing deadwood and elm (neither to be incorporated into the scheme) and, therefore, adversely impact on these specialists of county / local importance.

8.3.28. Therefore, until such time as a fuller dataset is presented this must be viewed as a negative impact due to loss of hedgerows and field margins.

8.3.29. Temporary disturbances of species through noise, vibration, increased air pollution, temporary habitat removal/destruction. All disturbances to protected species should be known and undertaken with licencing in place, where required.

Missed Opportunities

8.3.30. The proposed landscape scheme is not based on local habitats, species mixes or important habitats destined to be removed (field margins, hedgerows and woodland). Instead, species have been included which will not thrive with the predicted future climate (e.g. silver birch), while key characteristic species, such as elm, have been omitted.

- 8.3.31. Huntingdonshire is a national stronghold for elm specialist invertebrates due to the presence of Dutch Elm disease resistant elm trees. The scheme itself supports a veteran elm and locally important invertebrate assemblages associated with elm and county important deadwood. The lack of elm within the planting scheme is a missed opportunity to future-proof the veteran tree habitat, as well as providing habitat for key terrestrial invertebrates.
- 8.3.32. The 5-year landscape maintenance period (set out in the first iteration Environmental Management Plan) is insufficient to allow habitats to establish (e.g. the Environment Bill that is currently sitting before Parliament suggests habitats are managed for a minimum of 30 years). This would not allow habitats to reach target condition.
- 8.3.33. As a result, it is considered that the scheme is likely to result in net loss in biodiversity value, rather than the reported 20.5% biodiversity net gain.
- 8.3.34. The HE Calculator used for the submitted calculations does not appear to have been through the same scrutiny as the accepted DEFRA Metric. It is based on the Warwickshire Model, but with no apparent separation of linear and regional biodiversity, which questions the mathematical integrity of the model. There is no estimation of future habitat condition (all is assumed to be poor), and there is no separation of pre-construction habitat types.
- 8.3.35. For example, all dense scrub is represented by the same distinctiveness and condition score. However, different areas of the same broad habitat can have different condition scores. Similarly, different geographical locations across the UK will have different distinctiveness scores from the model which was designed to assess Warwickshire habitats.
- 8.3.36. NSIPs are to be subject to mandatory biodiversity net gain through an amendment to the Environment Bill currently sitting before Parliament and we would assume that they would therefore be expected to provide all calculations using the latest DEFRA Metric.
- 8.3.37. The opportunity has been missed to implement a mitigation strategy to minimise impact to Arable Field Margins of district importance (priority habitat). A small section of these fields will be permanently lost to the route of the road or landscape scheme, whilst other areas will be lost as a result of the landscape scheme or the site compound. The site compound could be designed to avoid the arable field margins. In addition, the landscape scheme within the field margins should have been prioritised for arable field margins, rather than grassland / scrub / trees.

8.3.38. A small section of these fields will be permanently lost to the route of the road or landscape scheme, whilst other areas will be lost as a result of the landscape scheme or the site compound. The site compound could be designed to avoid the arable field margins. In addition, the landscape scheme within the field margins should have been prioritised for arable field margins, rather than grassland / scrub / trees.

8.3.39. The opportunity has been missed to implement a restoration scheme for the borrow-pits (sites 3 & 4), site compounds and soil storage areas which benefits biodiversity and breeding and wintering birds in particular.

8.3.40. Many of the residual impacts to habitats and species could have been compensated through a well-designed scheme. It is understood the restoration of these sites has been designed for the future aspirations of the land owner – being returned to agriculture. A well-designed agricultural scheme could deliver both ecological mitigation and be returned to the land owner, with covenants to manage it for biodiversity. For example:

- a) Borrow-pits 3 & 4 are identified as being restored to grassland. This area could compensate for the loss of Great Crested Newt (GCN) terrestrial habitat through selection of an appropriate species-rich wildflower grassland mix, and management of the site for GCNs (e.g. creation of areas of tussocky grassland) as well as providing compensation for loss of any priority grassland.
- b) Restoration and long-term management of priority habitat arable field margins within fields that currently support (or are next to) arable field margins of county importance,
- c) Planting of hedgerows / trees within the agricultural fields away from the road scheme to provide breeding habitat for farmland birds, along with planting of seed mixes for foraging / wintering birds (within fields with poor quality arable field margins).

8.3.41. The opportunity has been missed to create wildlife ponds. The scheme incorporates only attenuation ponds that will be maintained as wet grassland. The creation of wildlife ponds would add immensely to biodiversity interest, providing new habitats and drawing in additional invertebrates and terrestrial species.

8.3.42. The high number of missed opportunities demonstrates that the scheme has not been adequately designed to implement the mitigation hierarchy - to avoid, minimise or compensate for adverse impact on biodiversity, including adverse impacts on wildlife sites, priority habitats and species / habitats of local-county importance.

8.3.43. The design of the scheme has not maximised opportunities for biodiversity enhancement and, therefore, does not accord with South Cambridgeshire Local Plan 2018 policy NH/4, Hunts Local Plan 2019 policy

LP 30 and Cambridgeshire & Peterborough Mineral and Waste Local Plan 2021 policies 19 and 20 (borrow-pits) or NPPF 2021.

8.4. Noise and vibration

8.4.1. The Explanatory Note within the Noise Policy Statement for England (NPSE) policy document introduces the following concepts to aid in the establishment of significant effects:

- a) No Observed Effect Level (NOEL): the level below which no effect can be detected. Below this level no detectable effect on health and quality of life due to noise can be established.
- b) Lowest Observable Adverse Effect Level (LOAEL): the level above which adverse effects on health and quality of life can be detected.
- c) Significant Observed Adverse Effect Level (SOAEL): the level above which significant adverse effects on health and quality of life occur.

8.4.2. The factors to be considered in determining if noise is a concern have been identified, including the absolute noise level of the source, the existing ambient noise climate, time of day, frequency of occurrence, duration, character of the noise and cumulative impacts. These have been used to inform the setting of LOAEL and SOAEL levels.

Positive impacts

8.4.3. The table below compares the long-term effects of noise on dwellings both without the scheme in operation (Opening Year 2025) (DM) and with the scheme in operation in 2040 (Do Something) (DS).

8.4.4. An overall decrease in traffic noise levels due to the Scheme in the study area is predicted to occur in the longer term. However, the impact of traffic growth over time reduces the beneficial impacts of the scheme.

Table 18: Long-term change in predicted Do-Something traffic noise levels (DM2025 to DS 2040)

Change in noise level		Daytime		Night-time	
		Number of residential buildings	Number of other sensitive receptors	Number of residential buildings	Number of other sensitive receptors
Increase in noise level Daytime L _{A10,18h} dB	0.1-2.9	2090	11	2,066	2
	3.0-4.9	80	3	54	1

Night-time L _{night, outside} dB	5.0-9.9	36	1	23	0
	≥10	4	0	1	0
No change	0	9	0	9	0
Decrease in noise level Daytime L _{A10,18h} dB Night-time L _{night, outside} dB	0.1-2.9	662	4	749	2
	3.0-4.9	127	0	117	0
	5.0-9.9	38	1	30	0
	≥10	3	0	0	0

- 8.4.5. The introduction of the new dual carriageway between Eltisley and Caxton Gibbet draws traffic away from the existing A428. As a result, the scheme is predicted to result in both traffic noise increases and decreases at properties along this section.
- 8.4.6. Major and moderate decreases in day and night time traffic noise levels are predicted at properties in the north and west of Eltisley. These decreases result from traffic no longer predicted to use St Neots Road and The Green to access the B1040 once the scheme opens, with this traffic accessing the B1040 via Potton End instead. The transfer of traffic from the existing A428 onto the scheme also contributes to these decreases, with traffic levels at a number of properties reducing from above to below SOAEL. It is considered that the major and moderate decreases in noise at these properties are likely to result in a significant beneficial effect at these properties.
- 8.4.7. As a result of traffic drawn to the scheme rather than using alternative parallel east-west routes through smaller villages to the north and south the villages predicted to experience moderate decreases in road traffic noise include Yelling, Toseland, Gamlingay, and Abbotsley.
- 8.4.8. With regards to noise impacts on public rights of way, the scheme will have positive effects in the vicinity of the existing A428, where the reduced traffic volumes will lead to a decrease in noise levels. However, on balance those path sections near the new A428 will have increased noise levels, as set out in the below section.

Negative impacts

During construction

8.4.9. The main construction activities that would take place during the scheme construction phase are utility works, site clearance, earthworks, retaining wall construction, bridge construction, bridge demolition and road construction (pavement) works. These construction activities have the potential to result in temporary noise impacts at the receptors closest to the scheme.

Table 19: Summary of predicted construction noise levels (levels at or above the SOAEL/LOAEL in bold underline)¹²

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
R01 - 53 Bedford Road, Roxton	65	<u>58</u>	62	60	<u>55</u>	57	<u>55</u>	<u>52</u>	58
R02 - 4 High Street, Roxton	65	<u>56</u>	57	55	<u>52</u>	52	55	<u>49</u>	52
R03 - 39 School Lane, Roxton	65	<u>53</u>	60	55	<u>50</u>	53	<u>50</u>	<u>45</u>	53
R04 - 2 Hills Close, Roxton	65	<u>51</u>	54	55	48	45	50	<u>43</u>	45
R05 - The Bungalow, Roxton Garden Centre Road, Roxton	<u>65</u>	<u>56</u>	67	<u>60</u>	<u>53</u>	63	<u>55</u>	<u>48</u>	63
R06 – Greenacres, Great North Road, Roxton	<u>65</u>	<u>62</u>	74	65	<u>59</u>	63	<u>55</u>	<u>54</u>	63
R07 - Kelpie Marina,	70	<u>63</u>	64	65	<u>60</u>	61	<u>55</u>	<u>55</u>	61

¹² N/A indicates that there are no construction works which affect this receptor during the specified time period.

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
Great North Road, Roxton									
R08 - 10 Roxton Road, Chawston	<u>65</u>	<u>56</u>	69	<u>60</u>	<u>53</u>	62	<u>55</u>	<u>49</u>	62
R09A - Chawston Manor, Colesden Road, Chawston (S)	65	<u>54</u>	55	55	51	47	50	<u>47</u>	48
R09B - Chawston Manor, Colesden Road, Chawston (E)	65	<u>52</u>	55	55	49	47	50	<u>46</u>	48
R10 - Mandeville House, Chawston Lane, Chawston	<u>65</u>	<u>62</u>	66	65	<u>59</u>	64	<u>55</u>	<u>54</u>	64
R11 - Russet House, Nagshead Lane, Wyboston	<u>65</u>	<u>60</u>	70	60	57	52	55	<u>53</u>	53
R12 - 25 Great North Road, Wyboston	75	75	69	72	72	57	66	66	57
R13 - 3 The Lane, Wyboston (W)	<u>65</u>	<u>57</u>	75	<u>60</u>	<u>53</u>	64	<u>55</u>	<u>51</u>	65
R14 - 51 Great North	75	75	61	73	73	53	67	67	54

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
Road, Wyboston									
R15A - 9 Great North Road, Chawston (W)	75	<u>70</u>	71	<u>67</u>	<u>67</u>	74	<u>61</u>	<u>61</u>	74
R15B - 9 Great North Road, Chawston (S)	<u>70</u>	<u>67</u>	71	<u>65</u>	<u>64</u>	71	<u>58</u>	<u>58</u>	71
R16 - 2 The Barns, Little Barford Road, Little Barford	<u>70</u>	<u>66</u>	71	<u>65</u>	<u>63</u>	68	<u>58</u>	<u>58</u>	68
R17 - Rectory Farm, Little Barford Road, Little Barford	65	<u>47</u>	61	55	43	42	<u>45</u>	<u>40</u>	50
R18 - Hill Farm, Station Road, Tempsford	65	<u>44</u>	53	55	40	N/A	45	37	N/A
R19 - Orchard House, Potton Road, Abbotsley	65	<u>55</u>	57	55	52	32	55	48	32
R20 - Parkers Farmhouse, Potton Road, Abbotsley	<u>65</u>	<u>59</u>	68	<u>60</u>	<u>56</u>	60	<u>55</u>	<u>52</u>	61

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
R21 - Rectory Farm Cottage, Potton Road, Abbotsley	<u>65</u>	<u>53</u>	74	55	<u>50</u>	50	<u>50</u>	<u>47</u>	50
R22 - Rectory Farm, Potton Road, Abbotsley	65	<u>49</u>	60	55	46	43	45	<u>42</u>	43
R23A - 2 Rectory Farm Cottage, Potton Road, Abbotsley (SE)	<u>65</u>	<u>58</u>	68	60	<u>55</u>	55	<u>55</u>	<u>50</u>	55
R23B - 2 Rectory Farm Cottage, Potton Road, Abbotsley (NW)	<u>65</u>	<u>61</u>	67	65	<u>58</u>	59	<u>55</u>	<u>53</u>	59
R24 - 155 Howitts Gardens, Eynesbury	65	51	50	55	48	39	50	44	40
R25 - Greyholme, Cambridge Road, St Neots	<u>65</u>	<u>60</u>	65	<u>60</u>	<u>57</u>	64	<u>55</u>	<u>54</u>	64
R26 - 4 Stone Hill, St Neots (GF)	65	61	52	60	57	43	55	52	43

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
R27 - 1 Wintringham Cottages, Wintringham Road, Wintringham (N)	<u>65</u>	<u>62</u>	74	65	59	57	<u>55</u>	<u>55</u>	58
R28 - Wintringham Hall, Wintringham Road, Wintringham	65	<u>62</u>	63	65	<u>58</u>	63	<u>55</u>	<u>55</u>	63
R29 - Lower Wintringham Farm, Wintringham Road, Wintringham	65	<u>45</u>	50	55	41	40	45	<u>39</u>	41
R30 - Eltisley Manor, Cambridge Road, Eynesbury (GF)	70	65	61	65	62	51	57	57	51
R31 - North Farm, Cambridge Road, Eynesbury	65	<u>53</u>	60	55	49	43	50	47	43
R32 - Whitehall Farm House, Whitehall Farm, Cambridge Road,	70	<u>64</u>	65	65	61	47	57	57	48

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
Croxton									
R33 - 24 St Neots Road, Eltisley	70	64	63	65	61	59	<u>56</u>	<u>56</u>	59
R34 - Lion House, Cambridge Road, Eltisley	65	<u>59</u>	63	60	<u>56</u>	56	<u>55</u>	<u>52</u>	57
R35 - 46 Caxton End, Eltisley	65	<u>48</u>	53	55	45	44	45	<u>41</u>	44
R36 - Fairview Farm, St Ives Road, Yelling	65	62	60	65	59	54	55	<u>54</u>	54
R37 - North East Farmhouse, North East Farm, Cambridge Road, Eltisley	65	<u>56</u>	60	60	53	44	55	50	44
R38 - Pembroke Farmhouse, Pembroke Farm, Cambridge Road, Eltisley	65	<u>53</u>	59	55	<u>50</u>	51	<u>50</u>	<u>47</u>	52
R39 - The Bungalow, Pastures Farm, Ermine	65	<u>51</u>	55	55	48	46	50	<u>43</u>	46

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
Street, Caxton									
R40A - Iway Inn, Ermine Street South, Papworth Everard (1 Storey SW - GF)	75	69	67	<u>66</u>	<u>66</u>	71	<u>60</u>	<u>60</u>	71
R40B - Iway Inn, Ermine Street South, Papworth Everard (1 Storey S - GF)	<u>65</u>	<u>60</u>	67	<u>60</u>	<u>57</u>	63	<u>55</u>	<u>52</u>	63
R41 - Crows Nest Farm House, Farm, Ermine Street South, Papworth Everard	65	57	46	60	54	40	55	49	40
R42 - Oak Tree Cottage, St Neots Road, Cambourne	70	<u>63</u>	66	65	<u>60</u>	63	<u>56</u>	<u>56</u>	63
R43 - Swansley Wood Farmhouse, Swansley	65	<u>50</u>	52	55	<u>47</u>	47	50	<u>44</u>	47

Receptor ID	Daytime L _{Aeq} dB (façade)			Evening / weekend L _{Aeq} dB (façade)			Night L _{Aeq} dB (façade)		
	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level	SOAE L	LOAE L	Max Level
Wood Farm, St Neots Road, Cambourne									
R44 - 4 Common Farm Cottages, Brockley Road, Elsworth	65	<u>49</u>	55	55	<u>46</u>	48	50	<u>43</u>	49
R45 - Lawn Farm, St Neots Road Old Alignment, Elsworth	65	51	37	55	48	32	50	45	33

- 8.4.10. Of the 45 selected construction noise assessment locations:
- 36 are predicted to experience construction noise levels which are at or above the LOAEL during the daytime period in one or more months, of which 14 would also be at or above the SOAEL.
 - For the evening/weekend period, 22 receptors are predicted to be at or above the LOAEL, of which 8 would also be at or above the SOAEL.
 - For the night-time period, 33 receptors are predicted to be at or above the LOAEL, of which 22 would also be at or above the SOAEL.

- 8.4.11. As a result of construction traffic movements there are moderate increases in predicted road traffic noise on the following routes during construction:
- Bourn Road, Caxton between Caxton Road and Royston Road (Phase 4).
 - Main Street, Caldecote between B1046 and approximately New Barns Farm, Caldecote (Phase 3 and Phase 4).
 - Caxton Road between Alms Hill, Caxton End and Bourn Road, Caxton (Phase 3 and Phase 4).
B1046 Meadow Road, Great Gransden (Phase 3 and Phase 4).

- 8.4.12. Disruption to all Public Rights of Way (PROWs) is anticipated due to temporary closure with negative impacts on noise, views and amenity for

those paths that remain open or the agreed temporary alternative routes. This is likely to decrease usage locally with potential impacts on health and well-being. The diversion of footpath 2/87 will have an increase in noise levels compared to the current route. The proposed diversion of the route to Toseland Bridge and back, involves approximately 900 metres additional length parallel to the new A428 at approximately 20 metres. The other 300 metres of the route is on embankments and a bridge over the A428 which will also lead to increased noise on the diverted route.

- 8.4.13. Most of the scheme construction will take place in a rural environment with just a few properties being affected by construction noise. There are two main areas that will be affected by construction noise; the Potton Road junction and the Cambridge Road junction. Both junctions will see new stretches of local road bridging over the new A428. The following dwellings are likely to experience a significant adverse effect during the day and night: Parkers Farm, The Bungalow at Parkers Farm, Rectory Farm Cottage and 1-2 Rectory Farm Cottage at the Potton Road junction, and Greyholme (Cambridge Road) and Wintringham Cottages (Wintringham Road - A428) at the Cambridge Road junction. The village of Wintringham may also experience a significant adverse effect during the night-time.

Construction Vibration

- 8.4.14. Significant adverse construction vibration effects are identified at the following locations where either moderate or major adverse vibration annoyance impacts are predicted to occur:
- a) 64 to 68 Great North Road (alongside southbound A1).
 - b) Parallel to both sides of the A1 between The Lane and Black Cat junction.
 - c) Along parts of The Lane, Nags Head Lane and Chawston Lane in proximity to the Roxton Road Link between Roxton Road and The Lane.
 - d) Where the new Roxton Road re-alignment ties into the existing Roxton Road.
 - e) Greenacres.
 - f) Kelpie Marina.
 - g) At the new turning head on School Lane.
 - h) To the north east of the new alignment of Barford Road.
 - i) Along Potton Road in proximity to the new Scheme alignment.
 - j) At the southern alignment of the new Cambridge Road junction.
 - k) At the junction between Cambridge Road and Toseland Road.
 - l) Along the A1198 to the north of the new Caxton Gibbet junction (Iway Inn).

Operational Impacts

- 8.4.15. Minor increases in traffic noise are predicted on The Lane in the vicinity of the junction with Roxton Road. Moderate increases in traffic noise are also predicted to occur at a number of properties fronting St Neots Road in Eltisley, between the B1040 and The Green.
- 8.4.16. Increases in traffic noise on the moderate/minor border are predicted at properties to the east of Eltisley. Although the Scheme moves traffic slightly closer to these properties, the acoustic environment of these properties remains unchanged with the new dual carriageway at least 600m from these properties and traffic noise levels tending to remain low both during the day and night. Minor increases in traffic noise are also predicted at North East Farmhouse located between Eltisley and Caxton Gibbet junctions, although new dual carriageway moves traffic slightly further away from this property. Taking all these factors into consideration, no significant effects are likely at these properties.
- 8.4.17. Minor and moderate increases in traffic noise are also predicted at a number of isolated properties in the vicinity of Caxton Gibbet junction, including 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. These increases in traffic noise result from traffic transferring from the existing A428 to the new dual carriageway which moves slightly closer to a number of these properties, in addition to the new dual carriageway carrying a greater volume of traffic at higher speed through the proposed grade separated junction. Traffic noise will continue to dominate their acoustic environment, these properties have a direct line of sight of the new dual carriageway and Caxton Gibbet junction, both of which are elevated in this section. Taking all these factors into account, it is considered that significant adverse effects are likely to occur at these properties.
- 8.4.18. Increases in traffic noise on the minor/moderate border are also predicted at Swansley Wood Farmhouse in Cambourne, located approximately 500m to the south east of the scheme. However, the view of the Scheme from this property is likely to be limited, due to the development of Cambourne West providing screening of the scheme at this property. Taking these factors into account, it is considered that a significant adverse effect is unlikely to occur at this property.
- 8.4.19. Increases in traffic noise are predicted in the area of the Cambourne West development, with moderate increases in noise predicted in the areas close to the scheme. These increases result from the new dual carriageway carrying a greater volume of traffic at higher speed through the proposed grade separated junction. Traffic noise will continue to dominate the acoustic environment in these areas once the scheme is operational, with both the new

dual carriageway and Caxton Gibbet junction visible to those properties to be located on the north and west boundaries of the development.

- 8.4.20. A small number of affected routes are predicted to experience a minor increase in traffic noise levels in the short term. These routes are predominantly in the vicinity of the west and eastern extents of the scheme. These increases are a result of traffic being drawn to the scheme on routes in close proximity to the western and eastern extent of the scheme, including the A421 to the west of Roxton, the existing A428 east of Caxton Gibbet and routes through Caxton. This adverse effect is classed as not significant.

8.5. Air Quality

- 8.5.1. With regard to the operational phase of the development, it is agreed that the scheme will not have a significant adverse impact in terms of air quality on human health within the Cambridgeshire districts with regard to the modelled outputs. These are based upon data within the transport assessment, therefore if any changes are made to the traffic data the potential impact of these changes on air quality will need to be demonstrated.

Positive impacts

- 8.5.2. Huntingdonshire District Council have four AQMA's within their district and the proposals will not lead to a breach of the air quality objectives in these areas, or elsewhere in the district.
- 8.5.3. South Cambridgeshire District Council have one AQMA within their district and the proposals will not lead to a breach of the air quality objectives in these areas, or elsewhere in the district.
- 8.5.5. The scheme has the potential to affect air quality during operation, both increasing and decreasing the annual average concentration of Nitrogen Dioxide NO₂ within the study area. Whilst the proposals are predicted to lead to improvements in air quality for a number of residents, it is noted that some small increases in the annual average concentration of Nitrogen Dioxide (NO₂) are predicted at a limited number of locations representative of sensitive residential receptors within the districts. The largest modelled increase within Huntingdonshire is predicted to be 0.8µg/m³ and 1.1µg/m³ within South Cambridgeshire. However, all modelled residential receptors are predicted to remain well below the relevant air quality objectives for NO₂ and the predicted impact is classed as non-significant.
- 8.5.6. The predicted pollution levels from the proposed scheme demonstrate there will not be a breach in national objectives or an unacceptable risk from air pollution for the residents of Cambridgeshire.

Negative impacts

8.5.7. Construction activities could have a significant impact on residents, however adequate controls can be secured by way of an Environment Management Plan to ensure adequate mitigation measures are agreed and utilised.

Missed opportunity

8.5.8. No enhancement measures relating to air quality have been incorporated into the design of the scheme. This could have been achieved through provision of infrastructures to facilitate more sustainable modes of transport for the future particularly through the provision of Electric Vehicles Charging Stations.

8.6. Climate

Positive impacts

8.6.1. From a climate perspective, specifically in relation to carbon emissions, there are not considered to be any positive impacts from the scheme as it will result in an increase in emissions. There is potential for these negative impacts to be mitigated, albeit we seek further clarification as to the measures that will be implemented to mitigate impacts, as set out in our Written Representation (**REP1-048**).

Negative impacts

8.6.2. The scheme will result in an increase in carbon emissions, both during the construction phase and during the scheme's operational phase. Table 14-9 of the climate change chapter of the Environment Statement (**APP-083**) indicates construction stage emissions of 208,380 tCO₂e. Operational emissions in the year of opening are shown to rise by 35,280 tCO₂e from the do minimum scenarios to the do something scenario. This increase is due to the increase in vehicle kilometres travelled as a result of the scheme (**APP-083** paragraph 14.9.12).

8.6.3. Table 14-11 and paragraph 4.9.24 of the ES (**APP-083**) presents these emissions against the national carbon budgets. During the period when carbon emissions from the scheme would be at their highest level (short- and near-term construction activity and the first year of operation), the scheme's carbon emissions would equate to 0.012% of the UK's carbon budget for the relevant period (the fourth carbon budget period, 2023-2027). For the fifth carbon budget period (2028 to 2032), the scheme's carbon emissions would equate to 0.011% of the national carbon budget. While the significance testing of the scheme as not considered the implications of the sixth carbon

budget, covering the period from 2033 to 2037, paragraph 14.9.28 notes that the scheme represents less than 0.117% of total emissions in the budget period.

- 8.6.4. The presentation of a single project as a percentage of a national emissions budget will also result in a low value leading to an impression that the emissions are small. However, they do still represent an increase in emissions, and when one considers all national level road building under RIS2, road building will lead to an additional 20 MtCO₂ of cumulative emissions between 2020 and 2032. This represents a 5% increase in emissions over a do-nothing scenario, making the task of emissions even more challenging at a time when, as noted by the Committee on Climate Change in their recent June 2021 progress report to parliament, we should be reducing emissions. The Committee 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.”
- 8.6.5. Any increase in kilometres travelled as a result of the Scheme will also impact on the ability of the CPCA to meet the recommendations from the CPICC to reduce car miles by 15% by 2030.

Missed opportunity

- 8.6.6. Specific opportunities to use materials with lower embodied carbon should have been identified in detail at this stage in order to inform comments on the scheme.
- 8.6.7. Opportunities to enhance infrastructure to support low emissions vehicles alongside the route of the scheme have been missed (for example provision of ultra-rapid chargepoint provision across motorways and A-roads, in line with commitments made in Decarbonising Transport, page 98, first bullet point).

8.7. Pedestrians, Cyclists and Equestrian travellers

Positive impacts

- 8.7.1. The provision of grade separated crossings across the new A428, combined with less traffic along the route of the existing A428 may encourage greater use by removing some of the barriers for safe use.

- 8.7.2. A new public footpath linking Public footpaths Abbotsley1/9 and 1/17 will enable circular walks between the two existing parallel paths. This provision helps to encourage greater use through providing additional options of route length and interest.
- 8.7.3. The A428 scheme will partly tie in with the revision of public rights of way at the Wintringham development east of St Neots.
- 8.7.4. Localised improvements to NMU facilities at Eltisley Link Road and Caxton Gibbet junctions may encourage non-motorised user movements in these areas.
- 8.7.5. The DCO proposes to upgrade the provision between Caxton Gibbet North roundabout and Brockley Road, Elsworth, to bridleway status, which will accommodate a greater variety of highway users and provide an improved link between the A1198 and the former A428 at Elsworth leading towards Cambourne.

Negative impacts

- 8.7.6. The scheme will result in the closure and diversion of 15 PROWs in Cambridgeshire during the construction phase. Closures and diversions must be signed at the point where there the PROW leaves the public carriageway, in addition to the point of closure. This did not happen with the A14 scheme and resulted in users attempting to continue along the closed route rather than back-track several kilometres, putting users potentially at risk on a live scheme as well as engendering poor relations. Good, consistent communication is critical.
- 8.7.7. During construction of the new A428 a large number PROWs will be closed or diverted. CCC's experience with the A14 is that whilst the mainline A14 dual carriageway opened in December 2019, and the Local Access Road fully opened in April 2020, 16 months later (August 2021) many of the diverted and changed PROW are incomplete do not have confirmed dates for opening. It is unacceptable that the route network non-motorised users are negatively impacted for an unnecessarily longer time that road users.
- 8.7.8. Noise will impact the Public Rights of Way, during construction and in operation. Within Cambridgeshire the majority of the new A428 is at, or above ground level, resulting in traffic noise carrying a further distance than if in a cutting. Tree planting and screening would help to mitigate both the noise and visual impact of the road.
- 8.7.9. Where the proposed A428 is elevated it will impact visually and reduce the ruralness of the routes with sight of the new road.

- 8.7.10. Flooding and damage to surface of PROW in close proximity to the A428 construction works. Experience with the A14 suggests that such issues only become apparent during/following construction. Therefore, there should be preparedness in Highways' England's design process to be ready to address such issues.
- 8.7.11. New and improved existing links to create opportunities for local people to commute from A to B on safe NMUs and provide opportunities to improve pedestrian, cycle and horse-riding experience have not been provided fully in accordance with National and Local Policies:
- National Planning Policy Framework paragraph 100
 - Highways England 'Connecting our customers 2021'
 - Department for Transport 'Gear Change: A bold vision for cycling and walking'
 - Department for Transport 'Cycle infrastructure design - Local Transport Note 1/20'
 - Cambridgeshire County Council 'Rights of Way Improvement Plan.'
- 8.7.12. The current new NMU provision is limited to only where the A428 has disrupted the existing highway network. Providing good, well connected NMU networks may positively influence the uptake of more active forms of transport to help meet the aims set out in the South Cambridgeshire Zero Carbon Strategy, ease congestion and help to maintain air quality targets locally.
- 8.7.13. The Cambridgeshire Transport & Health JSNA (2015) states priorities as being improving safety and perception of safety, infrastructure.
- 8.7.14. The Countywide health and wellbeing strategy 2020-2024 promotes housing and transport infrastructure that is designed to help tackle climate change.
- 8.7.15. In a CCC report entitled Reducing air pollution, congestion, and CO2 emissions from transport across Cambridgeshire (2019) it recommends a minimum goal that 60% of travel in 2030 ought to be on buses, cycling and walking.
- 8.7.16. The impacts on NMU routes which are considered to be of moderate or major significance in operation:

Table 20: NMU routes with a moderate to significant impact during operation

Route	
NMU route at Cambridge Road Junction	NMU users at the Cambridge Road junction will be required to cross the new A428 slip roads without a signalised crossing facility. This is inconsistent with the crossing

Route	
	facilities that have been provided at a similar A428 junction at Cambourne
Abbotsley Footpath 1/16	Realignment drops into the A428 cutting and back out again adding additional height change to the route which may cause difficulties for some users including those with protected status. Part of the route runs close to the new A428, where it will be noisy and visually intrusive: there is no amenity benefit. A revised route along the top of the cutting would resolve these issues.
Yelling Footpath 278/7	The diversion of this route utilising the Toseland Road bridge will add approximately 1.2km additional length to the route. 900 metres of the diverted route will run closely (15-20m) parallel to the new A428 with significant noise and visual intrusion. On the northern side of the A428, an extension to the DCO boundary would have enabled the route to utilise an existing farm track which would have allowed the northern part of the diversion to have run at 170m from the new A428. The existing diversion proposals must provide adequate screening to mitigate the effects of the proximity to the new road.
Caxton Gibbet Junction North Roundabout	The A1198 will be more difficult to cross without an NMU underpass / bridge or signalised crossing due to the increased number of lanes of traffic (proposed 3 southbound and 2 northbound lanes)
NMU users at New Caxton Gibbet junction	NMU users at the New Caxton Gibbet junction will be required to cross the new A428 slip roads without a signalised crossing facility. This is inconsistent with the crossing facilities that have been provided at a similar A428 junction at Cambourne
Caxton Gibbet North Roundabout to Brockley Road	Users of the Caxton Gibbet North Roundabout to Brockley Road, Elsworth NMU route will have to share the route with a private vehicular access. Vehicular use of the route may lead to a deterioration of the surface material and thus a negative effect on the enjoyment of the route by Non-motorised users.
All routes that cross or run close to the new A428.	Permanent intrusion into the rural nature of the affected Public Rights of Way, which will now be closer to (in some cases immediately next to) a high-speed dual carriageway. The Environmental statement Table 7-6 lists that during year 15 of operation there will be a moderate-adverse (significant) of the road - LLCA 11: Wintringham and Weald Clay Farmland in Cambridgeshire. This may dissuade some users from using paths with impact on health and well-being.

Missed Opportunities

- 8.7.17. All NMU provision should include equestrians in accordance with CCC ROWIP and Highways England's own Accessibility Strategy and Connecting Our Customers 2021 policy. Equestrians are classed as vulnerable road users. By having the equivalent right to use the off-carriageway NMUs, they would benefit from much safer routes.
- 8.7.18. 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. In addition, it lengthens the time before the NMU facilities can be provided, since the LHA cannot start work until the highway is handed over to the LHA.
- 8.7.19. The Eltisley–Caxton Gibbet Junction link has a 600-metre gap in NMU provision where vulnerable users will have to use the carriageway to continue and are then required to cross the realigned A428 with no crossing provision. This creates a safety risk and acts a significant barrier to the use of the entire NMU route between Eltisley and Cambourne.
- 8.7.20. The request for the upgrade of Abbotsley FP1/17 to Bridleway status, included in our Supplementary Consultation response, and the associated improvements to the proposed NMU bridge over the new A428, has not been incorporated into the draft order. This is disappointing as an opportunity to create off road east west links for all NMU users is being missed. The Connecting Our Customers 2020-21 Highways England⁵ publication also states that they will: "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." Such provision would also support the CCC Rights of Way Improvement Plan (ROWIP), Statement of Action (SOA) 5 – Filling in the Gaps – Given the lesser extent of the bridleway network there is a real need to improve the network making connections to the wider transport network.
- 8.7.21. The re-aligned Potton Road B1046 over the new A428, has no space available for NMU users off-carriageway. This creates a risk for on-road NMUs and prevents future potential for providing safe NMU provision along this route. Provision of such space is required to bring the Scheme into compliance with ROWIP (SOA 2 - A safer and health enhancing activity; SOA5, Filling in the gaps).
- 8.7.22. The existing A428 to be de-trunked has no suitable NMU facilities: this will inhibit the creation of an active travel corridor between St Neots and Cambridge. Leaving the NMU provision to a Designated Funds application leaves it at risk of not being delivered. Designated Funds requires equal matching of funds or expertise by CCC, which is unreasonable as CCC has no additional resources for A428 works.

- 8.7.23. Croxton – Eltisley. Current NMU facilities along the existing A428 that connect these two communities are sub-optimal and should have been identified for improvement as part of the DCO in accordance with Highways England’s own Accessibility Strategy.
- 8.7.24. Toseland Road: No off-carriageway NMU provisions are provided northwards to link the new works at Toseland Road with Toseland Footpath 237/7, despite the DCO boundary extending far enough to allow such works to proceed. This would allow a longer NMU and a better transition from the road to NMU.
- 8.7.25. Eltisley northern bypass (existing A428): Improved equestrian crossing facilities have not been provided at Eltisley, where Eltisley bridleway 74/6 crosses the existing A428. This crossing will remain on a B-class road that represents a well-used through-route for local traffic and the provision of a safe crossing point should be considered.
- 8.7.26. Eltisley Link North roundabout: This 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. 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.”
- 8.7.27. 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. Department of Transport “Gear Change 2020” includes the following statement: 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.”
- 8.7.28. Connectivity 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 Highways England funded link to Papworth Everard, would provide a continuous segregated route from Papworth to Cambourne and onward connectivity to Cambridge through the recent A14 scheme NMU improvements. The Connecting Our

Customers 2020-21 Highways England 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”.

8.8. Flooding and Water

Positive impacts

8.8.1. The attenuation basins proposed within the scheme are integral to the design. They promote the use of SuDS to manage surface water from the site and are used for the treatment of the surface water before this discharges into the wider watercourse network. As the watercourses around this scheme are large and can carry high flows as well as containing habitats and passages for wildlife, if pollutants manage to enter the watercourses, this could be very detrimental to the biodiversity. The proposed basins are retaining the flows to reduce the discharge to the natural rates, as well as treating the water to ensure that biodiversity is maintained for the lifetime of the carriageway. The basins therefore provide multiple benefits once constructed and fully functioning.

8.8.2. Part of the discussions with the EA and scheme proposals are to retain flood waters on the westbound carriageway side by undersizing the culverts, which would ensure that the scheme is providing betterment where possible to the surrounding flood risk. While this is part of the flood zone compensation and flood alleviation works discussed with the EA, it will provide a major benefit post construction, as there are some large scale developments occurring on the south and eastern fringes of St Neots.

Negative impacts

8.8.3. During construction, there is an increased risk of pollution. This is a result from earthworks which generate sediment movement, which can result in an increase of sediment being discharged into the surrounding watercourses, unless carefully managed. The other risk presented is the presence of hazardous pollutants, such as fuel and oils, which could cause high levels of damage to the watercourses if they are discharged into them. While the monitoring of the water bodies and watercourses around the scheme is proposed, more detail should be provided around the proposed mitigation to reduce the risk of these pollutants being discharged into the watercourses. This includes items such as the use of settlement basins to reduce sediment transport, bunging of gullies from the finished surface while there is still a risk of higher sediment loaded entering the system and safe disposal of high contaminant laden water. The damage these pollutants can cause to the wildlife and habitats of the watercourses can be substantial.

- 8.8.4. The current proposed works to the watercourses around the scheme, such as the diversions, culverting and removal of watercourses, could present negative impacts post development. The large watercourses which the A428 dissects are proposed to be culverted, which is fine, however the proposed culverts can present a risk. Currently the proposals are for the shortest crossing, leading to sharp bends in the watercourses to pass the road perpendicular to the direction of travel. Where this is the case, the water will slow down and sediment will start to deposit around the corners. The best practice design of culverts is to keep them aligned with the natural flow of water as far as possible. The other area of particular concern is around the Wintringham brook crossing, which indicates flows will be converging head on, before passing below the proposed A428 carriageway. This would lead to sediment deposition and potentially erosion in higher flows. The risk around watercourse works and main concerns from the LLFA is that the Land Drainage Act 1991 is being proposed to be disapplied, which means that no authorising body is able to comment and provide input on the proposals. The LLFA is against the disapplication of section 23 of the Land Drainage Act 1991.
- 8.8.5. Proprietary treatment by means of interceptors is proposed in area where there is viewed to be an increased risk of pollution against the HEWRAT assessment. Generally, proprietary treatment systems are opposed by the LLFA as they are not viewed as a sustainable solution and the maintenance risks associated with the feature. If the features aren't maintained appropriately or regularly enough, they start losing their treatment benefits and even stop treating surface water. This could lead to the risk of increased pollutant loads being discharged into the watercourses, which has a negative impact on the surrounding biodiversity. The LLFA's preference for treatment is through SuDS. While the basins are providing a level of treatment, this is not enough for the higher risk areas. The use of features such as reed planting can treat surface water in a natural way to reduce the maintenance need and risk of the treatment failing and should be considered over the use of proprietary treatment.
- 8.8.6. The proposals for the discharge from the different catchments across the scheme is to limit the runoff from the basins to the natural Greenfield runoff rates. However, the submitted reports indicate that where the rate is below 5 l/s then this should be defaulted to a minimum of 5 l/s. This could increase the discharge rates from certain catchments pretty drastically, increasing the peak volumes discharging from the basins into the surrounding watercourses, in turn increasing the risk of flooding to the downstream extents of the receiving watercourses. As this is upstream of large developments such as Wintringham Park and the wider St Neots area, this could increase the risk of flooding to existing and future properties There is a balance to meet around

the discharge rates and risk of blockage, however the increased rates to 5 l/s is an outdated approach and this can be reduced further.

- 8.8.7. Maintenance of the features has not been fully arranged. There needs to be a clear delineation between the adoption and ongoing maintenance body for the proposed surface water features. This is to ensure that they are maintained appropriately for the entirety of the lifetime of the upgraded carriageway. If a feature is not maintained then its function and ability to manage water will reduce and lead to risks previously discussed, such as increased pollution and flood risk. It is acknowledged that not all of the works will remain with Highways England post construction, and some will be handed back to land owners or other maintenance bodies, such as the highways team. Where these are to be adopted by bodies such as the highways team then it must be clear that this has been agreed by all parties.

8.9. Minerals and Waste

- 8.9.1. As set out above, the focus of the impacts in respect of minerals and waste are focused mainly on the borrow pits and associated effects. There will be some impacts in relation to waste generation and management, these are impacts are likely to be lesser and so are not the focus of the Council's comments.

Positive impacts

- 8.9.2. In terms of positive impacts, it is proposed that fill material will be sourced, and waste will be disposed of, on-site where possible, though the use of borrowpits. This should limit the wider impact on existing waste and minerals sites, associated transport movements and their associated impacts, such as amenity. Furthermore, the documentation sets out that the developer will seek to minimise waste generation. Both of these help support the development in meeting Policy 23 Traffic, Highways and Rights of Way of the MWLP.

Negative impacts

- 8.9.3. However, the borrowpits as proposed are likely to have negative impacts. It is likely that there will be temporary negative onsite impacts such as disruption of existing site use (agriculture); potential disruption to wildlife, and the water table; and the destruction / removal from site of archaeology. There may also be temporary off-site impacts centre around amenity, particularly in relation to noise, dust and light from on-site and transportation activities. These topics are covered by policies 7, 19 and 20 of the MPWLP. As it stands, the Council is of the view that the current proposals are not compliant with these policies owing to lack of detail and not according with the policy in respect of restoration (see missed opportunities). This lack of consideration, particularly

of Policy 19, undermines confidence that the developer respects local priorities.

8.9.4. In failing to address Policies 7 and 19 the proposals, which currently involve returning the borrowpits to their original use as part of restoration, fail to provide on-site biodiversity net-gain or mitigation for climate change, which would assist in the proposal complying with local policy. In addition, the proposals do not contain any assessment to establish if it may be more sustainable to acquire the required materials from local quarries, and aid in their restoration by disposing of inert materials at those locations. Nor has there been an assessment of the impact of the timing of extraction from the borrowpits on local quarries. These missed opportunities not only demonstrate a lack of appreciation of local priorities, but also ambition to provide additional biodiversity net-gain and potential adaptation to climate change where an opportunity presents itself. Ultimately this indicates that the current proposal may not be the most sustainable solution which is sought by Policy 1 of the MWLP.

8.10. Economy

Positive impacts

- 8.10.1. During construction there will be direct and indirect benefits to employment linked to the project.
- 8.10.2. There will be employment opportunities for local residents and additional economic benefits such as local spending from the construction workforce involved in the project on elements such as food and accommodation particularly for those who may not live locally to the scheme.
- 8.10.3. Tier 1, 2 and 3 construction companies in the local area will have the opportunity to obtain work from the appointed main contractor.
- 8.10.4. Highways England has developed a process to upskill construction businesses who may be interested in joining their supply chain - this programme will be beneficial to many aspiring local constructors.
- 8.10.5. The proposed route is likely to disrupt or displace fewer businesses as the construction is planned in a rural area in the Huntingdonshire and South Cambridgeshire districts.
- 8.10.6. Once completed, the A428 upgrade, will enable accessible local movement in and around St Neots and Cambourne, linking existing and future railway stations and employment sites. The road improvements will facilitate long-term sustainable economic growth, improving journey times for freight

and port traffic as well as other business users. St Neots will be a key beneficiary, sitting upon an improved north, south, east, west axis providing links to the midlands, the ports and to London. For both Huntingdonshire and South Cambridgeshire Districts there is going to be more reliable travel time between Cambridge, Bedford, Milton Keynes (M11, A1, M1) This development, alongside East-West Rail, is a key component and will help Huntingdonshire and South Cambridgeshire contribute further to the development and success of the Ox-Cam-Arc.

Negative impacts

- 8.10.7. There will be a greater potential of traffic disruption and longer journey times close to St Neots East which is an important access point to St Neots mainline station, and north south rail travel and providing access to London.
- 8.10.8. Longer and disrupted journeys will have a negative impact, financially and on the productivity of local business particularly the businesses operating at the services area at Caxton Gibbet.
- 8.10.9. The costs associated with the disbenefits of construction according to the calculations of the Highways England economic assessment amount to £35 Million.

8.11. Social and Community Matters

- 8.11.1. This section identifies social and community impacts from the scheme during construction and operation. The impacts focus on specific local impacts which may have also been made as representations in relation to the application by groups or individuals specifically affected. The purpose of this section is to specify the local social and community impacts and to highlight examples of how the local communities / businesses are affected.

Positive impacts

- 8.11.2. The methodology used by the Applicants in preparing the Population and Human Health chapter in the Environment Statement is generally satisfactory and broadly aligns with the proposal outline.

Negative impacts

- 8.11.3. There has been no reference to the Cambridgeshire Health Board or Wellbeing Strategy and so it is not clear how this has been considered as part of the proposal.
- 8.11.4. There is also no mention of Cambridgeshire data or local Joint Strategic Needs Assessments (JSNAs) being used as part of the data

sources for health. These should be used and referenced in the assessment of impacts on Human Health, specifically the “Cambridgeshire Core Data Set” and the “Cambridgeshire Transport and Health JSNA”.

- 8.11.5. The applicant should have considered if the assessment of “impacts on any feeder PRowWs between destinations, within 1km of the DCO site boundary” is appropriate considering that it is recommended to include walking and cycling as part of active travel to work and therefore distances travelled by NMU greater than 1km are not unusual, therefore consideration should have been given to extend the boundary to 5km, or consideration given to identifying relevant employment and leisure destination within 5 km of the DCO boundary, this was requested at the scoping request stage but doesn't seem to have been addressed or a justification for scoping it out given.
- 8.11.6. There appear to be no embedded mitigation measures proposed to address any impacts on human health which include access to and severance from community facilities, education facilities, recreational facilities and health facilities; access to and severance from open space, blue space, green space and play space; use of walking, cycling and horse riding routes; air quality and noise and vibration. Only significant adverse effects are mitigated.
- 8.11.7. Noting that the existing A428 between Caxton Gibbet junction and the Cambridge Road junction will experience closures for 43 months between August 2022 and March 2026 it is not clear if there has been any assessment on the impact the diversion routes will have on villages, local residents, access to emergency services following the night closures of existing A428. In particular, it is not clear what the specific impact of night time closures on access to Cambridge University Hospital Trust (Addenbrookes) which is the Regional Trauma Centre would be.
- 8.11.8. The statement that the “Proposed Development would have no significant adverse effects on human health or designated habitats sites during either construction or operational phases of the scheme” has not been adequately demonstrated. The health chapter of the ES clearly states “During the operation of the Scheme, Chapter 11, Noise and Vibration of the Environmental Statement [TR010044/APP/6.1] identifies likely significant adverse noise effects at. (a number of sensitive locations)” and “Therefore, the operational effect of the Scheme in terms of noise and vibration as a determinant of human health will result in a negative health outcome for the people living and working in the properties identified” one of which is Eltisley Manor nursing home, which is a 37-bed psychiatric nursing home offering specialist mental health care services for the over 50s, separate care for over 18s with complex mental health issues and patients coming to the end of their rehabilitation process.

8.11.9. The ES has not quantified if this impact due to noise is significant or not, just that it is a negative impact, whereas the document has identified moderate adverse – significant impacts on recreational users or the River Great Ouse and to users of PROW 73/17 due to closure during construction. Specifically, the Eltisley Manor should be looked at in depth as any impacts are likely to be disproportionately felt by the occupiers of this facility due to the health nature of the residents. In addition, it is not clear if an assessment has been undertaken in respect of the need for emergency night time access by NHS services, particularly factoring in the profile of the residents of the Manor.

Missed Opportunity

8.11.10. The benefit of using a Health Impact Methodology within the production of the Health Chapter of the EIA is that it enables the consideration of the effects of the wider determinants of health on not only the physical environment but also the social environment. It is also known that these wider determinants are not distributed equally among populations (e.g., those people living in areas of deprivation tend to have poorer health outcomes). Therefore, more details should have been included in respect of:

- An appraisal of the potential positive and negative health and well-being impacts of the proposed development on any planned new communities and the adjacent existing communities in the study area.
- Highlight any potential differential distribution effects of health impacts among groups within the population by asking ‘who is affected?’ for the impacts identified.
- Suggest actions / mitigations that aim to minimise any potential negative health impacts and maximise potential positive health impacts, referencing where possible the most affected vulnerable group(s).

9. Legacy

- 9.0.1. The Councils are working with the Applicant, who has set up four Legacy working groups, to create additional sustainable outcomes, beyond scheme mitigation, for the environment, economy and local communities aligned to local needs and priorities. These are broken down into Connected Communities (also covering NMU), Enhancing the Environment, Local Economy, Skills and Employment, and opportunities to apply to Highway England's Designated Fund.
- 9.0.2. The HE Designated Funds process is welcomed by the local authorities. It has yielded positive outcomes in relation to other projects in the area promoted by the Applicant, including the A14. The local authorities are in the preliminary stages of the application process for projects centred on improving NMU connections and town centre regeneration for St Neots. It is anticipated that there may be other applications that could be submitted by the local authorities as dialogue with the Applicant's Designated Funds team continues.
- 9.0.3. The local authorities are concerned that too much reliance on Designated Funds is placed to deliver mitigation that is required under the DCO. One of the fundamental concerns that remains is the uncertainty of the process and the implications of an unsuccessful Designated Funds application, particularly in the context of the much needed NMU routes along the route.

Positive impacts

- 9.0.4. The local authorities welcome the opportunity to potentially deliver additional benefits beyond the scheme itself and the initial work with HDC, in particular relating to St Neots' Future High Street Fund projects which is at an early stage within the Designated Funds application process.

Negative impacts

- 9.0.5. There are unlikely to be any negative impacts from the Legacy aspects of the scheme if delivered, however, for example, if funds are used for purposes that should otherwise have been delivered through the DCO, this reduces the availability of funds for other projects either through financial (Designated Funds or other sources of match funding) or resources, e.g. staff time.
- 9.0.6. In the case of NMU routes, the local authorities have flagged with the Applicant the need to ensure that these connect into existing routes otherwise they can have an undesirable outcome, e.g. routes ending short of the destination or not going ahead as subsequently deemed unfeasible.

Missed opportunities

The process of applying to the Applicant's Designated Funds, while well-supported by the Applicant's team, requires some input from the local authorities (others can also apply). There is potential that, due to limited resources, opportunities to seek funding are missed. The fund is also a time limited pot and monies agreed must be spent within the timescale (the current pot is understood to be available to 2025), beyond which it is unclear what, if any, funding may be available. Some potential projects, for example, a possible NMU connecting St Neots to Cambourne, may not be deliverable in these timescales. This reemphasises the need for appropriate mitigation to be secured through the DCO itself where possible.

10. Conclusion

- 10.0.1. This Joint Local Impact Report gives details of the likely impacts of the proposed development on the Cambridgeshire Authorities' areas, in line with section 60 of the Planning Act 2008.
- 10.0.2. The authorities would like reiterate their strong support for the improvements to the A428 between the Black Cat roundabout, and Caxton Gibbet. The Councils are generally supportive of this project coming forwards as part of the wider Ox-Cam Arc strategic development corridor, and to relieve congestion and improve network reliability in the area. However, concerns remain about the local impacts of the scheme that, unless adequately addressed, may overshadow the positive benefits of the proposed development.
- 10.0.3. With regards to traffic and transportation, the Councils are broadly content with the Applicant's methodology and conclusions on the dual carriageway, and the traffic numbers used within the economic assessment of the scheme. It has become apparent however that the modelling of the local roads and junctions to be adopted by the County Council has used a non-standard method, and remains not agreed at this point. As a consequence, the local road design cannot be approved as the Council hasn't been able to agree the relevant traffic flows and impact, and therefore confirm whether the local roads have been designed with the right size and capacity. The Councils have received information from the Applicant during August 2021 which is still under review. The County Council considers that it is reasonably seeking to understand the detailed operation of its future asset, and be confident that the design is appropriate.
- 10.0.4. The County Council's position on the design of the local roads and junctions is that it requires the normal standards for highways, the Design Manual for Roads and Bridges to be used for the design of any asset it is to adopt, and the Council requires a robust approval process for the design to be secured through the Development Consent Order and a legal agreement.
- 10.0.5. Given the extensive period of construction the Councils are concerned about the volume, duration, and control of construction traffic, routing and diversions, and the impacts on our communities. Additional information and commitment to mitigate impacts secured through the draft Development Consent Order would be welcomed, given the nature and location of the routes that have been identified for use.
- 10.0.6. The Councils require more to be done to help integrate the proposed development into the host landscape, and are yet to be convinced that the order limits allow for sufficient mitigation to be implemented.

10.0.7. The Councils have expressed concerns about the range and quality of the ecological surveys undertaken for the Application and are not confident that the impact of the scheme can be fully assessed, with particular reference to habitats and areas of local significance. The Applicant should undertake further ecological surveys to address this issue. The Applicant's assessment of Biodiversity Net Gain has been questioned by the Councils and there are concerns that using the standard metrics for this does not give an accurate picture of the impact of the project. The Councils are keen to explore this with the Applicant to ensure that the scheme delivers the maximum possible benefits for biodiversity.

10.0.8. The Councils are concerned that there is limited information on borrow pits and their management and remediation within the Application.

10.0.9. The Councils are keen that all development in the area provides safe and extensive opportunities for cycling, walking, and other active travel uses. The Councils are not convinced that the local roads within the scheme provide good connectivity to all surrounding villages, or that the level of provision is in accordance with the latest policy guidance. The Councils are keen that all opportunities are taken to deliver high standard facilities for active travel users.

10.0.10. The Councils look forward to working with Highways England to address the issues set out in this report, ensuring the positive impacts of the scheme are realised and the development has a lasting legacy.

11. Appendices

11.0. Appendix A: Policy Assessment of the Scheme and Degree of Compliance with Local Plans Policies

	Compliant with Policy
	Currently considered contrary to Policy

County Policies

	Relevant Policies	Comment	Compliance with Plan / Policy
Cambridgeshire & Peterborough Local Transport Plan, Cambridgeshire & Peterborough Combined Authority (February 2020)	<p>Objectives:</p> <ul style="list-style-type: none"> Housing - Support new housing and development to accommodate a growing population and workforce, and address housing affordability issues Business & Tourism - Ensure all of our region’s businesses and tourist attractions are connected sustainably to our main transport hubs, ports and airports Employment - Connect all new and existing communities sustainably so all residents can easily access a good job within 30 minutes by public transport, spreading the region’s prosperity Resilience - Build a transport network that is resilient and adaptive to human and environmental disruption, improving journey time reliability Safety - Embed a safe systems approach into all planning and transport operations to achieve Vision Zero – zero fatalities or serious injuries Health & Wellbeing - Provide ‘healthy streets’ and high-quality public realm that puts people first and promotes active lifestyles Accessibility - Promote social inclusion through the provision of a sustainable transport network that is affordable and accessible for all Air Quality - Ensure transport initiatives improve air quality across the region to exceed good practice standards Environment - Deliver a transport network that protects and enhances our natural, historic and built environments Climate Change - Reduce emissions to ‘net zero’ by 2050 to minimise the impact of transport and travel on climate change <p>Local strategies:</p> <p>“2.4.6 Although we want to prioritise the development of public and ‘active’ transport modes, we recognise that the private car remains a key mode for many residents across Cambridgeshire and Peterborough. We will therefore support targeted highway infrastructure and enhancement schemes such as: ...</p> <p>-dualling of the A428, which will significantly improve commuter links along the Oxford to Cambridge corridor”</p> <p>“3.78 Dualling of the A428 between Cambourne and St Neots, currently being proposed by Highways England, will improve access to and from</p>	The Cambridgeshire & Peterborough Local Transport Plan includes sections on the A428, and specifically the A428 Black Cat to Caxton Gibbet Road Improvement scheme. The Local Transport Plan notes that the investment in regional highway connectivity will improve accessibility to Greater Cambridge and the rest of the country and help to make Huntingdonshire a more attractive place to live or locate business. The Local Transport Plan notes the wider Oxford to Cambridge Expressway and that the scheme, within Cambridgeshire and Peterborough, will significantly improve accessibility to and from Huntingdonshire and improve journey times and reliability from Huntingdonshire to Cambridge and Bedford.	

	<p>Greater Cambridge from St Neots, Bedford and the wider Strategic Highway Network. This will form the first phase of the Oxford to Cambridge Expressway.”</p> <p>“3.106 ... Investment in improved regional highway connectivity, such as the dualling of the A428 between Cambourne / Caxton Gibbett and the Black Cat Roundabout, as part of the delivery of the wider Oxford to Cambridge Expressway, will also improve accessibility to Greater Cambridge and the rest of the country, and help to make Huntingdonshire a more attractive place to live or locate a business. ...”</p>		
<p>Cambridgeshire and Peterborough Minerals and Waste Local Plan, Cambridgeshire County Council and Peterborough City Council (July 2021)</p>	<p>Policy 1 Sustainable Development and Climate Change</p>	<p>This policy reflects a wider requirement in relation to climate change. Please refer to the proposals as a whole, with particular reference climate change sections in relation to consideration of if this policy has been satisfied.</p> <p>In so far as this policy relates to the A428, the Scheme incorporates measures for the mitigation of climate change, although we have requested further detail on the precise nature of these mitigation measures as part of our Written Statement.</p>	
	<p>Policy 5 Mineral Safeguarding Areas (MSAS)</p>	<p>This has been adequately addressed. No viable mineral reserves should be affected.</p>	
	<p>Policy 6 Mineral Development Areas (MDAS) and Mineral Allocation Areas (MAAS)</p>	<p>This has been adequately addressed. No existing or planned minerals and waste development and associated infrastructure should be affected.</p>	
	<p>Policy 7 Borrowpits</p> <p>Mineral extraction from a borrowpit will only be supported, in principle, where all of the following are met:</p> <p>(a) there is a demonstrated need for the mineral to be extracted from the borrowpit;</p> <p>(b) it will serve a named project only, and it is well related geographically* to that project;</p> <p>(c) the site will be restored in accordance with Policy 19: Restoration and Aftercare and within the same timescale as the project to which it relates;</p> <p>(d) material will not be imported to the borrowpit other than from the project itself, unless such material is required to achieve beneficial restoration; and</p> <p>(e) the quantity of material and timescale for extraction from the borrowpit will not significantly harm existing operational quarries and local markets.</p> <p>In demonstrating the need for a borrowpit for engineering clay, it will need to be demonstrated that the material could not be drawn more sustainably from existing mineral and landfill sites.</p> <p>*in order to pass the ‘well related geographically’ test, the borrowpit must be significantly geographically better located, when taken as a whole, compared with all other relevant allocated or existing</p>	<p>This policy has not been adequately addressed owing to lack of detail – see section 8.8 of this LIR and section 13 of the Councils’ Written Representation (REP1-048).</p> <p>The opportunity has been missed to implement a restoration scheme for the borrow-pits (sites 3 & 4), site compounds and soil storage areas which benefits biodiversity, such as providing opportunities for breeding and wintering birds far from the road, and compensates for the loss of Great Crested Newt.</p>	

	<p>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 borrowpit simply being physically nearer the named project, compared with an existing operational or allocated site, will not in itself necessarily pass the test.</p>		
	<p>Policy 19: Restoration and aftercare All mineral extraction related proposals, and all waste management proposals which are likely to be temporary in nature, must be accompanied by a restoration and aftercare scheme proposal, secured if necessary by a legal agreement. Such a proposal must, where appropriate: (a) set out a phasing schedule so as to restore available parts of the site to a beneficial afteruse as soon as is reasonably practicable to do so, and to restore the whole of the site within an agreed timeframe. Only in exceptional circumstances, such as where the afteruse is a reservoir or on very small sites where phasing is not practical, will a non-phased scheme be approved; (b) reflect strategic and local objectives for countryside enhancement and green infrastructure, including those set out in relevant Local Plans and Green Infrastructure Strategies, in the Local Nature Partnerships vision and strategic proposals, as well as any applicable wider Development Plan objectives; (c) contribute, if feasible, to identified flood risk management and water storage needs (including helping to reduce the risk of flooding elsewhere) or water supply objectives and incorporate these within the restoration scheme; (d) demonstrate net biodiversity gain through the promotion, preservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets; (e) protect geodiversity and improve educational opportunities by incorporating this element within the restoration scheme, by leaving important geological faces exposed and retaining access to them; and (f) incorporate within the restoration scheme amenity uses, such as formal and informal sport, navigation, and recreation uses. 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. In the case of mineral workings, restoration schemes which will contribute to addressing or adapting to climate change will, in principle, be supported e.g. through flood water storage; through biodiversity proposals which create habitats that enhance ecological networks (and thus assist species to adapt to climate change); and/or through living carbon sinks.</p>	<p>In respect of the borrowpits within Cambridgeshire this policy has not been addressed. The proposal does not accord with this policy. Please see section 13 of the local authorities' Written Representation (REP1-048) for detail.</p> <p>The opportunity has been missed to implement a restoration scheme for the borrow-pits (sites 3 & 4), site compounds and soil storage areas which benefits biodiversity, such as providing opportunities for breeding and wintering birds far from the road, and compensates for the loss of Great Crested Newt.</p>	

	<p>Any site specific restoration and after-care requirements are set out in Policy 2: Providing for Mineral Extraction. Where there is a conflict between this policy and Policy 2, then the provisions of Policy 2 take precedence.</p>		
	<p>Policy 20 Biodiversity and Geodiversity</p> <p>International Sites The highest level of protection will be afforded to international sites designated for their nature conservation or geological importance. Proposals having an adverse impact on the integrity of such areas, that cannot be avoided or adequately mitigated to remove any adverse effect, will not be permitted other than in exceptional circumstances.</p> <p>These circumstances will only apply where: (a) there are no suitable alternatives; (b) there are imperative reasons of overriding public interest; and (c) necessary compensatory provision can be secured.</p> <p>Development proposals that are likely to have an adverse effect, either alone or in-combination, on European designated sites must satisfy the requirements of The Conservation of Habitats and Species Regulations 2017 (as amended), including determining site specific impacts and avoiding or mitigating against impacts where identified.</p> <p>National Sites Development proposals on land within or outside a Site of Special Scientific Interest (SSSI), and which is likely to have an adverse effect on it (either individually or in combination with other developments), will not be permitted unless the benefits of the development clearly outweigh both the adverse impacts on the features of the site and any adverse impacts on the wider network of SSSIs.</p> <p>Local Sites Development likely to have an adverse effect on locally designated sites, their features or their function as part of the ecological network, including County Wildlife Sites and Local Geological Sites, will only be permitted where the need and benefits of the development clearly outweigh the loss and the coherence of the local ecological network is maintained.</p> <p>Habitats and Species of Local and Principal Importance Where adverse impacts are likely on the protection and recovery of priority species and habitats, development will only be permitted where the need for and benefits of the development clearly outweigh these impacts. Where adverse impacts are likely on other locally important habitats and species as identified by the Cambridgeshire and Peterborough Biodiversity Partnership, the benefits of development</p>	<p>The adverse impact to priority / irreplaceable habitats does not accord with this policy.</p> <p>The design of the scheme has not maximised opportunities for biodiversity enhancement and, therefore, does not accord with this policy.</p> <p>Further detail is provided at section 8.3 of this LIR.</p>	

	<p>must outweigh these impacts. In both cases, appropriate mitigation and/or compensatory measures will be required.</p> <p>Biodiversity and Geodiversity in Development All development proposals must: (d) conserve and enhance the network of geodiversity, habitats, species and sites (both statutory and non-statutory) of international, national and local importance commensurate with their status and give appropriate weight to their importance; (e) avoid negative impacts on biodiversity and geodiversity; (f) deliver a measurable net gain in biodiversity, proportionate to the scale of development proposed, by creating, restoring and enhancing habitats and enhancing them for the benefit of species; (g) where viable opportunities arise, contribute to the delivery of the Local Nature Partnership vision to ‘double land for nature’; (h) where necessary, protect and enhance the aquatic environment within, adjoining or functionally linked to the site, including water quality and habitat. Where appropriate, proposals should identify Water Framework Directive (WFD) (or equivalent, if superseded) waterbodies in the vicinity of the proposal, and set out how WFD status will be protected and, if opportunities arise, improved, with any mitigation proposed being suitable and appropriate to the water body affected. For riverside development, proposals should consider options for riverbank naturalisation. In all cases regard should be had to the Cambridgeshire Flood and Water SPD or Peterborough Flood and Water SPD (or their successors); and (i) for mineral extraction proposals, enable periodic temporary access in order to record, sample and document the geodiversity.</p> <p>Unless national policy or legislation provides an alternative but similar mechanism, mineral and waste management proposals must (unless a decision taker would clearly not benefit from it) be accompanied by a completed biodiversity checklist (see respective planning authority website for details) and must identify features of value on and adjoining the site and to provide an audit of losses and gains in existing and proposed habitat. Where there is the potential for the presence of protected species and/or habitats, a relevant ecological survey(s) must be undertaken by a suitably qualified ecologist. The development proposals must be informed by the results of both the checklist and survey.</p> <p>Mitigation of Potential Adverse Impacts of Development Development should avoid adverse impact on existing biodiversity and geodiversity features as a first principle. Where adverse impacts are unavoidable they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort where there is no alternative.</p>		
	<p>Policy 23 Traffic, Highways and Rights of Way</p>	<p>This policy relates to highways and rights of way which are considered to not have been sufficiently enhanced by the scheme.</p>	

	Policy 24 Sustainable Use of Soils	The current proposals would appear to satisfy this policy, but if the design changes, this may not be the case.	
	Policy 26 Other Developments Requiring Importation of Materials	If the proposal satisfies Policy 7, this policy will be adequately addressed.	
<p>Cambridgeshire Green Infrastructure Strategy, Cambridgeshire Horizons / Cambridgeshire County Council (June 2011)</p>	<ul style="list-style-type: none"> • To reverse the decline in biodiversity • To mitigate and adapt to climate change • To promote sustainable growth and economic development • To support healthy living and well-being <p>4.4.5 – Target Area 3.2: St Neots “Rights of Way: the Rights of Way network needs to be improved, particularly the links to the west (over the A1) and the south east (under the A428). The Ouse Valley Way links St Neots to Bedford and Huntingdon, but it is only available for walkers. There is a pressing need to develop safe cycling routes in the area.”</p> <p><u>Biodiversity</u></p> <ol style="list-style-type: none"> 1. Creating ‘bigger, better and joined-up’ networks of biodiversity, that connect and enlarge habitats and provide landscape-scale conservation initiatives that create and support healthy ecosystems. 2. Larger and better connected habitats have greater resilience against chance events and the impacts of climate change. 3. Protection and enhancement of existing habitats. 4. Enhanced landscapes which provide benefits for public access, health, well-being and education. 5. Environmental Stewardship Schemes offer a way to enhance habitat networks e.g. through grants to provide linear features to connect habitats <p><u>Climate Change</u></p> <ol style="list-style-type: none"> 1. Green Infrastructure can help ensure that the release of carbon is minimised and that carbon ‘sinks’ are created in areas where natural geography and land use allows enhanced carbon storage. 2. Changes in land use and/or management can increase or decrease the amount of carbon stored and also supply wood as fuel in appropriate locations supporting renewable energy generation locally. 3. Management and planning of green space, tree planting and the creation of wetlands can mitigate urban heat island effects and provide water storage, especially in densely built up areas such as Cambridge and larger market towns. 4. Maintaining Green Infrastructure assets, such as river corridors, encourages air flow into and through urban areas and woodland and helps to filter out air pollutants. 5. Green Infrastructure can reduce the impacts of flood risk through the restoration of natural flood plains along river valleys or the creation of sustainable drainage systems (SuDS) as part of development 	<p>The Cambridgeshire Green Infrastructure Strategy is designed to assist in shaping and co-ordinating the delivery of Green Infrastructure in the county, to provide social, environmental and economic benefits now and in the future.</p> <p>The A428 Black Cat to Caxton Gibbet Road Improvement scheme has been designed to avoid and minimise impacts and effects relating to GHG and climate change through the process of design-development and by embedding mitigation measures into the design of the Scheme. These include:</p> <ul style="list-style-type: none"> • Use of energy efficient road lighting; • Planting of trees; • Retention of existing highway infrastructure; • Inclusion of borrowpits within the scheme; • Reuse of materials generated from construction works; • Installation of highway equipment capable of withstanding high temperatures; • Incorporation of Sustainable Drainage Systems (SuDS); and • Implementation of emergency systems and response plans, including the identification of suitable network redundancies and diversion routes. <p>To reduce the impacts and effects of construction of the scheme, the following measures have been taken:</p> <ul style="list-style-type: none"> • Use of materials and plant with lower embedded GHG emissions and water consumption, using sustainably sourced materials, and using recycled or secondary materials; • Specification of energy efficient construction lighting and durable construction materials to reduce energy consumption; • Sustainable use of soil and aggregate materials won from excavation and demolition activities, where feasible, to minimise GHG emissions associated with the importation of materials to site and embodied carbon associated with additional materials; and • The identification, selection and use of construction materials with superior properties that offer increased tolerance of fluctuating temperatures associated with climate change. <p>Note that we have requested further detail on mitigation measures to reduce construction impacts as part of our Written Representation.</p>	

	<p>proposals, where possible. This is especially important in Cambridgeshire and supports the national strategy 'Making Space for Water, which proposes a whole catchment approach in order to take better account of the environmental and social consequences of flood risk.</p> <p><u>Water Management</u></p> <p>1. Reducing flood risk. The use of sustainable drainage systems (SuDS) as set out in the 2010 Flood and Water Management Act has many benefits. Appropriately design and positioned SuDS can reduce flood risk by capturing and storing rainfall and allowing it to evaporate or soak into the ground close to where it fell. They also provide benefits in terms of biodiversity, visual amenity, leisure and play within the open spaces and can contribute to the creation of a network of Green Infrastructure.</p> <p>2. Ensuring that opportunities are taken for co-ordinating work between Green Infrastructure and other water-related strategic and plans (including Catchment Flood Management Plans, Water Cycle Studies, Surface Water Management Plans) and any other studies, including work by Internal Drainage Boards (such as the Middle Level Commissioners) on flood risk and flood management.</p>	<p>The following Biodiversity mitigation is also included along with a Biodiversity Management Plan:</p> <ul style="list-style-type: none"> • Impact on important habitats (comprising woodland, grassland, hedgerow and ponds) have been avoided or reduced, where reasonably practicable; • the identification of measures that, wherever possible, provide a combined function of landscape integration and/or screening, and habitat creation and replacement, to mitigate effects on biodiversity interests; • Avoiding disturbance to breeding birds by not undertaking vegetation clearance and structure demolitions during the bird breeding season (March to August inclusive); • The retention of all mature trees and boundary features within the Order Limits that are outside the limits of the permanent works of the Environmental Statement except where loss is required for the safe construction of the Scheme, including temporary works; and • The supervision of construction works by an Ecological Clerk of Works (ECoW) or a suitably qualified person, where these works have the potential to impact on protected species, designated sites or other important biodiversity features. <p><u>Enhancement Measures</u></p> <ul style="list-style-type: none"> • A number of enhancement measures have been incorporated into the design of the Scheme, which focus principally on the creation of areas of habitat in excess of those required to mitigate losses due to the Scheme. These include hedgerow, grassland and scrub habitat as well as new areas of woodland. • Aquatic and wetland habitats will also be created, including ponds, ephemeral wetland habitat, reedbeds and wet grassland. The areas created will be in excess of those needed to mitigate for the loss of ponds. Watercourses affected by the Scheme will be restored to a better condition than when assessed in baseline surveys to the extent that they will more than mitigate for the damage to these watercourses under the Scheme. 	
<p>Cambridgeshire's Local Flood Risk Management Strategy (2015)</p>	<ul style="list-style-type: none"> • Understanding flood risk in Cambridgeshire. • Managing the likelihood and impact of flooding. • Helping Cambridgeshire's citizens to understand and manage their own risk. • Ensuring appropriate development in Cambridgeshire. • Improving flood prediction, warning and post flood recovery. <p>"2.5.12 Well maintained coastal and fluvial flood defences, supporting an extensive drainage infrastructure are essential in promoting sustainable growth in the Fens. Housing, jobs, essential infrastructure (such as roads and railway lines) and services (such as utilities) that meet the needs of the market towns and the rural communities can only happen if drainage and flood risk is well managed."</p>	<p>The strategy sets out the roles and responsibilities of Flood Risk Management Partners within the County, highlighting the position of the County Council as the Lead Local Flood Authority under the Flood and Water Management Act 2010.</p> <p>A review of the A428 scheme has not identified any areas where the scheme contradicts the strategy's approach, and incorporates suitable mitigation in relation to any flood risk either to or from the A428 scheme.</p>	

Cambridgeshire Landscape Guidelines (1993)	<ul style="list-style-type: none"> • Mobilise care and action amongst the main bodies that play the most active role in generating tomorrow's landscapes. • Improve overall visual quality and strengthen the contrasts between landscapes in different parts of the County (emphasising a sense of place). • Integrate wildlife conservation into landscape action at all scales from planning at a county level, through site planning, design and management, to the detailing of "hard" and "soft" features at the smallest scale. • Protect and enhance historic features. • Conserve existing features and create landmarks and 'personality' in the landscape. 	The proposals for the A428 have included landscape mitigations which improve the visual envelope of the new carriageway but some aspects such as wildlife habitat improvements, lighting proposals and green infrastructure connectivity could be improved.	
Cambridgeshire Rights of Way Improvement Plan (2016 Update) ¹³	Improvement and enhancement of Public Rights of Way.	There is limited improvement and enhancement of Public Rights of Way.	

District Policies

	Relevant Policies	Comment	Compliance with Plan / Policy
South Cambridgeshire			
South Cambridgeshire Local Plan 2018, South Cambridgeshire District Council (September 2018)	S/3 Presumption in Favour of Sustainable Development "1. When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals that accord with the Local Plan and Neighbourhood Plans can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area unless material considerations indicate otherwise."	The A428 scheme will support the economic success of the area, by facilitating economic and residential development, and will maintain the high quality of life and attractiveness of the area in which to live, work and play.	
	S/6 The Development Strategy to 2031 "3. The following 3 new strategic scale allocations are proposed for housing-led development with associated employment and supporting services and facilities to meet the majority of the additional development needs to 2031 and beyond: d. A new town north of Waterbeach for 8,000 to 9,000 homes; e. A new village based on Bourn Airfield for 3,500 homes; f. A major expansion of Cambourne for a fourth linked village of 1,200 homes, all of which by 2031."	The A428 scheme will assist with connections to and from the strategic allocations at Bourn Airfield and Cambourne.	

¹³ [Local Transport Plan \(LTP\) - Cambridgeshire County Council](#) – link to ROWIP is on this webpage as well

	<p>S/8 Rural Centres</p> <p>“The following villages are identified as Rural Centres: a. Cambourne b. Cottenham c. Great Shelford and Stapleford d. Histon and Impington e. Sawston</p> <p>2. Development and redevelopment without any limit on individual scheme size will be permitted within the development frameworks of Rural Centres, as defined on the Policies Map, provided that adequate services, facilities and infrastructure are available or can be made available as a result of the development. ”</p>	<p>The A428 scheme will assist in ensuring adequate infrastructure is available in Cambourne.</p>	
	<p>SS/7 New Village at Bourn Airfield</p> <p>“1. Land south of the A428 based on Bourn Airfield is allocated for the development of a new village of approximately 3,500 dwellings. A Supplementary Planning Document (SPD) will be prepared for the new village as addressed at subsection 15 of this policy. The final number of dwellings will be determined through a design-led approach and spatial framework diagram included in the SPD. It will be classified as a Rural Centre once built.”</p> <p>“8. The new village will be founded on a comprehensive movement network for the whole village, that connects key locations including the village centre and schools to encourage the use of sustainable modes of travel and includes:</p> <p>... c. Highway Improvements including: i. Include measures to mitigate the traffic impact of the new village on surrounding villages and roads; ii. Provide convenient vehicular access, with at least two separate access points to the north west and north east of the site; iii. Ensure that there will be no direct vehicular access to the Broadway for southbound traffic from the new village (except buses and bicycles).”</p>	<p>The A428 scheme will assist with connections to and from the west of the proposed new village.</p>	
	<p>SS/8 Cambourne West</p> <p>“1. Land shown on the Policies Map south of the A428, north west of Lower Cambourne, including an area within the current Business Park is allocated for the development of a sustainable, fourth linked village to Cambourne of approximately 1,200 dwellings by 2031 with high levels of green infrastructure...”</p> <p>“3. A Landscape Strategy must be submitted for approval by the Local Planning Authority as part of the first application for planning permission, and include the provision of a high quality landscaped setting around the boundary of the settlement to avoid it appearing as part of a ribbon of development south of the A428, to protect the rural character of the A1198, to mitigate the impact on Caxton village and</p>	<p>The A428 scheme will assist with connections to and from the west of the proposed new village.</p>	

	<p>provide appropriate open space between the new village and Lower Cambourne...”</p> <p>“12. Development will provide for the additional travel demands generated. Coordination will be required with other developments on the A428 corridor to deliver the necessary improvements. The development will need to address, but is not limited to, the following (subject to detailed strategy development and to the transport assessment of development proposals):</p> <p>...</p> <p>d. The impact of the proposals on the junctions of the A428 with the A1303 and the A1198 will be assessed in detail and contributions towards or direct funding of improvements to the junctions may be required;”</p>		
	<p>CC/1 Mitigation and Adaptation to Climate Change</p> <p>“Planning permission will only be granted for proposals that demonstrate and embed the principles of climate change mitigation and adaptation into the development. Applicants must submit a Sustainability Statement to demonstrate how these principles have been embedded into the development proposal. The level of information provided in the Sustainability Statement should be proportionate to the scale and nature of the proposed development.”</p>	<p>The A428 scheme incorporates measures for the mitigation of climate change, although we have requested further detail on mitigation measures as part of our Written Representation (REP1-048).</p>	
	<p>CC/6 Construction Methods</p> <p>“1. Development which by its nature or extent is likely to have some adverse impact on the local environment and amenity during construction and/or generate construction waste must:</p> <p>a. Carefully manage materials already on-site (including soils), or brought to the site, to reduce the amount of waste produced and maximise the reuse or recycling of materials either onsite or locally. Any construction spoil reused within the development should take account of the landscape character and avoid the creation of features alien to the topography;</p> <p>b. Ensure that constructors are considerate to neighbouring occupiers by restricting the hours of noisy operations and by locating storage compounds and using plant or machinery to avoid noise, smells, dust, visual or other adverse impacts.</p> <p>2. Where practicable, construction traffic will be required to be routed to avoid roads passing through villages.</p> <p>3. Any temporary haul roads must:</p> <p>c. Be agreed with the Local Planning Authority;</p> <p>d. Be located, designed and landscaped in such a way as to avoid any adverse impacts on existing residents and businesses;</p> <p>e. Have an agreed methodology for where they cross public rights of way; and</p> <p>f. Include provision for the cleaning of vehicle tyres to avoid the deposition of mud / debris on the public highway and the generation of dust.</p>	<p>Although some details have been provided in respect of construction management of the scheme, more details will be required as set out in the joint written representations of the Cambridgeshire Authorities.</p>	

	<p>4. Applicants must submit supporting documents with any planning application to demonstrate how their development will comply with this policy; this should include a Construction Environmental Management Plan (CEMP) or similar document and may include registration with the Considerate Constructors Scheme. The level of information provided in the supporting documents, including CEMP or similar document, should be proportionate to the scale and nature of the proposed development. “</p>		
	<p>CC/7 Water Quality</p> <p>“1. In order to protect and enhance water quality, all development proposals must demonstrate that:</p> <p>b. The quality of ground, surface or water bodies will not be harmed, and opportunities have been explored and taken for improvements to water quality, including renaturalisation of river morphology, and ecology;</p> <p>c. Appropriate consideration is given to sources of pollution, and appropriate Sustainable Drainage Systems (SuDS) measures incorporated to protect water quality from polluted surface water runoff.”</p>	<p>Although some details have been provided in respect of drainage, further clarity has been requested in respect of risks around the safe management of sediment and hazardous pollutants during construction which is considered high. The First Iteration Environmental Management Plan covers parts of the mitigation, however this appears to be more around the monitoring of the water bodies and watercourses. It is noted that this will likely be considered in more detail later on, however, there must be a plan for controlling sediment loads,</p>	
	<p>CC/8 Sustainable Drainage Systems</p> <p>“Development proposals must incorporate appropriate sustainable surface water drainage systems (SuDS) appropriate to the nature of the site. Development proposals will be required to demonstrate that:</p> <p>a. Surface water drainage schemes comply with the Sustainable Drainage Systems: Non-statutory technical standards for sustainable drainage systems and the Cambridgeshire Flood and Water Supplementary Planning Document or successor documents;</p> <p>b. Opportunities have been taken to integrate sustainable drainage with the development, create amenity, enhance biodiversity, and contribute to a network of green (and blue) open space;</p> <p>c. Surface water is managed close to its source and on the surface where it practicable to do so;</p> <p>d. Maximum use has been made of low land take drainage measures, such as rain water recycling, green roofs, permeable surfaces and water butts;</p> <p>e. Appropriate pollution control measures have been incorporated, including multiple component treatment trains; and</p> <p>f. Arrangements have been established for the whole life management and maintenance of surface water drainage systems”</p>	<p>The attenuation basins proposed within the scheme are integral to the design. They promote the use of SuDS to manage surface water from the site and are used for the treatment of the surface water before this discharges into the wider watercourse network.</p>	
	<p>CC/9 Managing Flood Risk</p> <p>“1. In order to minimise flood risk, development will only be permitted where: [...]</p>	<p>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</p>	

	<p>c. Suitable flood protection / mitigation measures are incorporated as appropriate to the level and nature of flood risk, which can be satisfactorily implemented to ensure safe occupation, access and egress. Management and maintenance plans will be required, including arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime;</p> <p>d. There would be no increase to flood risk elsewhere, and opportunities to reduce flood risk elsewhere have been explored and taken (where appropriate), including limiting discharge of surface water (post development volume and peak rate) to natural greenfield rates or lower, and</p> <p>2. Site specific Flood Risk Assessments (FRAs) appropriate to the scale and nature of the development and the risks involved, and which takes account of future climate change, will be required for the following:</p> <p>f. Development proposals over 1ha in size;</p> <p>g. Any other development proposals in flood zones 2 and 3;</p> <p>h. Any other development proposals in flood zone 1 where evidence, in particular the Strategic Flood Risk Assessment or Surface Water Management Plans, indicates there are records of historic flooding or other sources of flooding, and/or a need for more detailed analysis</p>	<p>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.</p>	
<p>HQ/1 Design Principles</p>	<p>“All new development must be of high quality design, with a clear vision as to the positive contribution the development will make to its local and wider context.”</p>	<p>The A428 scheme incorporates various measures for design and mitigation required under the policy. However, the measures employed only seem to be based on Highway England’s Design Manual for Roads and Bridges and not local design principles as set out in policy HQ/1.</p>	
<p>NH/2 Protecting and enhancing Landscape Character</p>	<p>“Development will only be permitted where it respects and retains, or enhances the local character and distinctiveness of the local landscape and of the individual National Character Area in which it is located.”</p>	<p>The loss of hedgerows within the project limits has been identified in the Biodiversity Net Gain calculations. Without additional mitigation planting, the loss will have a negative impact on wildlife, biodiversity and general landscape character as hedges are a prominent feature of all Clayland character areas.</p> <p>The imposition of large, engineered bridges, roundabouts, embankments, roadways and lighting columns into the rural landscape of the new route alignment will be a dramatic change for the very rural landscape into which it they are being placed causing. During the operational phase of the scheme the impact is generally irreversible and at odds with the scale, appearance and cultural aspects of the landscape and adversely affecting historic landscape patterns and visual amenity. All these impacts will likely be reduced as mitigation planting matures, but will not remove it entirely.</p>	
<p>NH/3 Protecting Agricultural Land</p>		<p>The construction of a new A-road has a significant land take which is permanent in nature. Large areas of agricultural land will be taken out of use permanently. This will dramatically alter the</p>	

	<p>“1. Planning permission will not be granted for development which would lead to the irreversible loss of Grades 1, 2 or 3a agricultural land unless:</p> <p>a. Land is allocated for development in the Local Plan;</p> <p>b. Sustainability considerations and the need for the development are sufficient to override the need to protect the agricultural value of the land.</p> <p>2. Uses not involving substantial built development but which take agricultural land will be regarded as permanent unless restricted specifically by condition.</p> <p>3. When considering proposals for the change of use or diversification of farmland, particular consideration shall be given to the potential for impact upon Priority Species and Habitats1 .</p> <p>1 Priority Species and Habitats are those that are identified within a Biodiversity Action Plan (BAP) and / or the Natural Environment and Rural Communities Act, 2006, Section 41.”</p>	<p>landscape character of these areas. This has been identified as adverse within the provided reports and mitigation will be through the extensive use of planting. The existing A428 is not going to be removed but will be detrunked and returned to the Local Highway Authority for management and maintenance. Ultimately, there is no mitigation for the loss of agricultural land.</p>	
	<p>NH/4 Biodiversity</p> <p>“2. New development must aim to maintain, enhance, restore or add to biodiversity. Opportunities should be taken to achieve positive gain through the form and design of development. Measures may include creating, enhancing and managing wildlife habitats and networks, and natural landscape. The built environment should be viewed as an opportunity to fully integrate biodiversity within new development through innovation. Priority for habitat creation should be given to sites which assist in the achievement of targets in the Biodiversity Action Plans (BAPs) and aid delivery of the Cambridgeshire Green Infrastructure Strategy.</p> <p>3. If significant harm to the population or conservation status of a Protected Species, Priority Species1 or Priority Habitat resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission will be refused.</p> <p>4. Where there are grounds to believe that a proposal may affect a Protected Species, Priority Species or Priority Habitat, applicants will be expected to provide an adequate level of survey information and site assessment to establish the extent of a potential impact. This survey information and site assessment shall be provided prior to the determination of an application.</p> <p>6. Planning permission will be refused for development resulting in the loss, deterioration or fragmentation of irreplaceable habitats, such as ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.</p> <p>7. Climate change poses a serious threat to biodiversity and initiatives to reduce its impact need to be considered. “</p>	<p>The scheme has missed opportunities to create biodiversity rich habitats characteristic of the local area, which would therefore be more resilient to climate change. The scheme is likely to result in a net loss of biodiversity value if calculated using the DEFRA metric rather than a bespoke model.</p> <p>In particular, the scheme has failed to develop mitigation strategies for Priority (BAP) habitats such as arable field margins, hedgerows and woodland or to create new wildlife ponds, with associated adverse impact on farmland birds (Priority species). There will be fragmentation of hedgerows resulting in loss of connectivity of the networks used by bats, small mammals and invertebrates; and the loss of breeding ponds and connected terrestrial habitat will adversely impact great crested newt populations</p> <p>The lack of survey information for arable field margins, watercourses and lowland meadows means that the scheme cannot be fully assessed for its impact on these Priority habitats.</p> <p>Potential harm to the conservation status of the barbastelle bat population of Eversden and Wimpole SAC and SSSI is still under consideration, with the results of further bat surveys agreed between the Applicant and Natural England awaited.</p>	
	<p>NH/6 Green Infrastructure</p>	<p>The proposed route of the A428 will further fragment the existing fabric of landscape, hedgerows, footpaths, and other natural and man-made systems. While some areas are being mitigated</p>	

	<p>“1. The Council will aim to conserve and enhance green infrastructure within the district. Proposals that cause loss or harm to this network will not be permitted unless the need for and benefits of the development demonstrably and substantially outweigh any adverse impacts on the district’s green infrastructure network.</p> <p>2. The Council will encourage proposals which: a. Reinforce, link, buffer and create new green infrastructure; and b. Promote, manage and interpret green infrastructure and enhance public enjoyment of it.</p> <p>3. The Council will support proposals which deliver the strategic green infrastructure network and priorities set out in the Cambridgeshire Green Infrastructure Strategy, and which deliver local green infrastructure.</p> <p>4. All new developments will be required to contribute towards the enhancement of the green infrastructure network within the district. These contributions will include the establishment, enhancement and the on-going management costs.”</p>	<p>through the provision of new planting, drainage features and footpaths/bridlepaths, there is little in the way of new features which aid in improving linkages north and south of the new carriageway, particularly for wildlife and sustainable transport. However, part one of the policy does allow for some adverse impacts on the GI network so long as the ‘need for and benefits of the development demonstrably and substantially outweigh any adverse impacts..’</p>	
	<p>NH/7 Ancient Woodlands and Veteran Trees</p> <p>1. Planning permission will be refused for development resulting in the loss or deterioration of ancient woodland (as shown on the Policies Map) or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.</p> <p>2. Development proposals affecting ancient woodland or veteran trees will be expected to mitigate any adverse impacts, and to contribute to the woodland’s or veteran tree’s management and further enhancement via planning conditions or planning obligations.</p>	<p>A single veteran English Elm tree (irreplaceable habitat) of county importance is located within a landscape area. No evidence has been provided to demonstrate the assumption that the tree will not be impacted during (landscape) construction works.</p> <p>The lack of elm within the planting scheme is a missed opportunity to future-proof the veteran tree habitat.</p>	
	<p>NH/14: Heritage Assets. Development proposals will be supported when they sustain and enhance the significance of heritage assets, including their settings, as appropriate to their significance and in accordance with the National Planning Policy Framework, particularly:</p> <p>c. Designated heritage assets, i.e. listed buildings, conservation areas, scheduled monuments, registered parks and gardens;</p> <p>e. The wider historic landscape of South Cambridgeshire including landscape and settlement patterns;</p> <p>h. Archaeological remains of all periods from the earliest human habitation to modern times.</p>	<p>The Archaeological Mitigation Strategy is not fully compliant with policy NH/14 part h) (APP-238) as it is too selective in its investigative approach and risks the loss of parts of the archaeological resource by exclusion.</p>	
	<p>SC/2 Health Impact Assessment</p> <p>“New development will have a positive impact on the health and wellbeing of new and existing residents.”</p>	<p>There is a potential for poor communication between construction and local residents leading to increased stress and poor mental health (as experienced with A14 upgrade).</p> <p>A robust community communications plan must be in place</p>	
	<p>SC/9 Lighting Proposals</p> <p>“1. Development proposals which include new external lighting will only be permitted where it can be demonstrated that:</p> <p>a. The proposed lighting scheme and levels are the minimum required for reasons of public safety, crime prevention / security, and living, working and recreational purposes;</p>	<p>The imposition of lighting columns into the rural landscape of the new route alignment will be a dramatic change for the very rural landscape into which it they are being placed causing.</p> <p>The local authorities reiterate their view that further detail is required on the Applicant’s lighting proposals so that (i) the County</p>	

	<p>b. Light spillage and glare are minimised; c. There is no unacceptable adverse impact on the local amenity of neighbouring or nearby properties, or on the surrounding countryside; d. There is no dazzling or distraction to road users including cyclists, equestrians and pedestrians; e. Road and footway lighting meets the County Council's adopted standards. 2. Proposed development that is adversely affected by existing artificial lighting outside the development site will not be permitted unless any significant impact can be mitigated to an acceptable level. "</p>	<p>Council can be sure that the lighting of road assets to be maintained by the County Council meet the relevant standards; and (ii) a view can be reached of the impacts of the scheme on protected bat species.</p>	
	<p>SC/10 Noise Pollution "1. Planning permission will not be granted for development which: a. Has an unacceptable adverse impact on the indoor and outdoor acoustic environment of existing or planned development; b. Has an unacceptable adverse impact on countryside areas of tranquillity which are important for wildlife and countryside recreation; c. Would be subject to unacceptable noise levels from existing noise sources, both ambient levels and having regard to noise characteristics such as impulses whether irregular or tonal. [...] 4. The Council will seek to ensure that noise from proposed commercial, industrial, recreational or transport use does not cause any significant increase in the background noise level at nearby existing noise sensitive premises which includes dwellings, hospitals, residential institutions, nursing homes, hotels, guesthouses, and schools and other educational establishments. "</p>	<p>The local authorities' review of the Chapter 11 of the Environmental Statement (APP-080) indicates predicted noise levels slightly underestimate the noise levels actually measured, but overall, the comparisons between measured and predicted noise levels provide confidence that the noise model developed to estimate the traffic noise impacts of the Scheme is a reasonable approximation. The noise assessment in Chapter 8 sets out the noise impacts of the scheme for the local area. Whilst there are a few receptors that would suffer a significant adverse impact, due to the location of the proposed development in a predominantly rural location, on balance these impacts are considered to be acceptable.</p>	
	<p>SC/11 Contaminated Land "Where development is proposed on contaminated land or land suspected of being impacted by contaminants the Council will require developers to include an assessment of the extent of contamination and any possible risks. Proposals will only be permitted where land is, or can be made, suitable for the proposed use. "</p>	<p>This is covered in the minerals and waste section.</p>	
	<p>SC/12 Air Quality "1. Where development proposals would be subject to unacceptable air quality standards or would have an unacceptable impact on air quality standards they will be refused. 2. Where emissions from the proposed development are prescribed by EU limit values or national objectives, the applicant will need to assess the impact on local air quality by undertaking an appropriate air quality assessment and detailed modelling exercise having regard to guidance current at the time of the application to show that the national objectives will still be achieved. 3. Development will not be permitted where it would adversely affect air quality in an Air Quality Management Area (AQMA); or lead to the declaration of a new AQMA through causing a significant deterioration in local air quality by increasing pollutant levels either directly or</p>	<p>The general air quality/dust mitigation measures proposed within the First Iteration Environmental Management Plan (EMP) are appropriate, but will require confirmation through review and agreement of the Second Iteration EMP which it is advised should be submitted and agreed in writing with the LPA's prior to construction works commencing.</p>	

	<p>indirectly; or if it would expose future occupiers to unacceptable pollutant levels.</p> <p>4. Larger development proposals that require a Transport Assessment and a Travel Plan as set out in Policy TI/2 will be required to produce a site based Low Emission Strategy. This will be a condition of any planning permission given for any proposed development which may result in the deterioration of local air quality and will be required to ensure the implementation of suitable mitigation measures.</p> <p>5. Development will be permitted where:</p> <p>a. It can be demonstrated that it does not lead to significant adverse effects on health, the environment or amenity from emissions to air; or</p> <p>b. Where a development is a sensitive end use, that there will not be any significant adverse effects on health, the environment or amenity arising from existing poor air quality.</p> <p>6. Specifically applicants must demonstrate that:</p> <p>c. There is no adverse effect on air quality in an Air Quality Management Area (AQMA) from the development;</p> <p>d. Pollution levels within the AQMA will not have a significant adverse effect on the proposed use / users;</p> <p>e. The development will not lead to the declaration of a new AQMA;</p> <p>f. The development will not interfere with the implementation of and should be consistent with the current Air Quality Action Plan;</p> <p>g. The development will not lead to an increase in emissions, degradation of air quality or increase in exposure to pollutants at or above the health based air quality objective;</p> <p>h. Any impacts on the proposed use from existing poor air quality, are appropriately mitigated;</p> <p>i. The development promotes sustainable transport measures and use of low emission vehicles in order to reduce the air quality impacts of vehicles.</p> <p>7. Applicants shall, where appropriate, prepare and submit with their application, a relevant assessment, taking into account guidance current at the time of the application. “</p>		
	<p>SC/14 Odour and other fugitive emissions to air</p> <p>“1. Development likely to generate malodours and emissions to air such as dust, fumes, smoke, heat, radiation, gases, steam or other forms of pollution will only be permitted where it can be demonstrated that it will not have significant adverse effects on:</p> <p>a. Health;</p> <p>b. The amenity of existing or proposed sensitive end users;</p> <p>c. The wider environment.</p> <p>2. In appropriate circumstances an odour or other emissions to air impact assessment may be required to be submitted. “</p>	<p>The general air quality/dust mitigation measures proposed within the First Iteration Environmental Management Plan (EMP) are appropriate, but will require confirmation through review and agreement of the Second Iteration EMP.</p>	
Huntingdonshire			
	<p>LP1 Amount of Development</p>	<p>Improvements to key transport infrastructure such as the A428 are critical to support economic growth. Locations close to economic</p>	

<p>Huntingdonshire Local Plan to 2036, Huntingdonshire District Council (May 2019)</p>	<p>“Amount of development In Huntingdonshire in the period 2011-2036 provision will be made for: at least 20,100 new homes (both market and affordable), and approximately 14,400 additional jobs”</p>	<p>success of Cambridge forms opportunities for providing complementary yet distinctive sector specialisms, supply chains and business accommodation.</p>	
	<p>LP2 Strategy for Development <u>“Strategy for Development</u> The development strategy for Huntingdonshire is to: Concentrate development in locations which provide, or have the potential to provide, the most comprehensive range of services and facilities;</p> <ul style="list-style-type: none"> • Direct substantial new development to two strategic expansion locations of sufficient scale to form successful, functioning new communities; • Provide opportunities for communities to achieve local development aspirations for housing, employment, commercial or community related schemes; • Support a thriving rural economy; • Protect the character of existing settlements and recognise the intrinsic character and beauty of the surrounding countryside; • Conserve and enhance the historic environment; and • Provide complementary green infrastructure enhancement and provision to balance recreational and biodiversity needs and to support climate change adaptation. <p><u>Distribution of Growth</u> Four spatial planning areas are designated reflecting their status as the district's traditional market towns and most sustainable centres. These are centred around:</p> <ul style="list-style-type: none"> • Huntingdon including Brampton and Godmanchester and the strategic expansion location of Alconbury Weald • St Neots including Little Paxton and the strategic expansion location of St Neots East • St Ives • Ramsey including Bury. <p>Approximately three quarters of the objectively assessed need for housing and the majority of employment and retail growth will be focused in the spatial planning areas</p>	<p>The A428 scheme will support the vitality and viability of the Spatial Planning Area of St Neots and the Strategic Expansion Location of St Neots East (SEL 2). Spatial Planning Areas are to account for three quarters of the objectively assessed need for housing and the majority of employment and retail growth.</p>	
	<p>LP3 Green Infrastructure</p> <p>“A proposal will be expected to support green infrastructure and will therefore be supported where it demonstrates that it:</p> <p>c. is consistent with the objectives of the Cambridgeshire Green Infrastructure Strategy (2011) or successor documents;”</p> <p>d. Improves accessibility, naturalness and connectivity of green spaces, assisting in achieving Natural England’s Accessible Natural Green Space Standards.</p> <p>Great Ouse Valley</p>	<p>The Cambridgeshire Green Infrastructure Strategy identifies St Neots as a target area for the delivery of strategic green infrastructure objectives.</p> <p>The strategy identifies the role of the local river network in flood mitigation and providing riverine habitats, and recognises the opportunity to deliver biodiversity enhancements to the River Ouse tributaries Hen Brook and Fox Brook, both of which run through the DCO area. It specifically identifies the following environmental opportunities which are relevant to the DCO:</p>	

	<p>A proposal within the Ouse Valley Landscape Character Area, defined in the Huntingdonshire Landscape and Townscape Assessment Supplementary Planning Document will be supported where it contributes to the landscape, wildlife, cultural and historical value of the area.</p>	<ul style="list-style-type: none"> • The creation of wet woodland and wet meadow along the River Great Ouse and its tributaries for biodiversity • The creation of wetlands within flood storage features to help mitigate the effects of climate change • The highest priority in landscape terms is the restoration of wildflower rich meadows. <p>It is also felt that the areas around attenuation lagoons, particularly around the St Neots Fringe, do not currently make the most of the above opportunities. Whilst it is predicted there will be a net gain in species rich grassland, disagreements remain over the composition and locations of the grassland. Without additional mitigation planting, the loss will have a negative impact on wildlife, biodiversity and general landscape character as hedges are a prominent feature of all Clayland character areas. The impact of temporary extraction may have an effect on local wildlife which cannot be addressed until specific details such as hours of working and routing of vehicles have been established.</p> <p>Several attenuation basins are proposed within the area surrounding Hen Brook. The Environmental Master Plan [APP-091] suggests that the basins themselves will be planted with Marsh and Wet Grassland, but the First Iteration Environmental Management Plan [APP-234] Annex L, section 1.10 Landscape Element Types, does not detail what the species composition of the basins might be.</p> <p>The basins are then surrounded by amenity grassland which is relatively devoid of biodiversity value, missing the opportunity to create both new wetland habitat, as well as species rich grassland within the Cambridgeshire Green Infrastructure Strategy target area objectives, and it is considered that more could be done to help reach the aims of this policy.</p> <p>Criterion d of the policy requires that accessibility is improved including the naturalness and connectivity of green spaces. Outstanding unresolved issues regarding the DCO include:</p> <ul style="list-style-type: none"> • New and improved existing links to create opportunities for local people to commute from A to B on safe NMUs and provide opportunities to improve pedestrian, cycle and horse-riding experience have not been provided fully • Permanent intrusion into the rural nature of the affected PROW be affected by proximity to a high speed dual carriage way. • The Environmental statement Table 7-6 lists that during year 15 of operation there will be a moderate-adverse (significant) of the road - LLCA 11: Wintringham and Weald 	
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		Clay Farmland in Cambridgeshire. This may dissuade some users from using paths with impact on health and well-being	
	<p>LP5 Flood Risk</p> <p>“A proposal will only be supported where all forms of flood risk, including breaches of flood defences or other defence failures, have been addressed, as detailed in the National Planning Practice Guidance and with reference to the Cambridgeshire Flood and Water Supplementary Planning Document (SPD),”</p> <p>d. all reasonable opportunities to reduce overall flood risk have been considered and where possible taken;</p> <p>Paragraph 4.69 The district is projected to have increased susceptibility to future climate impacts beyond the plan period. During the lifetime of most developments, the effectiveness of flood and surface water management assets is expected to reduce.</p> <p>Paragraph 4.70 Opportunities for developments to reduce flood risk in Huntingdonshire will vary depending on the site location and the nature of development. Flood risk assessments will be expected to show how the following potential opportunities have been explored: additional surface water attenuation through SuDS and rainwater harvesting; additional multifunctional flood storage or conveyance capacity within planned open space, or setting aside green space that could be used for water storage in the future; contacting local flood risk management authorities to explore the possibility of working in partnership to enhance flood risk management to and from the site; improving the sustainability of flood reduction assets that the development may rely upon at present, or in the future.</p>	<p>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</p> <p>Further concerns include:</p> <ul style="list-style-type: none"> • The varied responses to climate change allowances for watercourse mitigation measures • Failure to reduce flood depth at Hen Brook • The downstream flooding impacts on Wintringham Brook Tributary • Water quality impacts at Wintringham Brook and Hen Brook <p>All of which do not address policy LP 5 with regard to reducing overall flood risk and how flood risk management is enhanced ,improving the sustainability of flood reduction assets that the development may rely upon at present, or in the future (paragraph 4.70. 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.</p>	
	<p>LP7 Spatial Planning Areas</p>	<p>The A428 scheme will support the vitality and viability of the Spatial Planning Area of St Neots and the Strategic Expansion Location of St Neots East (SEL 2). Spatial Planning Areas are to account for three quarters of the objectively assessed need for housing and the majority of employment and retail growth.</p>	
	<p>LP 10 The Countryside</p> <p>“Development in the countryside will be restricted to the limited and specific opportunities as provided for in other policies of this plan. All development in the countryside must:</p>	<p>The construction of a new A-road has a significant land take which is permanent in nature. Large areas of agricultural land will be taken out of use permanently. This will dramatically alter the landscape character of these areas. This has been identified as adverse within the provided reports and mitigation will be through the extensive use of planting. The existing A428 is not going to be</p>	

	<p>a. seek to use land of lower agricultural value in preference to land of higher agricultural value: i. avoiding the irreversible loss of the best and most versatile agricultural land (Grade 1 to 3a) where possible, and ii. avoiding Grade 1 agricultural land unless there are exceptional circumstances where the benefits of the proposal significantly outweigh the loss of land; b. recognise the intrinsic character and beauty of the countryside; and c. not give rise to noise, odour, obtrusive light or other impacts that would adversely affect the use and enjoyment of the countryside by others. “</p>	<p>removed but will be detrunked and returned to the Local Highway Authority for management and maintenance. Ultimately, there is no mitigation for the loss of agricultural land</p>	
	<p>LP11 Design Context</p> <p>“A proposal will be supported where it is demonstrated that it responds positively to its context and has drawn inspiration from the key characteristics of its surroundings, including natural, historic and built environment, to help create distinctive, high quality and well designed places. In order to achieve this a proposal will need to have applied the guidance contained in the Huntingdonshire Design Guide SPD (2017), the Huntingdonshire Landscape and Townscape Assessment SPD (2007) or successor documents and applicable conservation area character statements. A proposal should also have had regard to relevant advice or guidance that promotes high quality design, details the quality or character of the area or describes how the area should develop in the future”</p>	<p>The Landscape and Visual Impact Assessment (LVIA) draws upon national and district landscape assessments to identify key landscape character areas within the application area and its setting. It is however considered that the LVIA does not adequately consider the “key issues” as identified within the Huntingdonshire Landscape and Townscape Assessment SPD (2007), such as the “<i>protection of tall hedgerows with hedgerow trees which are a distinctive feature of the central area</i>” and “<i>planting of tree and woodland belts along major roads to screen visually intrusive development particularly to the edges of the main settlements...</i>” Whilst trees may not currently be a part of the wider landscape in some areas surrounding St Neots, it has been identified that this is currently a fragmented and degraded landscape – there has been loss of hedgerows through agricultural pressures and the introduction of intrusive development. This has led to a landscape that has lost its sense of intimacy and tranquillity. In order to support the aims of this policy the proposals should seek to contribute to the repair of the landscape, rather than draw on its lack of enclosure as a defining character going forward.</p>	
	<p>LP12 Design Implementation</p> <p>“New development and advertisements will be expected to be well designed based upon a thorough understanding of constraints and appraisal of the site's context, delivering attractive, usable and long lasting buildings and spaces... f. promotes accessibility and permeability for all by creating safe and welcoming places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport; g. provides recognisable and understandable places, routes and points of reference; “</p>	<p>Very little information is currently provided on the design of infrastructure features, such as bridges, signage, gantries etc, therefore the policy is currently not supported by the proposals. In order to achieve this, the proposed infrastructure should be of high design quality, be sensitive to the host landscape, and provide beautiful tranquil routes for pedestrians and cyclist around and across the proposed highway corridor. Species mixes should also vary across different locations within the scheme (i.e. wet woodland and core woodland, and variation in the species of trees planted within hedgerows) to help create identifiable landscapes.</p>	
	<p>LP14 Amenity</p> <p>“A proposal will be supported where a high standard of amenity is provided for all users and occupiers of the proposed development and maintained for users and occupiers of neighbouring land and buildings. A proposal will therefore be required to ensure:</p>	<p>There are a number of outstanding issues with the DCO that require resolving to enable policy compliance, these have been addressed in more detail in the main body of the Local Impact Report and include:</p> <ul style="list-style-type: none"> • Temporary off-site impacts particularly in relation to noise, dust and light from on-site and transportation activities. 	

	<p>a. adequate availability of daylight and sunlight for the proposed use, minimising the effects of overshadowing and the need for artificial light;</p> <p>b. the physical relationships arising from the design and separation of buildings are not oppressive or overbearing, and in particular will not result in overlooking causing loss of privacy;</p> <p>c. that predicted adverse noise impacts, including internal and external levels, timing, duration and character, will be acceptable;</p> <p>d. that predicted adverse impacts from the following sources will be made acceptable:</p> <ul style="list-style-type: none"> i. obtrusive light; ii. contamination; iii. air pollution; iv. water pollution; v. odour; vi. dust; and vii. overheating <p>e. adequate and accessible waste storage is provided, avoiding adverse impacts;</p> <p>f. the risk and perceived risk of crime is minimised, including through applying relevant guidance from Secured by Design;</p> <p>g. that all homes, businesses and main town centre uses are capable of being served by super-fast broadband through the integration of appropriate measures such as open access ducting to industry standards; and</p> <p>h. that there would be no adverse effect on safety near a notifiable installation and no increase in the number of people that would be put at risk in the vicinity of a notifiable installation.</p>	<ul style="list-style-type: none"> • The introduction of new highway infrastructure and traffic which will cause adverse effects on visual amenity and tranquillity to rural and agricultural landscapes and landscape character. • Off-site impacts from borrow pits, especially in relation to noise, dust and light. The effects of which cannot be determined until specific details are provided on restrictions applying to re-routed construction vehicles etc. • The imposition of large engineered bridges, roundabouts, embankments, roadways and lighting columns into the rural landscape of the new route alignment will be a dramatic change for the very rural landscape into which it they are being placed. During the operational phase of the scheme the impact is generally irreversible and at odds with the scale, appearance and cultural aspects of the landscape and adversely affecting historic landscape patterns and visual amenity. All these impacts will likely be reduced as mitigation planting matures, but will not remove it entirely. Further detail is provided in Chapter 8. • The general air quality/dust mitigation measures proposed within the First Iteration Environmental Management Plan (EMP) are appropriate, but will require confirmation through review and agreement of the Second Iteration EMP which it is advised should be submitted and agreed in writing with the LPA's prior to construction works commencing. • Potential Water quality impacts at Wintringham Brook and Hen Brook 	
	<p>LP15 Surface Water</p> <p>"A proposal will only be supported where surface water has been considered from the outset as an integral part of the design process and:</p> <ul style="list-style-type: none"> a. the proposal incorporates sustainable drainage systems (SuDS) in accordance with the Cambridgeshire Flood and Water Supplementary Planning Document (SPD) or successor documents and advice from Cambridgeshire County Council as Lead Local Flood Authority, unless demonstrated to be inappropriate; b. provisions are put in place to ensure that SuDS will be maintained; c. if the drainage system would directly or indirectly involve discharge to a watercourse that the Environment Agency are responsible for the details of the discharge have been agreed with them; d. if a road would be affected by the drainage system the details have been agreed with the relevant highway authority; e. if the drainage system would discharge water to systems controlled by the Middle Level Commissioners or an internal drainage board their standing advice or guidance has been taken into account and the details of the discharge have been agreed with them; 	<p>There are a number of outstanding issues with the DCO that require resolving to enable policy compliance, these have been addressed in more detail in the main body of the Local Impact Report and include:</p> <ul style="list-style-type: none"> • Opposition 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. The Preference for treatment is through SuDS • The proposals for the discharge from the different catchments across the scheme is to limit the runoff from the basins to the natural Greenfield runoff rates. However, 	

	<p>f. if the drainage system would directly or indirectly involve discharge to the River Great Ouse the incorporation of water retaining features as part of the drainage system has been prioritised; and g. there is no adverse impact on, or unacceptable risk to, the quantity or quality of water resources or on meeting the objectives of the Water Framework Directive and the Habitats Directive. “</p>	<p>the submitted reports indicate that where the rate is below 5 l/s then this should be defaulted to a minimum of 5 l/s. This could increase the discharge rates from certain catchments pretty drastically, increasing the peak volumes discharging from the basins into the surrounding watercourses, in turn increasing the risk of flooding to the downstream extents of the receiving watercourses. As this is upstream of large developments such as Wintringham Park and the wider St Neots area, this could increase the risk of flooding to existing and future properties There is a balance to meet around the discharge rates and risk of blockage, however the increased rates to 5 l/s is an outdated approach and this can be reduced further.</p> <ul style="list-style-type: none"> • Maintenance of the features has not been fully arranged. There needs to be a clear delineation between the adoption and ongoing maintenance body for the proposed surface water features. 	
	<p>LP16 Sustainable Travel</p> <p>“New development will be expected to contribute to an enhanced transport network that supports an increasing proportion of journeys being undertaken by sustainable travel modes, defined in the 'Glossary'. A proposal will therefore be supported where it is demonstrated that:</p> <ol style="list-style-type: none"> opportunities are maximised for the use of sustainable travel modes; its likely transport impacts have been assessed, and appropriate mitigation measures will be delivered, in accordance with National Planning Practice Guidance; safe physical access from the public highway can be achieved, including the rights of way network where appropriate 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; and there are no severe residual cumulative impacts. <p>Where a proposal would affect an existing public right of way or other formal non-motorised users' route, this route should be protected or enhanced within the proposed development. Where this is not possible it should be diverted to a safe, clear and convenient alternative route. The stopping up of paths/ routes will only be acceptable where all opportunities to provide a safe, clear and convenient alternative have been investigated and proved to be unsuitable.</p> <p>All routes will be provided to an adoptable standard and all pedestrian and cycle routes will be formalised as rights of way unless otherwise agreed with the Council and the Highways Authority. “</p>	<p>It is noted that the proposals seek to maintain the existing public rights of 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 below in relation to the specific points on each affected route. In addition, there is concern 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.</p> <p>In considering whether the A428 proposals meet Policy LP16 of the Local Plan, we have looked at each element of the policy in turn.</p> <p>a) opportunities are maximised for the use of sustainable travel modes</p> <p>It is noted that the proposals seek to maintain the existing public rights of 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 in this section 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.</p>	

		<p>b) its likely transport impacts have been assessed, and appropriate mitigation measures will be delivered, in accordance with National Planning Practice Guidance</p> <p>CCC, as Local Highway Authority, has assessed the submitted Transport Strategy and related documents. It is understood that 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; and 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.</p> <p>c) safe physical access from the public highway can be achieved, including the rights of way network where appropriate</p> <p>As noted above there are aspects of the scheme design that are cause for concern in relation to safe access of the public highway network, as detailed elsewhere in this joint response. The revisions set out will overcome these concerns and ensure that this aspect of LP Policy LP16 is complied with.</p> <p>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</p> <p>This is addressed elsewhere in this response and, as it stands, there is currently concern that the impacts have not been appropriately addressed.</p> <p>e) there are no severe residual cumulative impacts.</p> <p>The councils are concerned that the level of severity of residual cumulative impacts may be incorrectly assessed in the Environmental Statement and would urge the applicant to revisit this in light of other comments set out in this representation.</p>	
	<p>LP17 Parking Provision and Vehicle Movement</p> <p>“A proposal will be supported where it incorporates appropriate space for vehicle movements, facilitates accessibility for service and emergency vehicles and incorporates adequate parking for vehicles and cycles”</p>	<p>Congestion on the A428 trunk road has already become a constraint to housing and employment growth in the St Neots area. Local and regional businesses need access to a large and diverse labour market, requiring many people to commute into and out of the area each day. The quality of life for those who live in and between Cambridge and St Neots is diminished by congestion, primarily on the A428, which can cause driver stress and can contribute to other factors affecting wellbeing, safety and health. Without improvement, the situation is expected to get worse.</p>	

	<p>LP29 Health Impact Assessment</p> <p>“A proposal for large scale development, defined in the 'Glossary', will be supported where it can be demonstrated that the design of the scheme has been informed by the conclusions of a rapid Health Impact Assessment.</p> <p>A proposal for large scale major development, defined in the 'Glossary', will be supported where it can be demonstrated that the design of the scheme has been informed by the conclusions of a full Health Impact Assessment. “</p>	<p>There is a potential for poor communication between construction and local residents leading to increased stress and poor mental health (as experienced with A14 upgrade). A robust community communications plan must be in place</p> <p>A Full Health Impact Assessment would also be required.</p>	
	<p>LP30 Biodiversity and Geodiversity</p> <p>“A proposal will be required to demonstrate that all potential adverse impacts on biodiversity and geodiversity have been investigated.</p> <p>A proposal that is likely to have an impact, either direct or indirect, on biodiversity or geodiversity will need to be accompanied by an appropriate appraisal, such as a Preliminary Ecological Appraisal, identifying all individual and cumulative potential impacts on biodiversity and geodiversity. Any further research that is identified as necessary by this appraisal will need to have been carried out and submitted with the proposal. Where a proposal has potential to affect an internationally important site an 'appropriate assessment' in accordance with the Habitats Directive will be required and sufficient information to enable such an assessment to be completed must be submitted with the proposal.</p> <p>All possible efforts must be taken to avoid adverse impacts. If it is demonstrated that adverse impacts are unavoidable they must be minimised as far as possible and then mitigated. Only where this process of avoidance, minimisation and then mitigation is insufficient to fully address adverse impacts will consideration be given to compensation measures.”</p>	<p>The lack of survey information for arable field margins, watercourses and lowland meadows means that the scheme cannot be fully assessed for its impact on these Priority habitats. It is therefore not possible to assess if impacts have been minimised as far as possible or mitigated.</p> <p>The scheme has failed to develop mitigation strategies for Priority (BAP) habitats such as arable field margins, hedgerows and woodland with associated adverse impact on farmland birds (Priority species). There will be fragmentation of hedgerows resulting in loss of connectivity of the networks used by bats, small mammals and invertebrates.</p> <p>Potential harm to the conservation status of the barbastelle bat population of Eversden and Wimpole SAC and SSSI is still under consideration, with the results of further bat surveys agreed between the Applicant and Natural England awaited. An appropriate assessment may be required in accordance with the Habitats Directive and the Conservation of Habitats and Species Regulations 2017.</p>	
	<p>LP31 Trees, Woodland, Hedges and Hedgerows</p> <p>“A proposal will be required to demonstrate that the potential for adverse impacts on trees, woodland, hedges and hedgerows has been investigated. Where investigations show that such adverse impacts are possible a statement will be required that:</p> <ol style="list-style-type: none"> assesses all trees, woodland, hedges and hedgerows that would be affected by the proposal, describing and assessing their value; sets out how the details of the proposal have been decided upon in terms of their impact on the value of trees, woodland, hedges and hedgerows and how adverse impacts will be avoided as far as possible, or if unavoidable how they will be minimised as far as possible. <p>A proposal will only be supported where it seeks to conserve and enhance any existing tree, woodland, hedge or hedgerow of value that would be affected by the proposed development. In such cases the proposal will be expected to make reference to and follow the guidance</p>	<p>During construction the scheme does not provide a sufficient level of protection, including root protection to nearby trees subject to Tree Preservation Orders.</p> <p>The loss of hedgerows within the project limits has been identified in the Biodiversity Net Gain calculations. Without additional mitigation planting comprising hedgerows and hedgerows with trees, the loss will have a negative impact on wildlife, biodiversity and general landscape character as hedges are a prominent feature of all Clayland character areas. It is considered that this planting could be provided along more open stretches of the road</p> <p>The Local Impact Report addresses in more detail opportunities for improvement including:</p> <ul style="list-style-type: none"> Additional Elm Planting 	

	<p>contained in the Council's A Tree Strategy for Huntingdonshire (2015) or successor documents. Loss, threat or damage to any tree, woodland, hedge or hedgerow of visual, heritage or nature conservation value will only be acceptable where: c. it is addressed firstly by seeking to avoid the impact, then to minimise the impact and finally where appropriate to include mitigation measures; or d. there are sound arboricultural reasons to support the proposal. Where impacts remain the need for, and benefits of, the development in that location must clearly outweigh the loss, threat or damage. Where loss, threat or damage cannot be fully addressed through minimisation and/ or mitigation measures the proposal may be supported if alternative measures such as reinstatement of features, additional landscaping, habitat creation or tree planting will compensate for the harm and can be implemented and established before development starts. A proposal for major scale development will be required to include additional new trees to form part of landscaping for the proposal, the form of which will be determined by negotiation. "</p>	<ul style="list-style-type: none"> • Increased native species planting and a reduction in non-native species • Planting trees and woodland belts along road corridors to help screen intrusive development at settlement edges and restore a higher quality landscape. 	
	<p>LP34 Heritage Assets and their Settings</p> <p>"Great weight and importance is given to the conservation of heritage assets (see 'Glossary') and their settings. The statutory presumption of the avoidance of harm can only be outweighed if there are public benefits that are powerful enough to do so. "</p>	<p>No Conservation Areas or Listed Buildings are considered to be adversely impacted within Huntingdonshire.</p>	
	<p>LP36 Air Quality</p> <p>"A proposal will need to be accompanied by an Air Quality Assessment where: a. it is for large scale major development, defined in the 'Glossary'; b. it would potentially conflict with an Air Quality Action Plan; c. any part of the site is located within 50m of an Air Quality Management Area (AQMA) or a Clean Air Zone (CAZ); d. a significant proportion of the traffic generated would go through an AQMA or a CAZ; or e. any part of the site is located within 100m of a monitoring site where the annual mean level of nitrogen dioxide exceeds 35µg/m3 . [...] A proposal will need to be accompanied by a low emissions strategy where the air quality assessment shows that the proposal would: j. have a significant adverse effect on air quality; k. have an adverse effect on the air quality factors that led to the affected AQMA being designated; l. cause a significant increase in the number of people that would be exposed to poor air quality; or m. lead to a designated nature conservation site or protected species that is sensitive to poor air quality being adversely affected by changes in air quality. [...]</p>	<p>The general air quality/dust mitigation measures proposed within the First Iteration Environmental Management Plan (EMP) are appropriate, but will require confirmation through review and agreement of the Second Iteration EMP which it is advised should be submitted and agreed in writing with the LPA's prior to construction works commencing.</p>	

	In other circumstances, where identified as necessary based on a transport assessment/ statement, measures to reduce air pollution arising from traffic and traffic congestion may also be required. “		
	<p>LP37 Ground Contamination and Groundwater Pollution</p> <p>“Where ground contamination of a site and/ or adjacent land is possible, due to factors including but not limited to existing or previous uses, the risks of ground contamination, including ground water and ground gases, will need to be investigated. “</p>	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. Further detail is provided by the LLFA in the main body of the report.	
St Neots Neighbourhood Plan 2014-2029, St Neots Town Council (February 2016)	<p>A2 Gateway into St Neots</p> <p>“All development on the edge of St Neots must provide soft landscaping on the approach into the town. The following design principles must be taken into account: [...] (b) The landscape treatment should be designed to minimise but not obliterate views of the development except where required by a visual impact assessment; and (c) Stands of trees should be used to either restrict or focus views of the development and to break up the form of the buildings; and (d) Wide boulevards will be expected on the main approach into St Neots to create a high quality environment; and (e) Roundabouts should be attractive and must ensure that good vision is achieved for drivers. (f) All soft landscaping should contribute to supporting native fauna where possible, using the latest research available to support choices, which may include non-native plant species, more tolerate to future climate change.”</p>	Refer to landscaping comments set out in Chapter 8.	
	<p>PT1 Sustainable Travel</p> <p>“Development proposals must demonstrate how opportunities for the use of sustainable modes of transport are maximised. This should be achieved through maximising the potential for cycling and walking throughout the site and through contributions towards the extension, linking, and/or improvement of existing routes throughout St Neots. The Town Council will support proposals to improve facilities that enhance safe and suitable access to the railway station or support sustainable and health objectives.”</p>	It is noted that the proposals seek to maintain the existing public rights of 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 in this section in relation to the specific points on each affected route. In addition, the local authorities 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.	
	<p>P1 Green Spaces</p> <p>“Priory Park, Riverside Park, Sudbury Meadow, Regatta Meadow, and The Coneygeare, as shown in figure 2, are designated as Local Green Spaces.”</p>	The A428 scheme will not be located within, or impact, on Green Spaces identified in the Local Plan.	
	<p>P4 Flooding</p> <p>“Development proposals will be expected to include sustainable drainage systems (SUDS). In addition to their principal role of flood risk</p>	There are a number of outstanding issues with the DCO that require resolving to enable policy compliance, these have been	

	<p>management SuDS should offer additional benefits such as amenity value and biodiversity enhancement.”</p>	<p>addressed in more detail in the main body of the Local Impact Report and include:</p> <ul style="list-style-type: none"> • Opposition 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. The Preference for treatment is through SuDS • The proposals for the discharge from the different catchments across the scheme is to limit the runoff from the basins to the natural Greenfield runoff rates. However, the submitted reports indicate that where the rate is below 5 l/s then this should be defaulted to a minimum of 5 l/s. This could increase the discharge rates from certain catchments pretty drastically, increasing the peak volumes discharging from the basins into the surrounding watercourses, in turn increasing the risk of flooding to the downstream extents of the receiving watercourses. As this is upstream of large developments such as Wintringham Park and the wider St Neots area, this could increase the risk of flooding to existing and future properties There is a balance to meet around the discharge rates and risk of blockage, however the increased rates to 5 l/s is an outdated approach and this can be reduced further. • Maintenance of the features has not been fully arranged. There needs to be a clear delineation between the adoption and ongoing maintenance body for the proposed surface water features. 	
	<p>RD3 Eastern Expansion Employment Allocation</p> <p>“High quality employment, business start-ups and creative industries will be encouraged as part of the Eastern expansion employment allocation.”</p>	<p>The A428 scheme will support the economic success of the area, by facilitating economic development and provide increased routes into and out of the area.</p>	

