

# A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 6

6.4 Environmental Statement

Non-Technical Summary

Planning Act 2008

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and  
Procedure) Regulations 2009

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Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning  
(Applications: Prescribed Forms and  
Procedure) Regulations 2009**

**A428 Black Cat to Caxton Gibbet  
improvements**  
Development Consent Order 202[ ]

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**Environmental Statement: Non-Technical Summary**

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<b>Author</b>	A428 Black Cat to Caxton Gibbet improvements Project Team, Highways England

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# 1 Introduction

- 1.1.1 This Non-Technical Summary (NTS) has been prepared for the A428 Black Cat to Caxton Gibbet improvements scheme (the Scheme) and provides a summary of the Environmental Impact Assessment of the Scheme.
- 1.1.2 The Scheme is a Nationally Significant Infrastructure Project under the Planning Act 2008, which means that permission is required to build and operate the Scheme. The permission is called a Development Consent Order (DCO). The DCO application will be examined by the Planning Inspectorate which will report its findings and make a recommendation to the Secretary of State for Transport, who will make a decision on the application.
- 1.1.3 Highways England is responsible for modernising and maintaining England's strategic road network (made up of motorways and trunk roads (the most significant 'A' roads)), as well as running the network and keeping traffic moving. Highways England, as the Applicant under the Planning Act 2008, proposes to improve traffic flows and road capacity between the wider conurbations of Bedford, St Neots and Cambridge by constructing a new dual carriageway from the existing Black Cat roundabout to the south of St Neots to the existing Caxton Gibbet roundabout to west of Cambourne on the A428.
- 1.1.4 An Environmental Statement has been prepared to accompany the DCO application and presents the Environmental Impact Assessment. It includes a description of the Scheme and the reasonable alternatives considered in the development of the design, the environmental setting, the likely significant effects of the Scheme on the environment and local communities, and the measures proposed to mitigate these effects. This document provides a summary of the Environmental Statement in non-technical language.

## 2 Need for the Scheme

- 2.1.1 The existing A428 connects communities between St Neots and Cambourne and links the East of England to important regional, national and international hubs such as the 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.
- 2.1.2 The existing A428 between Wyboston interchange and Caxton Gibbet in Cambridgeshire remains the only stretch of single carriageway between the two key economic hubs of Milton Keynes and Cambridge. The existing A428 provides a vital link between the M1 (at Milton Keynes) and the M11 (at Cambridge), connecting the communities of Bedford, St Neots, Cambridge and Cambourne. The road carries twice the traffic it was designed for, with drivers suffering daily congestion, delays and incidents.
- 2.1.3 The existing Black Cat roundabout, where the A1 meets the A421, and the existing A428 near St Neots is a daily source of queues, delays and congestion. Similar problems exist at the Barford Road, Cambridge Road (St Neots) and Caxton Gibbet roundabouts.
- 2.1.4 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 reaching capacity, which results in delays along the route. There are also a high number of incidents, with collision clusters at both junctions.
- 2.1.5 There is therefore a need to improve the route to address the current levels of congestion and their impacts of delay and journey unreliability on road users. The investment in additional capacity that is required to address these issues will also help to support local economic growth by improving east-west connectivity and enhanced north-south traffic flow.

## 3 Scheme description

### 3.1 Environmental context

- 3.1.1 The Scheme would pass through a predominantly rural setting characterised by agriculture, comprising a pattern of agricultural fields and pockets of plantation woodland framed by a network of hedgerows and farm access tracks.
- 3.1.2 The area surrounding the Scheme is characterised by varying landform. Local topography at the existing Black Cat roundabout, the A1 and the western extents of the A428 in the Wyboston locality is relatively flat and situated around 20 - 30 metres Above Ordnance Datum (AOD), rising gradually to around 40 metres AOD near Great Barford to the west. To the east of St Neots, the profile of the land gradually rises in elevation before reaching 65 metres AOD surrounding Caxton Gibbet roundabout.
- 3.1.3 Land use is marked by a contrast of urban development within St Neots, Eynesbury and Eaton Socon on the western extents of the Scheme against the more open landscapes and smaller settlements and farms along and surrounding the eastern extents of the Scheme.
- 3.1.4 There are a number of villages in the vicinity of the Scheme including Roxton Village, Abbotsley, Croxton, Eltisley and Caxton to the south, and the village of Yelling and the settlement of Papworth Everard to the north.

### 3.2 The Scheme

- 3.2.1 The Scheme would create a reliable, high quality route from the existing Black Cat roundabout (which is located south of St Neots) to the Caxton Gibbet junction (located to the west of Cambourne). The Scheme (as shown on the **Figure A**) principally comprises of:
  - a. A new 16 kilometre (10 mile) dual carriageway from the Black Cat roundabout to the Caxton Gibbet roundabout, to be known as the A421 (hereafter referred to as the 'new dual carriageway') and in addition 3 kilometres (1.8 miles) of tie-in works..
  - b. A new three-level junction at the Black Cat junction, improving connectivity between the existing A1, the new dual carriageway and the local road network.
  - c. A new junction to the east of the existing Cambridge Road roundabout to provide access to the new dual carriageway and maintain access provisions to the local road network.
  - d. A new junction at the Caxton Gibbet roundabout, which would tie in the new dual carriageway and the existing A428 to the east of the roundabout utilising elements of the existing roundabout and its alignment.
  - e. New crossings would be constructed 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.

- f. Improved local roads within proximity to the Scheme due to safety requirements and alternative accesses provided to side roads at Chawston, Wyboston and Eltisley.
- g. Safer routes for non-motorised user networks for walkers, cyclists, and horse riders and improved connections.

3.2.2 Sections of the existing A428 between St Neots and Caxton Gibbet would be retained for local traffic and public transport.

### 3.3 Scheme objectives

3.3.1 The objectives of the Scheme have been developed in light of the problems identified in Section 3 of this NTS and Highways England's wider environmental and customer satisfaction aspirations. These objectives are set out below.

- a. **Connectivity:** Cut congestion and increase capacity and journey time reliability between Milton Keynes and Cambridge by providing a free-flowing network.
- b. **Economic growth:** Enable growth by improving connections between people and jobs and supporting new development projects.
- c. **Safety:** Improve safety at junctions on both the A428 and A1 by reducing traffic flows on the existing A428 and by removing existing side road junctions and private accesses onto the A1.
- d. **Environmental improvements:** Maintain existing levels of biodiversity and have a beneficial impact on air quality and noise levels in the surrounding area.
- e. **Accessibility:** Ensure the safety of cyclists, walkers and horse riders and those who use public transport by improving the routes and connections between communities.
- f. **Resilience:** Improve the reliability of the road network so that it can cope better when accidents occur.
- g. **Customer Satisfaction:** Listen to what is important to our customers to deliver a better road for everyone and improve customer satisfaction.

### 3.4 Measures to avoid prevent or reduce significant effects

3.4.1 The Scheme includes a range of measures that have been developed to avoid, prevent, reduce or offset potential significant adverse environmental effects including (but not limited to) the following:

- a. Avoiding sensitive, valued or important environmental features and interests where reasonably practicable through iterative design.
- b. The implementation of a detailed archaeological evaluation and subsequent mitigation strategy for the Scheme.
- c. Creation of habitat and specific connectivity routes (such as mammal tunnels) for the purpose of protecting species and wider integration.

- d. Construction of noise bunding (i.e. engineered mounds of earth) from excess soil materials within the extent of the Scheme to reduce the impacts to identified noise receptors.
- e. Addressing (through mitigation) potential landscape effects using earthworks, planting, drainage and barriers and screening the Scheme where possible with appropriate planting.

3.4.2 The control measures mentioned above are contained within the First Iteration Environmental Management Plan (EMP), which is included in the DCO Application. The EMP will be further developed into a Construction Environmental Management Plan (CEMP) (also referred to as a Second Iteration Environmental Management Plan), which will be implemented by the construction contractor and will detail the construction related mitigation measures, the approaches to the monitoring of construction activities, and where appropriate the methods for evaluating the performance of mitigation measures.

### 3.5 Construction approach and programme

- 3.5.1 The Environmental Impact Assessment is based on the Scheme's main construction works starting in Spring 2023 and the Scheme being open for traffic in 2026.
- 3.5.2 To minimise the disruption caused by construction of the Scheme, it is expected that certain works would need to be undertaken in advance of the main construction activities (See **Table 3.1**) to enable other works to proceed and to optimise the overall delivery programme for the Scheme.

**Table 3.1: Indicative programme dates**

Key construction programme elements	Indicative date(s)
Anticipated DCO application granted by the Secretary of State for Transport	Spring 2022
Advanced works (archaeological clearance and utility diversion)	Spring 2022 to Summer 2022
Enabling works (site compounds, accesses and site clearance works)	Summer 2022 to Spring 2023
Main construction works	Spring 2023 to Spring 2026
Completion of the Whole of the Works and Scheme Open for Traffic	Spring 2026

- 3.5.3 Upon completion of the advanced works, the main construction activities would be split into six distinct sections that due to the complexity and size of the Scheme would overlap in places to minimise disruption and maximise construction efficiencies.

**Table 3.2: Main construction activities and indicative completion dates**

Section	Indicative completion date(s)
Section 1: Black Cat junction	Spring 2026
Section 2: River Great Ouse viaduct to East Coast Main Line railway	Spring 2026
Section 3: East Coast Main Line railway to Cambridge Road junction	Spring 2026
Section 4: Cambridge Road junction	Autumn 2025
Section 5: Cambridge Road junction to Caxton Gibbet junction	Spring 2026
Section 6: Caxton Gibbet junction	Spring 2026

- 3.5.4 The construction contractor (also known as the Principal Contractor) would employ standard best practice construction methods to minimise disruption during the construction phase, with Scheme-specific measures identified in the Construction Environmental Management Plan.
- 3.5.5 Highways England will work closely with stakeholders during the construction works to maximise the efficiency of the construction and minimise disruption to the travelling public and other stakeholders living in the area.
- 3.5.6 Given the geographical extent of the Scheme, the construction of the Scheme would require three main construction compounds and a number of satellite compounds along the route alignment to service particular construction phases or activities.
- 3.5.7 Construction of the Scheme would require the diversion, relocation and protection of existing utility assets including water, wastewater, electricity, gas and telecommunications.



## 4 Alternative studies and consultation

- 4.1.1 **Chapter 3, Assessment of alternatives** of the Environmental Statement provides the details of the main alternatives considered and studied and provides an indication of the main factors for selecting the chosen route alignment for the Scheme.
- 4.1.2 This section of the Non-Technical Summary provides an overview of the process followed and the types of alternatives considered. The consideration of alternatives followed these stages:
- Options identification and options selection, including the testing, design development and decision-making process, informed by non-statutory consultation in March 2017 to April 2017.
  - Preferred Route announcement in February 2019.  
[a428blackcattocaxtongibbetwebpra.pdf \(citizenspace.com\)](#)
  - Post-preferred route announcement design development for Statutory Consultation in June 2019 to July 2019.
  - Continued design development.
  - Non-statutory supplementary consultation of Scheme design amendments in June 2020 to July 2020.

### 4.2 Alternatives studied and iterative design development

- 4.2.1 The main alternatives considered in adopting the Preferred route alignment comprised of a shortlist of eight colour coded route options and 12 Black Cat junction arrangement options.
- 4.2.2 From the eight route options and 12 Black Cat junction options, three route options and three Black Cat junction options were progressed for further assessment. In summary, these comprised:

#### Route Options

**Orange (Option 1):** Comprised an offline solution between Black Cat junction and Caxton Gibbet roundabout, whilst also providing a grade separated junction at Cambridge Road. The route was a dual carriageway approximately 18.9km long, with both Black Cat junction and Caxton Gibbet roundabout being grade separated. After the route crossed the East Coast Main Line railway, the alignment headed north approximately 2.5 km towards the existing A428 and B1046/ St Neots Road and an improved grade separated Cambridge Road junction. The route then ran broadly parallel, and to the north of the existing A428 for approximately 9 km. The route crossed Toseland Road and B1040/ St Neots Road, and passed through an improved Caxton Gibbet junction.

**Purple (Option 5):** Comprised a wholly offline dual carriageway from Black Cat junction to Caxton Gibbet junction, approximately 18.4 km in length. From Black Cat to Caxton Gibbet, the route was aligned east towards Abbotsley for approximately 5 km. The alignment then changed to a north east direction, bypassing Abbotsley to the north for approximately 2km. Past Abbotsley, the route continued east for approximately 5 km, passing north west of Great Gransden. The alignment then changed to a north direction passing Eltisley to the south and joining Caxton Gibbet roundabout.

**Pink (Option 6):** Comprised a wholly offline dual carriageway from Black Cat junction to Caxton Gibbet roundabout, approximately 18.4 km in length. From Black Cat to Caxton Gibbet, the route was aligned directly east towards Little Gransden for approximately 7 km. The alignment changed to a north east direction when it reached southern Abbotsley. The route bypassed Abbotsley to the south and continued in a north east direction for approximately 5.5 km towards the mid-point between Eltisley and Great Gransden, where it continued in a northerly direction towards Caxton Gibbet roundabout.

### **Black Cat junction Options**

**Option A:** Comprised a new three-tiered junction, by removing the existing Black Cat junction, and constructing two new roundabouts to the west of the existing junction. A new free-flow continuous link from the A421 eastbound towards the A1 northbound would be created, along with slip roads to and from the A421, the A1 and the A428. With this option the A1 would become a free-flow continuous road going under the slip roads.

**Option B:** Comprised a new two-tiered junction, by retaining the existing Black Cat junction and creating a new free-flow continuous link from the A421 eastbound towards the A1 northbound. The addition of slip roads would provide a free-flow link, bypassing traffic moving southbound onto the A421, with the A1 remaining the same.

**Option C:** Comprised a new three-tiered junction, by enlarging the Black Cat junction and creating a new free-flow continuous link from the A421 eastbound towards the A1 northbound. Slip roads would be built from the A421 to the A1, and the A428 and the A1 would become continuous free-flow roads through the widened Black Cat roundabout.

- 4.2.3 Feedback obtained from the non-statutory consultation in Spring 2017 demonstrated widespread support for the Orange route option, and for Option C for the Black Cat junction, these being the most popular solutions from the options presented.
- 4.2.4 The assessments demonstrated that the Orange route option and Option C for the Black Cat junction presented the best value for money, had the least overall impact on the environment, and provided the greatest economic return compared to the other options. As such these two component parts were progressed as the Preferred Route alignment for statutory consultation.



- 4.2.5 Details of the statutory consultation and supplementary consultation can be found in the Consultation booklets at <https://a428.consultation.ai/> and [A428 Black Cat to Caxton Gibbet Virtual Exhibition - Highways England \(consultation.ai\)](#).
- 4.2.6 The feedback to these consultation exercises, and Highways England's response to it, is presented in the Consultation Report included in the DCO Application.
- 4.2.7 In addition to formal consultation, regular engagement has been undertaken with relevant stakeholders to share information and inform the development and assessment of the Scheme design.

## 5 Assessment of likely significant effects

- 5.1.1 Under the Environmental Impact Assessment (EIA) Regulations, the Scheme is defined as the type and scale of development that automatically requires an Environmental Impact Assessment. Accordingly, an Environmental Impact Assessment has been undertaken to meet the requirements of the relevant planning policy and legislation, and identify the potential for the Scheme to have significant effects upon the environment. The results of the Environmental Impact Assessment are reported in the Environmental Statement which is submitted with the DCO Application.
- 5.1.2 The Environmental Impact Assessment considers impacts during construction and operation of the Scheme. The construction phase assessment addresses the temporary activities involved in building the Scheme, and the subsequent permanent presence of the Scheme once constructed. Where relevant, these temporary and permanent effects are described separately below. The operational assessment considers the situation when the Scheme is being used by traffic.

### 5.2 Methods used in the assessment

- 5.2.1 The approach to the Environmental Impact Assessment comprised the gathering of information to establish the current environmental setting or baseline, considering the potential impacts of the Scheme, developing measures to avoid, prevent or reduce adverse impacts and then assessing the resultant likely significant effects of the Scheme on local communities and the environment. The Environmental Impact Assessment has followed industry standard methods, including for establishing significance, set out in Highways England's Design Manual for Roads and Bridges, along with topic-specific guidance as appropriate. Each topic chapter in the Environmental Statement provides further detail regarding the specific methodology applied.
- 5.2.2 This assessment has been undertaken against both the current baseline setting of the Scheme, and potential changes to the Scheme's baseline setting at the times of both construction and operation of the Scheme (the future baseline). Future changes to the baseline, without the Scheme, could result from both natural events such as the movement of protected ecological species, or from human activities, such as the development of homes and businesses in the area.
- 5.2.3 For each environmental topic, a prediction (based on either professional judgements or computer modelling, undertaken in accordance with industry guidance and methodologies) in regard to 'significant effects' has been provided. Significant effects can either be adverse (negative) or beneficial (positive) and indicate the greatest environmental impacts. Predictions regarding significant effects take into account the proposed mitigation and are the effect that is likely to occur once mitigation has been implemented, for example, noise barriers and landscape planting such as woodland and grassland.

- 5.2.4 In accordance with the EIA Regulations, an assessment has been undertaken of the vulnerability of the Scheme to major accidents or disasters. The assessment considered a wide range of events including naturally occurring events such as: lightning strikes, floods and heatwaves; human accidents such as road, aircraft and military accidents; infrastructure failure such as bridge, utilities or dam failure; bomb, vehicle and cyber-attacks. The assessment concluded that with the mitigation measures included in the Scheme design, no significant adverse effects from major events would be expected.
- 5.2.5 The following sections provide a summary of the assessment of likely significant environmental effects as a result of the Scheme on an environmental topic basis as reported in the Environmental Statement.

## 6 Air quality

### 6.1 Baseline

- 6.1.1 There are four Air Quality Management Areas in the vicinity of the Scheme declared by the local authorities due to the exceedance of nitrogen dioxide annual mean limit value, and the exceedance of the 24 hour mean limit value.
- 6.1.2 There are a number of sensitive receptors (including residential properties) within 200m from the Scheme. Air quality in the immediate area around the Scheme is considered good (i.e. below the nitrogen dioxide annual mean limit value).

### 6.2 Construction

- 6.2.1 Without mitigation, construction of the Scheme could temporarily impact air quality as a result of dust from construction activities, such as earth moving, demolition and excavations, and emissions from construction traffic and equipment. Mitigation measures in the Construction Environmental Management Plan would include those for dust suppression, the controlled use of equipment and construction traffic management. These would minimise the temporary dust impacts during Scheme construction activities. No significant changes to emissions important for air quality are expected at identified sensitive receptors.

#### **Summary of construction assessment**

- a. No significant air quality effects are likely to occur.

### 6.3 Operation

- 6.3.1 During Scheme operation there could be impacts on air quality as a result of changes in vehicle flows along the alignment of the Scheme and wider road network as the Scheme would be open to traffic. Air quality impacts have been assessed at identified properties near the Scheme.
- 6.3.2 Modelling undertaken indicates the Scheme would not result in new exceedances of air quality objectives.

#### **Summary of operation assessment**

- a. Once operational, no significant adverse air quality effects are predicted.

## 7 Cultural heritage

### 7.1 Baseline

- 7.1.1 Cultural heritage includes archaeology, historic buildings, structures and historic landscapes including parks and gardens. There are a range of cultural heritage assets within the vicinity of the Scheme, including 11 scheduled monuments, nine Grade II\* listed and 124 Grade II listed buildings and one Grade II\* Registered Park and Garden.
- 7.1.2 Many of the listed buildings are located within five conservation areas, while seven are located within the Croxton Park Grade II\* Registered Park and Garden. In addition, there are 406 non-designated archaeological assets recorded from council Historic Environment Records.
- 7.1.3 A total of 1,339 archaeological evaluation trenches have been excavated across the Scheme to inform the assessment and the archaeological mitigation.

### 7.2 Construction

- 7.2.1 Construction of the Scheme would result in adverse impacts on cultural heritage. This includes the partial or total removal of archaeological remains within the Scheme footprint. Impacts upon historic buildings include temporary impacts from construction activities such as traffic movements, lighting and noise, and the demolition of a Grade II listed building, Brook Cottages.

#### **Summary of construction assessment**

- a. The construction of the Scheme would result in significant adverse effects on 21 heritage assets ranging from archaeological features of Iron Age and Roman date to milestone markers along the existing A428.
  - b. With the exception of Brook Cottages (which would be demolished to build the Scheme) no effect on heritage assets would result in substantial harm.
- 7.2.2 As significant adverse archaeological effects remain during the construction phase, a comprehensive archaeological mitigation strategy will be implemented by the construction contractor to mitigate the effects of the Scheme.
  - 7.2.3 In addition, Highways England are committed to recording prior to demolition the heritage features of Brook Cottages, and are continuing to explore opportunities to relocate them within a museum setting.

### 7.3 Operation

- 7.3.1 During operation, cultural heritage impacts are restricted to those associated with the setting of heritage assets, principally due to changes in lighting and traffic noise levels.

#### **Summary of operation assessment**

- a. The assessment of operational effects has concluded that no significant adverse effects would occur on known heritage assets and all heritage assets would experience less than substantial harm.

- b. Through removing vehicle noise and lighting associated with the existing A428, and placing it on the new dual carriageway, a number of beneficial effects on historic buildings and on Croxton Park have been identified.

## 8 Landscape and visual

### 8.1 Baseline

- 8.1.1 The topography in the vicinity of the Scheme varies between the low-lying floodplain of the River Great Ouse in the west, to a more elevated one in the east. Much of the land in the central section of the Scheme (to the east of St. Neots) consists of gently undulating land interspersed with a number of small villages and single farmsteads.
- 8.1.2 The area is predominantly of agricultural use consisting of irregular but well-defined field boundaries of hedgerows and/ or trees. Pockets of wooded areas are present in the central area of the Scheme. The existing infrastructure within the vicinity of the Scheme includes the existing Black Cat roundabout, the A1, the A421, the A428, Caxton Gibbet junction and a number of local roads that tie into the wider road network. There are no statutory designated landscapes within the vicinity of the Scheme; however, the Grade II\* listed Croxton Park (a Registered Park and Garden) is located to the south of the existing A428.
- 8.1.3 The Scheme would pass through two published Landscape Character Assessments (LCAs) which define existing physical features and their character. These two LCAs were further defined to 16 Local Landscape Character Areas (LLCAs).
- 8.1.4 One hundred and eighty-three visual receptor groups (such as individual and/ or grouped dwellings, footpaths or existing roads) and their associated viewpoints (i.e. what is likely to be seen from that area) have been identified in the vicinity of the Scheme.

### 8.2 Construction

- 8.2.1 Construction activities have the potential to temporarily impact on local landscapes and on the views of users on public rights of way and local roads, and views from residential properties close to the Scheme. Measures to mitigate impacts of construction activities include the sensitive design of construction compounds to blend into the surrounding area, sympathetic lighting to minimise disturbance to nearby receptors and ensuring that materials are delivered when they are required to minimise the need for stockpiling.

#### **Summary of construction assessment**

- a. Eight LLCAs would experience significant adverse landscape effects during construction, primarily due to construction related activities, such as plant movements, compounds and storage of materials.
- b. Ninety-six visual receptor groups would experience significant visual effects arising from construction related activity, particularly where there is limited existing vegetation or existing vegetation would be removed to facilitate construction. These effects would be temporary and may be lower than reported during summer, when existing vegetation would be in leaf.

## 8.3 Operation

- 8.3.1 Due to the nature of the Scheme within the wider landscape, the operation of a new dual carriageway in a predominantly rural area would likely result in permanent adverse impacts on the local landscape and views. Measures to mitigate the landscape and visual impacts include the installation of planting screening and landscape integration, as well as the careful design and siting of new lighting and signage to minimise visual intrusion and light spill into the surrounding area.

### **Summary of operation assessment**

- 8.3.2 Following 15 years of operation and the establishment of mitigation planting, the following significant effects would be present:
- a. Four LLCAs would experience significant adverse landscape effects due to the permanent changes to landform and landcover patterns and the presence of major infrastructure locally altering the character and reducing the tranquillity of generally more rural, less settled areas. Planting in these areas would assist in limiting the scale of these effects.
  - b. Thirty visual receptor groups would experience significant visual effects as a result of new infrastructure being introduced into existing views.
- 8.3.3 As significant effects remain during operation, monitoring will be undertaken to ensure that proposed mitigation planting grows as expected, so it reduces the effect as far as practicable.



## 9 Biodiversity

### 9.1 Baseline

- 9.1.1 Within the overall study area there are three international statutory nature conservation designations, four statutory national nature conservation designations, and 15 non-statutory nature conservation designations. There are no statutory nature conservation designations.
- 9.1.2 The habitat study area is predominantly rural, comprising mostly arable fields, with a scatter 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).
- 9.1.3 Desk studies and ecological vegetation and habitat surveys have been undertaken from 2016 to 2020 to understand the existing ecological condition and to gather baseline information on protected and notable species in the vicinity of the Scheme.

### 9.2 Construction

- 9.2.1 During construction the Scheme has the potential to impact on protected species, such as breeding and wintering birds, GCN, bats and badgers, and upon a range of designated and non-designated sites.
- 9.2.2 Ecological mitigation for the Scheme involves standard best practice measures across all construction activities, and a number of embedded mitigation measures that include the creation and replacement of habitat. In addition, the installation of mammal tunnels and bat boxes would allow for impacts on protected species to be reduced as far as practicable.

#### **Summary of construction assessment**

- a. No significant effects on designated sites, including those of national and international importance, are predicted during construction of the Scheme.

### 9.3 Operation

- 9.3.1 Mitigation for the Scheme has been developed to provide a conservation-led approach to the introduction and management of habitat(s) to mitigate the effects of the Scheme throughout the operational phase. These include measures to provide replacement habitat, and to re-establish and create habitat corridors and subsequent connectivity.

#### **Summary of operation assessment**

- a. With the implementation of the ecological avoidance, mitigation and enhancement measures, the Scheme would result in no significant effects on biodiversity..

## 10 Geology and soils

### 10.1 Baseline

- 10.1.1 The current land use along the alignment of the Scheme is primarily medium to large working agricultural fields, with dominant features of the River Great Ouse corridor to the east and pockets of established wooded and plantation areas to the west of the Scheme. The underlying geology across the Scheme consists of Glacial Till, alluvium and River Terrace deposits associated with the River Great Ouse, its tributaries and the wider flood plains.
- 10.1.2 A number of potential sources of ground contamination have been identified close to the Scheme including potential agricultural contamination in the form of pesticides and fertilisers, existing petrol stations, underground tanks and made ground associated with the existing A421/A428.
- 10.1.3 There are a number of historic landfill sites concentrated around the village of Wyboston assumed to originate from abandoned historical quarry sites. Other notable historic land use includes the Breedon Quarry (located to the immediate west of the existing Black Cat roundabout), which is currently undergoing a programme of restoration for nature conservation purposes.

### 10.2 Construction

- 10.2.1 There is the potential for construction related activities to generate contaminants and enter groundwater or surface water, either through disturbance to *in situ* contamination or construction related. Other potential impacts may include harm to human receptors or physical changes on geology and soils such as the compaction of soil, or direct loss of Best and Most Versatile soils. The Construction Environmental Management Plan would include best practice measures to prevent construction related contamination, in addition to measures for the identification, treatment, re-use and management of excavated materials.

#### **Summary of construction assessment**

- a. Construction of the Scheme would result in a significant adverse effect on agricultural land due to the permanent loss of approximately 348 hectares of Best and Most Versatile agricultural soil.

### 10.3 Operation

- 10.3.1 During operation of the Scheme, road users, and the road infrastructure would be introduced as new receptors. Any contamination deemed by risk assessment to have posed a significant risk during construction, would have been removed or remediated during the construction phase.
- 10.3.2 Following the opening of the Scheme, soils adjacent to the road may be affected by spray or airborne contaminants generated during routine maintenance and operation of the road or released during road accidents or emergency situations.

#### **Summary of operation assessment:**

- a. No significant effects are anticipated during operation of the Scheme.

## 11 Material assets and waste

### 11.1 Baseline

- 11.1.1 Baseline information consists of the current landfill capacity in the wider east of England region (the waste management study area). In 2019, there was 84.5 million cubic metres of landfill capacity.
- 11.1.2 A wide range of material resources would be required to construct the Scheme. This includes concrete, cement, timber, plywood, reinforcing fabrics, geotextiles and packaging materials. The use of these resources for construction activities would inevitably generate waste. Given the nature of the Scheme, large quantities of material would be excavated during construction. With regards to re-use of materials, the baseline target for recycling construction and demolition waste is 70%, in accordance with the national recovery target.

### 11.2 Construction

- 11.2.1 Opportunities to re-use material resources would be sought where practicable and waste would be prevented and designed out in accordance with the requirements of the Construction Environmental Management Plan. The main material generated during construction would be from the excavations and subsequent infill materials to build the Scheme.
- 11.2.2 Construction of the Scheme is expected to generate approximately 383,600 tonnes of waste (166,802m<sup>3</sup>) of which an estimated 15,118 tonnes (6,584m<sup>3</sup>) is forecast to require off-site disposal to land fill. This would equate to 0.008% of the land fill capacity within the waste management study area. In practice a large proportion of waste from the Scheme is likely to be recovered rather than disposed of to landfill, further reducing the overall quantities of waste for disposal.

#### **Summary of construction assessment**

- a. No significant effects on materials and waste are anticipated during construction.

### 11.3 Operation

- 11.3.1 Material use and waste generation are expected to be very small during operation of the Scheme. Routine maintenance would include gully emptying and litter collection. Periodically, maintenance activities such as resurfacing would be required. Waste arising from these maintenance activities is expected to be generally the same (in both type and quantity) to that generated by the existing strategic highway network, and the waste would be managed using the established procedures and facilities that are used across the strategic road network. The scale of such activities would be unlikely to generate significant effects relating to material use and waste arising during operation. Therefore, an operational assessment was not undertaken in agreement with the Planning Inspectorate.

## 12 Noise and vibration

### 12.1 Baseline

12.1.1 Within the area considered for the noise assessment there are:

- a. A mixture of agricultural land uses and built up areas, including Roxton, Chawston, St Neots, Croxton and Eltisley.
- b. Major transport infrastructure including the East Coast Mainline railway, the A421, the A428 and the A1.
- c. 2,735 residential buildings.
- d. Twenty non-residential sensitive buildings consisting of schools, community facilities, a medical facility, places of worship and a hotel.
- e. There are six Noise Important Areas (NIAs) (a defined geographic area where high noise levels are identified as a result of road traffic) in the vicinity of the Scheme.

12.1.2 A baseline noise survey was undertaken to assist in understanding the general noise environment in the area and identify any other local noise sources.

### 12.2 Construction

12.2.1 The main construction activities that would take place during the Scheme construction phase are site clearance, earthworks (including borrow pits), and re-grading land for infrastructure such as new bridges and junctions, piling activities and ultimately road construction. These construction activities have the potential to result in temporary noise impacts at the receptors closest to the works.

12.2.2 The potential for temporary construction vibration impacts is dependent on the need for construction activities which are a potentially significant source of vibration, such as earthworks, piling and road surface construction.

#### **Summary of construction assessment**

- a. Significant adverse noise effects are predicted at twenty locations (each of which represent a number of receptors) during the construction phase of the Scheme.
  - b. Significant adverse vibration effects are predicted at twelve locations (each of which contain a number of receptors) during the construction phase of the Scheme.
- 12.2.3 As significant construction noise and vibration effects are predicted, monitoring would be undertaken during the Scheme construction stage to ensure that the mitigation measures are being appropriately implemented.
- 12.2.4 The monitoring would include physical measurements, observational checks and audits undertaken by the construction contractor, to ensure and demonstrate compliance with the noise and vibration commitments and the requirements of the Construction Environment Management Plan.

## 12.3 Operation

- 12.3.1 The Scheme has the potential to result in both beneficial and adverse traffic noise impacts at nearby noise sensitive receptors as the Scheme moves existing traffic from the A428 to the new dual carriageway, resulting in traffic closer to some receptors, and further away from others.
- 12.3.2 In addition, noise reduction measures have been included within the Scheme design, such as the use of low noise surfacing, and sections of the Scheme being constructed in cutting. In addition to this, earthworks bunding would be constructed out of excess soil from the Scheme at key locations where there is a requirement to mitigate noise impacts, namely at residential receptors at Roxton and close to the intersection with Potton Road.

### **Summary of operation assessment**

- a. Overall, the assessment has predicted a decrease in road traffic noise levels as a result of the Scheme in the short and long term,
  - b. Increases in traffic noise are predicted to occur in the short and long term at properties around Roxton, Little Barford Road, Potton Road, Cambridge Road and Caxton Gibbet junction.
  - c. Decreases in three out of the six NIAs are predicted as a result of the Scheme.
- 12.3.3 It has been concluded that no additional mitigation would be appropriate in areas where the layout of existing housing affronts the roads where an operational impact has been predicted. This is primarily due to engineering practicalities, constraints of the Scheme and unsustainable noise mitigation measures.

## 13 Population and human health

### 13.1 Baseline

- 13.1.1 In proximity to the Scheme, there are a range of facilities located in the main residential areas of St Neots, Tempsford, Roxton, Chawston, Wyboston, Little Barford, Croxton and Eltisley. These include two nurseries, three schools, a number of local shops, four churches, nine publicly accessible open spaces and four community facilities.
- 13.1.2 The areas around these villages are predominantly agricultural and interspersed with a well-connected and established Public Rights of Way network. These are predominantly around the existing Black Cat roundabout, to the east of St Neots and to the north of the existing A421 from Wintringham to Eltisley.
- 13.1.3 Data collected shows that residents within proximity to the Scheme have a general health classification of 'good' or 'very good', and both male and females have a life expectancy that is slightly higher than the national average.

### 13.2 Construction

- 13.2.1 During construction of the Scheme, there would be loss, severance and fragmentation of agricultural holdings. There are also potential impacts on the recreational users of the River Great Ouse. A number of Public Rights of Way, footways and cycle routes would be severed by the Scheme. The Scheme has been designed to reduce land take and severance as far as practicable. Mitigation measures during construction would include temporary and permanent diversions and signage to limit the impacts on pedestrians, cyclists and equestrians, and maintain agricultural access.
- 13.2.2 During the construction period the traffic management required to construct the Scheme, including the construction of temporary junction alignments and tie-ins and the presence of construction traffic, could lead to additional delays that would increase driver stress and severance. Traffic management and construction activity could also lead to changes in views from the road. A Traffic Management Plan would be implemented which would define measures to be used by the construction contractor to reduce the impacts from construction traffic, including measures to appropriately manage vehicle movements and minimise heavy goods movements at busy times.
- 13.2.3 Highways England would communicate up-to-date construction and community liaison information. It is envisaged that this would include progress updates to areas affected by construction and on mitigation measures to reduce adverse effects. These communication approaches would help drivers and local residents to plan their journeys and take account of potential disruption due to Scheme construction.



### **Summary of construction assessment**

- 13.2.4 The assessment has concluded that during construction, the following significant adverse effects would be generated:
- a. The temporary impact upon recreational users of the River Great Ouse due to closure of the waterway for the construction of the viaduct crossing; and
  - b. The temporary impact upon users of the segregated footpath/ cycleway from the Caxton Gibbet roundabout to the St Neots Road/ Brockley Road.
- 13.2.5 As temporary effects would remain during part of the construction of the Scheme, where possible suitable alternatives would be provided if walkers, cyclists, horse riders are unable to access the existing route(s).

## **13.3 Operation**

- 13.3.1 The Scheme design would include the permanent creation of new sections and diversions of cycleways, footways and Public Rights of Way to maintain connectivity of the local network. Users would experience improved usability of sections of the non-motorised user network and safer methods of crossing main roads and navigating junctions.

### **Summary of operation assessment**

- a. Permanent beneficial effects resulting from new and improved walkers, cyclists and horse riders network and subsequent connectivity within the vicinity of the Scheme.

## 14 Road drainage and the water environment

### 14.1 Baseline

- 14.1.1 In the vicinity of the Scheme there are ten key watercourses ranging from the River Great Ouse and its tributaries; numerous minor and unnamed drains and ditches that are often associated with field boundaries; and 85 ponds, of which 16 would be impacted by the Scheme.
- 14.1.2 There are no groundwater Source Protection Zones in the vicinity of the Scheme nor would it lie within a Drinking Water Safeguard Zone for groundwater. The majority of the Scheme would be located within Flood Zone 1 (low probability of flooding), except where it would need to cross the watercourses. In these locations, these are within Flood Zone 3 (high probability of flooding).

### 14.2 Construction

- 14.2.1 Without mitigation, proposed construction activities could impact upon surface water quality and flows, as well as impact upon groundwater quality and flows. Impacts upon surface water and groundwater could result from accidental spillages or sediment containing runoff causing pollution and risk of contamination to surface water and groundwater, localised disruption to groundwater levels and increases in flood risk.
- 14.2.2 The Construction Environmental Management Plan would include measures to mitigate potential adverse impacts on surface watercourses during construction. This would include measures to tackle emergency spillages, and appropriate procedures for managing storage areas and material stockpiles. Potential impacts on groundwater would also be mitigated through adherence to the Construction Environmental Management Plan.

#### **Summary of construction assessment**

- a. With the implementation of best practice construction guidance, and the measures set out within the Construction Environment Management Plan, no significant adverse water effects are predicted.
- 14.2.3 Notwithstanding this, water quality monitoring will be undertaken prior to and during construction to ensure that the mitigation measures embedded in the Scheme design are appropriately implemented and to ensure compliance with the Water Framework Directive.

### 14.3 Operation

- 14.3.1 The road has been designed to minimise the risk of it flooding or causing flooding elsewhere by incorporating current design standards and future climate change allowances to improve its resilience, and through the use of measures to control and manage runoff.
- 14.3.2 The overall water management strategy for the Scheme is to attenuate and treat highway runoff using wet ponds, filter drains, swales, new highway ditches and Sustainable Drainage Systems (SuDS) where applicable.



- 14.3.3 In addition, six new flood compensation areas would be constructed to replace areas removed as part of the construction of the Scheme.

**Summary of operation assessment**

- a. A beneficial effect on the water quality at Rockham Ditch is predicted.

## 15 Climate

### 15.1 Baseline

- 15.1.1 An assessment has been undertaken of the effects on climate from greenhouse gas emissions associated with the Scheme. Consideration has also been given to the resilience of the Scheme to climate change.
- 15.1.2 The Scheme sits within the Met Office East Anglia region. Climate observations for this region, presented as 10-year averages between 1969 and 2018, identify gradual warming, with an increase of 1.163°C in mean maximum annual temperatures between the periods 1969-1978 and 2009-2018. Mean annual rainfall has increased by 43.5% between the same periods. The UK Climate projections for the area covering the Scheme suggest an increase in mean summer and winter air temperatures, while precipitation rates (i.e. rainfall) are expected to become more seasonal, with increased precipitation expected in winter and decreased in summer.

### 15.2 Construction

- 15.2.1 During the construction of the Scheme, a number of processes would produce greenhouse gases, and these could include: emissions from fuel consumed by construction vehicles and construction machinery; emissions during the production of materials used to construct the Scheme; emissions from grid electricity to power auxiliary facilities; emissions arising from the fuel consumed for workers commuting to and from the construction site; and emissions arising from the transportation of the waste to treatment and disposal facilities. The construction contractor would develop and implement a plan to reduce energy consumption and associated carbon emissions. This could include the consideration of renewable, or low to zero carbon energy sources and record percentage of savings implemented. These measures would be set out in the Construction Environment Management Plan.
- 15.2.2 Potential impacts of severe weather events during the construction phase include reduction of working hours, increased health and safety risks, and damage to construction materials. The Scheme has been designed to be resilient to impacts arising from predicted severe weather events and climatic conditions, and designed in accordance with current planning, design and engineering practice and codes. Trees, shrubs and hedgerows planted as part of the landscape design would offset some of the carbon emissions associated with land use change and the subsequent loss of carbon sink (i.e. the process in which the living environment (primarily vegetation and oceans) absorbs carbon dioxide from the atmosphere).

#### **Summary of construction assessment**

- a. No significant effects with regards to changes in greenhouse gas emissions are predicted.
- b. No significant effects with regards to the vulnerability of the Scheme to climate change are predicted.

### 15.3 Operation

- 15.3.1 Potential likely impacts during the operation of the Scheme are related to the use of the Scheme by road users, the repair and maintenance of the road and the emissions associated with the electricity used to light the Scheme.
- 15.3.2 Potential impacts of climate change during the Scheme operational phase would include increased flooding, health and safety risks associated with extreme weather events, and storm damage to structures. Mitigation measures included within the Scheme design comprise the use of appropriate construction materials, and the provision of highway drainage systems and flood mitigation measures that take account of the predicted increased in rainfall.

#### **Summary of operation assessment**

- a. No significant effects with regards to changes in greenhouse gas emissions are predicted.
- b. No significant effects with regards to the vulnerability of the Scheme to climate change are predicted.

## 16 Assessment of cumulative effects

- 16.1.1 An assessment has been undertaken of potential cumulative and combined effects for all the above environmental topics arising from the following:
- Cumulative effects – proposed developments in the vicinity of the Scheme that are under construction, have been consented or are identified on development plans, combined with the effects of the Scheme; and
  - Combined effects – from the Scheme on a single receptor from a number of individual environmental impacts, for example, noise, dust and traffic.

### 16.2 Cumulative effects with other developments

- 16.2.1 A review of the planning applications and development proposals within the area around the Scheme was undertaken to identify any other developments which have the potential to result in a cumulative effect together with the Scheme. The predicted traffic flows associated with area developments were accounted for in the traffic data used for the noise, air quality, water and population and human health assessments. As such, these assessments are inherently cumulative.

#### **Summary of cumulative effects assessment**

- 16.2.2 A total of five ‘other developments’ have been shortlisted for inclusion in the assessment of cumulative effects. Two of the developments were determined to result in no significant cumulative effects with the Scheme.
- 16.2.3 The following three developments are predicted to cause significant cumulative effects with the Scheme:

***Wintringham Housing Development, Huntingdonshire District Council,***  
***Planning Application Reference: 17/02308/OUT, Assessment Reference: ID004***

- A temporary significant adverse cumulative landscape effect on the local landscape during the construction of the Scheme. This is due to the possible but unlikely overlap of construction activities between the Wintringham Housing Development, the Loves Farm Housing Development and the Scheme. However, if no overlap between the construction activities of these developments were to occur, no significant adverse effects would be anticipated.
- A temporary significant adverse cumulative noise effect at the property Greyholme, Tithe Farm, Cambridge Road, St. Neots, PE19 6SW during the construction of the Scheme. However, the effect would only occur in the unlikely worst-case scenario that construction of the Scheme and Wintringham were to coincide, in the vicinity of the receptor.

***Cambourne Housing Development, South Cambridgeshire District Council, Planning Application Reference: S/2903/14/OL, Assessment Reference: ID005.***

- a. A temporary significant adverse cumulative landscape effect on the local landscape during construction of the Scheme. This is due to the possible overlap of construction activities between the Scheme and the Cambourne Housing Development. However, if no overlap between the construction activities of these developments were to occur, no significant adverse effects would be anticipated.
- b. A temporary significant cumulative visual effect on the residents of Swansley Wood Farm, St. Neots Road, Caxton, CB23 3PH during the operation of the Scheme, due to the visual effects caused by the Scheme and the Cambourne Housing Development. This would reduce to a slight adverse cumulative visual effect as planting around the property matures.
- c. A temporary significant cumulative visual effect on the residents of 1 - 4 Common Farm Cottages, - Brockley Road, Elsworth, during construction of the Scheme, due to the visual effects caused by the Scheme and the Cambourne Housing Development. Reducing to a neutral cumulative effect by Year 1 of the Scheme.

***Loves Farm Housing Development, Huntingdonshire District Council, Planning Application Reference: 0101550OUT, Assessment Reference ID007***

- a. A temporary significant cumulative visual effect on the residents of Tithe Farm Cambridge Road, St. Neots, PE19 6SW, during construction of the Scheme due to the visual effects caused by the Scheme during operation and the Loves Farm Housing Development.

## 16.3 Combined effects on a single receptor

- 16.3.1 A number of properties have the potential to experience combined impacts associated with visual intrusion, noise, vibration, air quality and dust during the Scheme construction phase. Such combined impacts are predicted where Scheme construction activities would be taking place in close proximity to such receptors. The Construction Environmental Management Plan would include a range of best practice construction measures that aim to minimise the potential for construction phase environmental impacts (e.g. impacts associated with visual intrusion, noise, dust and vibration). Implementation of the measures as detailed in the Construction Environmental Management Plan would aim to minimise the occurrence of combined effects.

## Summary of construction assessment

- 16.3.2 The construction of the Scheme is likely to result in significant adverse combined effects for twenty-three receptors which consist of residential properties and one commercial property; the Iway Inn in Papworth Everard. These are predominantly as a result of a combination of visual, noise and vibration effects which would occur during the construction activities required to complete the Scheme. Thirteen of the affected receptors are located at the western end of the Scheme, in the vicinity of the Black Cat junction and the Roxton Road link. These effects are of a temporary nature and would cease upon completion of construction in the vicinity of the affected receptors.

## Summary of operation assessment

- 16.3.3 The operation of the Scheme is likely to result in significant adverse combined effects at fifteen receptors which consist of residential properties and one commercial property; the Iway Inn in Papworth Everard. Beneficial combined effects are predicted to occur at one residential receptor. These are predominantly caused by the operational road traffic noise and the visual effects caused by the different elements of the Scheme. All operational in-combination effects are of a permanent nature, however, some of the visual effects will reduce as planting around the Scheme matures. In contrast to the receptors in the construction assessment, the affected receptors are not concentrated in one area of the Scheme, and many are isolated properties.

# 17 Summary of significant effects

- 17.1.1 **Table 17.1** provides a summary of the EIA findings with regard to the significant environmental effects associated with the Scheme's construction and operation. Full details of these and non-significant environmental effects can be found within the Environmental Statement.

**Table 17.1: Summary of Significant Effects**

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
Chapter 5 Air Quality	No significant effects	No significant effects
Chapter 6 Cultural Heritage	<b>Moderate adverse (permanent)</b> effects on features within 23 fields, ranging from features dating from the Iron Age and Roman period, to the displacement of milestones which are Grade II listed. The types of features expected to be encountered include remains of a farmstead and a windmill mound.	No significant effects

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<b>Large adverse (permanent)</b> effects on a Grade II listed building (Brook Cottages).	
<b>Chapter 7 Landscape and Visual Effects</b>	<p><b><u>Landscape effects:</u></b></p> <ul style="list-style-type: none"> <li>a. Local Landscape Character Area (LLCA) 02: Settled Ouse Valley – <b>Large adverse</b></li> <li>b. LLCA 03: Wyboston and Chawston – <b>Moderate adverse</b></li> <li>c. LLCA 04: Ouse Valley Lakes – <b>Moderate adverse</b></li> <li>d. LLCA 05: Biggin Wood Clay Vale – <b>Moderate adverse</b></li> <li>e. LLCA 06: Alington Hill Clay Farmland – <b>Very large adverse</b></li> <li>f. LLCA 08: Settled Clayland Valley – <b>Large adverse</b></li> <li>g. LLCA 11: Wintringham and Weald Clay Farmland – <b>Large adverse</b></li> <li>h. LLCA 14: Western Claylands – <b>Moderate adverse</b></li> </ul> <p><b><u>Visual effects:</u></b></p> <ul style="list-style-type: none"> <li>a. C01, C02, C03, C04, C18, C27, C29, H03, H05, H06, H07, P09, P10, P17, P18, P20, P21, P24, R01, R14, R22, R24, R25, R28, R35, R38, R43, R45, R48, R50, R56, R59, R63, R82, R91, R95, R102, R104, R105, R106, R107, R114 – <b>Moderate adverse</b></li> <li>b. C14, P2, P3, P4, P6, P7, P8, P13, P14, P15, P16, P19, P22, P23, P25, R05, R06, R07, R08, R09, R10, R15, R16, R17, R18, R19, R20, R21, R27, R39, R40, R41, R42, R44, R46, R51, R53, R54, R57, R58, R61, R62, R66, R80, R81, R97, R98, R100, R108, R113 – <b>Large adverse</b></li> <li>c. R11, R36, R37, R52 – <b>Very large adverse</b></li> </ul>	<p><b><u>Landscape effects:</u></b></p> <p><b>Year one of operation</b></p> <ul style="list-style-type: none"> <li>a. LLCA 02: Settled Ouse Valley – <b>Moderate adverse</b></li> <li>b. LLCA 03: Wyboston and Chawston – <b>Moderate adverse</b></li> <li>c. LLCA 04: Ouse Valley Lakes – <b>Moderate adverse</b></li> <li>d. LLCA 05: Biggin Wood Clay Vale – <b>Moderate adverse</b></li> <li>e. LLCA 06: Alington Hill Clay Farmland – <b>Large adverse</b></li> <li>f. LLCA 08: Settled Clayland Valley – <b>Large adverse</b></li> <li>g. LLCA 11: Wintringham and Weald Clay Farmland – <b>Large adverse</b></li> <li>h. LLCA 14: Western Claylands – <b>Moderate adverse</b></li> </ul> <p><b>Year 15 of operation</b></p> <ul style="list-style-type: none"> <li>a. LLCA 02: Settled Ouse Valley – <b>Moderate adverse</b></li> <li>b. LLCA 06: Alington Hill Clay Farmland – <b>Moderate adverse</b></li> <li>c. LLCA 08: Settled Clayland Valley – <b>Moderate adverse</b></li> <li>d. LLCA 11: Wintringham and Weald Clay Farmland – <b>Moderate adverse</b></li> </ul> <p><b><u>Visual effects:</u></b></p> <p><b>Year one of operation</b></p> <ul style="list-style-type: none"> <li>a. C03, C14, C18, C29, H03, P02, P03, P04, P06, P08, P10, P17, P18, P19, P20,</li> </ul>



Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
		<p>P22, P23, P24, P25, R06, R09, R10, R15, R17, R20, R21, R22, R24, R27, R28, R35, R38, R39, R40, R41, R42, R43, R44, R46, R48, R50, R57, R63, R66, R80, R97, R98, R100, R102, R104, R108, R114 – <b>Moderate adverse</b></p> <p>b. P07, P13, P14, P15, P16, R05, R07, R08, R11, R16, R18, R36, R51, R52, R53, R54, R61, R62, R81, R113 – <b>Large adverse</b></p> <p>c. R37 – <b>Very large adverse</b></p> <p><b>Year 15 of operation</b></p> <p>a. P07, P08, P13, P14, P15, P22, P23, R05, R06, R07, R08, R11, R15, R16, R18, R20, R21, R27, R36, R51, R52, R53, R54, R61, R62, R81, R113 – <b>Moderate adverse</b></p> <p>b. R37 – <b>Large adverse</b></p>
<b>Chapter 8 Biodiversity</b>	No significant effects	No significant effects
<b>Chapter 9 Geology and Soils</b>	<p>Permanent loss of 37.17 ha of soil resources best and most versatile (BMV) agricultural land Grade 1 – <b>Very Large adverse</b></p> <p>Permanent loss of 285.40 ha of soil resources BMV agricultural land Grade 2 – <b>Very Large adverse</b></p> <p>Permanent loss of 26.37 ha of soil resources BMV agricultural land Grade 3 – <b>Large adverse</b></p>	No significant effects
<b>Chapter 10 Material Assets and Waste</b>	No significant effects	No significant effects
<b>Chapter 11 Noise and Vibration</b>	<p><b>Noise</b></p> <p>Significant adverse construction noise effects are identified at the closest receptors to the construction works in the vicinity of the following receptors/locations:</p>	<p><b>Traffic noise</b></p> <p>Significant adverse operational noise effects are identified at the following receptors:</p> <p>a. 10 Roxton Road, Chawston (north of A421)</p>



Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<p>a. A1 between 9 and 25 Great North Road; The Lane, Nagshead Lane and Chawston Lane in proximity to the Roxton Road Link between Roxton Road and The Lane.</p> <p>b. Roxton Road and Roxton Garden Centre in proximity to the north and south of the Roxton Road re-alignment.</p> <p>c. Greenacres.</p> <p>d. Bedford Road in the proximity of the western A421 works.</p> <p>e. School Lane in the proximity of the southern A1 works.</p> <p>f. Rectory Farm; Potton Road in proximity of the new dual carriageway.</p> <p>g. Cambridge Road and Wintringham Road in proximity of the Cambridge Road junction northern and southern alignment works.</p> <p>h. Ermine Street in proximity to the northern Caxton Gibbet dumbbell.</p> <p>i. St Neots Road in proximity to the tie-in point between the Scheme and the existing A428 at Caxton Gibbet east.</p> <p><b><u>Vibration</u></b></p> <p>Significant adverse construction vibration effects are identified at the following locations where either moderate and major vibration annoyance impacts are predicted to occur:</p> <p>a. 64 to 68 Great North Road (alongside southbound A1).</p> <p>b. Parallel to both sides of the A1 between The Lane and Black Cat junction.</p> <p>c. Along parts of The Lane, Nags Head Lane and Chawston Lane</p>	<p>b. The Bungalow, Roxton Garden Centre, Roxton</p> <p>c. Isolated properties close to route between Black Cat junction and East Coast Mainline (1 and 2 The Barns, Little Barford Road and Rectory Farm, Little Barford Road)</p> <p>d. Isolated properties between East Coast Mainline and B1046 overbridge (Hill Farm, 5 residential properties at The Range, Rectory Farm, Orchard House, Parkers Farmhouse, The Bungalow at Parkers Farm, The Bramleys, Glen Eden, Rectory Farm Cottage)</p> <p>e. Cambridge Road: Tithe Farm and Wintringham Cottages (5 properties)</p> <p>f. Cambridge Road: North Farm Cottage and Weald Farm Cottage, North Farm Barn and North Farm (4 properties)</p> <p>g. Isolated properties in vicinity of Caxton Gibbet junction (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)</p> <p>Significant beneficial operational noise effects are identified at the following receptors:</p> <p>a. Croxton including Eltisley Manor (52 residential properties, 1 care home and 1 community facility)</p> <p>b. Eltisley (North and West) (66 residential properties)</p>

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<p>in proximity to the Roxton Road Link between Roxton Road and The Lane.</p> <p>d. Where the new Roxton Road re-alignment ties into the existing Roxton Road.</p> <p>e. Greenacres.</p> <p>f. Kelpie Marina.</p> <p>g. At the new turning head on School Lane.</p> <p>h. To the north-east of the new alignment of Little Barford Road.</p> <p>i. Along Potton Road in proximity to the new Scheme alignment.</p> <p>j. At the southern alignment of the new Cambridge Road junction.</p> <p>k. At the junction between Cambridge Road and Toseland Road.</p> <p>l. Along the A1198 to the north of the new Caxton Gibbet junction (Iway Inn).</p> <p><b><u>Traffic noise</u></b></p> <p>Significant adverse construction traffic noise effects are identified at the following affected routes:</p> <p>a. Bourn Road, Caxton between Caxton Road and Royston Road (Phase 4)</p> <p>b. Main Street, Caldecote between B1046 and approximately New Barns Farm, Caldecote (Phase 3 and Phase 4)</p> <p>c. Caxton Road between Alms Hill, Caxton End and Bourn Road, Caxton (Phase 3 and Phase 4)</p> <p>d. B1046 Meadow Road, Great Gransden (Phase 3 and Phase 4)</p> <p>Significant adverse construction traffic noise effects are identified at</p>	<p><b><u>Affected routes</u></b></p> <p>Significant beneficial effects are anticipated in Yelling, Toseland, Gamlingay, and Abbotsley due to decreases in road traffic noise.</p>

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<p>all noise sensitive properties within 25m of the following proposed diversion routes:</p> <ul style="list-style-type: none"> <li>a. Sandy to Black Cat: 89 residential properties along A603 between A421 and A1.</li> <li>b. Wyboston to Black Cat: 182 residential properties and 2 hotels along existing A428, A1198, A505 and A1.</li> <li>c. Renhold to Black Cat: 116 residential properties and 1 hotel along A1 and A603.</li> <li>d. Caxton to St Neots: 15 residential properties and 1 hotel along A1198 and A1.</li> <li>e. Girton to Caxton: 21 residential properties along existing A428, A14 and A1.</li> </ul>	
<b>Chapter 12 Population and Health</b>	<p>A temporary <b>moderate adverse</b> effect upon recreational users of the River Great Ouse due to closure during construction</p> <p>A temporary <b>moderate adverse</b> effect upon users of public right of way (PRoW) 73/17 due to closure during construction Phase 2 of Caxton Gibbet junction</p>	No significant effects
<b>Chapter 13 Road Drainage and the Water Environment</b>	No significant effects	No significant effects
<b>Chapter 14 Climate</b>	No significant effects	No significant effects
<b>Chapter 15 Assessment of Cumulative Effects</b>	<p><b><u>In-combination construction assessment</u></b></p> <p><b>Moderate adverse (temporary) effects:</b></p> <ul style="list-style-type: none"> <li>a. 15 - 39 (even nos.) - School Lane, MK44 3DR, residential properties, Landscape receptor: R5, Construction Noise Receptor: R03</li> </ul>	<p><b><u>In-combination operational assessment</u></b></p> <p><b>Moderate adverse (permanent) effects:</b></p> <ul style="list-style-type: none"> <li>a. Hill Farm, Station Road, Tempsford, SG19 2BP, Landscape receptor: R50, Air quality receptor: N/A</li> </ul>

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<ul style="list-style-type: none"> <li>b. Kelpie Marina, Great North Road, Roxton, Bedford, MK44 3DS, Landscape receptor: R7, Construction Noise Receptor: R07</li> <li>c. Greenacres, Great North Road, Roxton, MK44 3DS, Landscape receptor: R8, Construction Noise Receptor: R06</li> <li>d. 17 and Berlo House Spinney Road, residential properties, Landscape receptor: R10, Construction Noise Receptor: R08</li> <li>e. Field Cottage, Scuttle Cottage, Russet House - Nagshead Lane, MK44 3AN, residential properties, Landscape receptor: R15, Construction Noise Receptor: R11</li> <li>f. Ferndale, Wycombe House, Mandeville House - Chawston Lane, MK44 3BH, residential properties, Landscape receptor: R16, Construction Noise Receptor: R10</li> <li>g. 8, 9 – Great North Road, MK44 3BD, residential properties, Landscape receptor: R17, Construction Noise Receptor: R15A &amp; R15B</li> <li>h. 1 - 9 – Great North Road, MK44 3BD Chawston, residential properties, Landscape receptor: R19, Construction Noise Receptor: R15A &amp; R15B</li> <li>i. 2 Thatch Cottage, Little Thatch, Freora - Nagshead Lane, MK44 3AN, residential properties, Landscape receptor: R20, Construction Noise Receptor: R11 and R12</li> <li>j. 1 Great North Road, MK44 3AJ, residential properties, Landscape receptor: R21, Construction Noise Receptor: R11 and R12</li> </ul>	<p>(reducing to slight adverse at year 15)</p> <ul style="list-style-type: none"> <li>b. 1-4 Wintringham Cottages, Toll Gate Cottage, Wintringham Road, PE19 6 SP, Wintringham – residential properties, Landscape receptor: R62, Air quality receptor: R168</li> <li>c. Weald Farm Cottages, North Farm Cottage, Cambridge Road, PE19 6SR, Landscape receptor: R80, Air quality receptor: R167</li> <li>d. North Farm, Cambridge Road, PE19 6SR, Eynesbury – residential property, Landscape receptor: R81, Air quality receptor: R241</li> <li>e. Pastures Farm, Ermine Street, CB23 3PF, residential properties, Landscape receptor: R102, Air quality receptor: N/A (reducing to slight adverse at year 15)</li> <li>f. Oak Tree Cottage, New Bungalow – St Neots Road, CB23 2PH, residential property, Landscape receptor: R105, air quality receptor: R96</li> <li>g. The Range, Potton Road, Abbotsley, PE19 6XJ, residential properties, Landscape Receptor R114, Air quality receptor: R240 (reducing to slight adverse at year 15)</li> <li>h. Papworth Hotel, Ermine Street South, CB23 3PB, commercial property, Landscape receptor: C29, Air quality receptor: N/A (reducing to slight adverse at year 15)</li> </ul>

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<p>k. Wait for The Wagon, Great North Road, Wyboston, MK44 3AJ, residential properties, Landscape receptor: R22, Construction Noise Receptor: R13</p> <p>l. 19 - 25 (odd nos.) - Great North Road, MK44 3AJ, 1A, 1, - 4, Waddon Lodge - The Lane, MK44 3AP, Wyboston – residential properties, Landscape receptor: R24, Construction Noise Receptor: R12 and R13</p> <p>m. Rectory Farm Cottage, Potton Road, PE19 6XJ, residential properties, Landscape receptor: R53, Construction Noise Receptor: R21 and R22</p> <p>n. 1 and 2 Rectory Farm Cottage, Potton Road, PE19 6XJ, residential properties, Landscape receptor: R54, Construction Noise Receptor: R23A and R23B</p> <p>o. Greyholme, Tithe Farm, Cambridge Road, PE19 6SW, residential property, Landscape receptor: R61, Construction Noise Receptor: R25</p> <p>p. 1-4 Wintringham Cottages, Toll Gate Cottage, Wintringham Road, PE19 6 SP, residential properties, Landscape receptor: R62, Construction Noise Receptor: R27</p> <p>q. Wintringham Lodge, Wintringham Farm, Wintringham Farmhouse, Wintringham Hall, Wintringham Road, Wintringham, PE19 6SP, residential properties, Landscape receptor: R63, Construction Noise Receptor: R28</p> <p>r. Oak Tree Cottage, New Bungalow - St, Neots Road, CB23 3PH, residential</p>	<p><b>Large adverse (permanent) effects:</b></p> <p>a. 10 Roxton Road, MK44 3BP, residential properties, Landscape receptor: R11, Air quality receptor: R53</p> <p>b. 1 The Barns, 2 The Barns - Little Barford Road, PE19 6YF, residential properties, Landscape receptor: R36, Air quality receptor: R209</p> <p>c. Rectory Farm, Little Barford Road, PE19 6YF, residential properties, Landscape receptor: R37, Air quality receptor: N/A</p> <p>d. Orchard House, Potton Road, PE19 6XJ, residential property, Landscape receptor: R51, Air quality receptor: R240</p> <p>e. Glen Eden, The Bramleys, Parkers Farmhouse, The Bungalow, Eynesbury Warehouse - Potton Road, PE19 6XJ, Abbotsley – residential properties, Landscape receptor: R52, Air quality receptor: R240</p> <p>f. Rectory Farm and Rectory Farm Cottage, Potton Road, PE19 6XJ, residential properties, Landscape receptor: R53, Air quality receptor: R84</p> <p>g. Tithe Farm, Cambridge Road, PE19 6SW, residential property, Landscape receptor: R66, Air quality receptor: R170 (reducing to moderate adverse at year 15)</p> <p><b>Moderate beneficial (permanent) effects:</b></p> <p>a. Whitehall Farm House, Cambridge Road, PE19 6SS, residential property,</p>

Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<p>properties, Landscape receptor: R105, Construction Noise Receptor: R42</p> <p>s. Papworth Hotel / Iway Inn, Ermine Street South, CB23 3PB, commercial property, Landscape receptor: C29, Construction noise receptor: R40B</p> <p><b>Large adverse (temporary) effects:</b></p> <p>a. 7 - 10 Roxton Road, MK44 3BP, residential properties, Landscape receptor: R11, Construction Noise Receptor: R08</p> <p>b. 1 The Barns, 2 The Barns - Little Barford Road, PE19 6YF, residential properties, Landscape receptor: R36, Construction Noise Receptor: R16</p> <p>c. Rectory Farm, Little Barford Road, PE19 6YF, residential properties, Landscape receptor: R37, Construction Noise Receptor: R17</p> <p>d. Glen Eden, The Bramleys, Parkers Farmhouse, The Bungalow, Eynesbury Warehouse - Potton Road, PE19 6XJ, residential properties, Landscape receptor: R52, Construction Noise Receptor: R20</p> <p><b><u>Assessment of other developments:</u></b></p> <p><b>ID004: Wintringham Park – 17/02308/OUT</b></p> <p>a. Temporary <b>moderate adverse</b> cumulative landscape effect on the local landscape</p> <p>b. Temporary <b>moderate adverse</b> cumulative construction noise effect at Greyholme, Cambridge Road (receptor R25)</p>	<p>Landscape receptor: R82, Air quality receptor: R242</p>

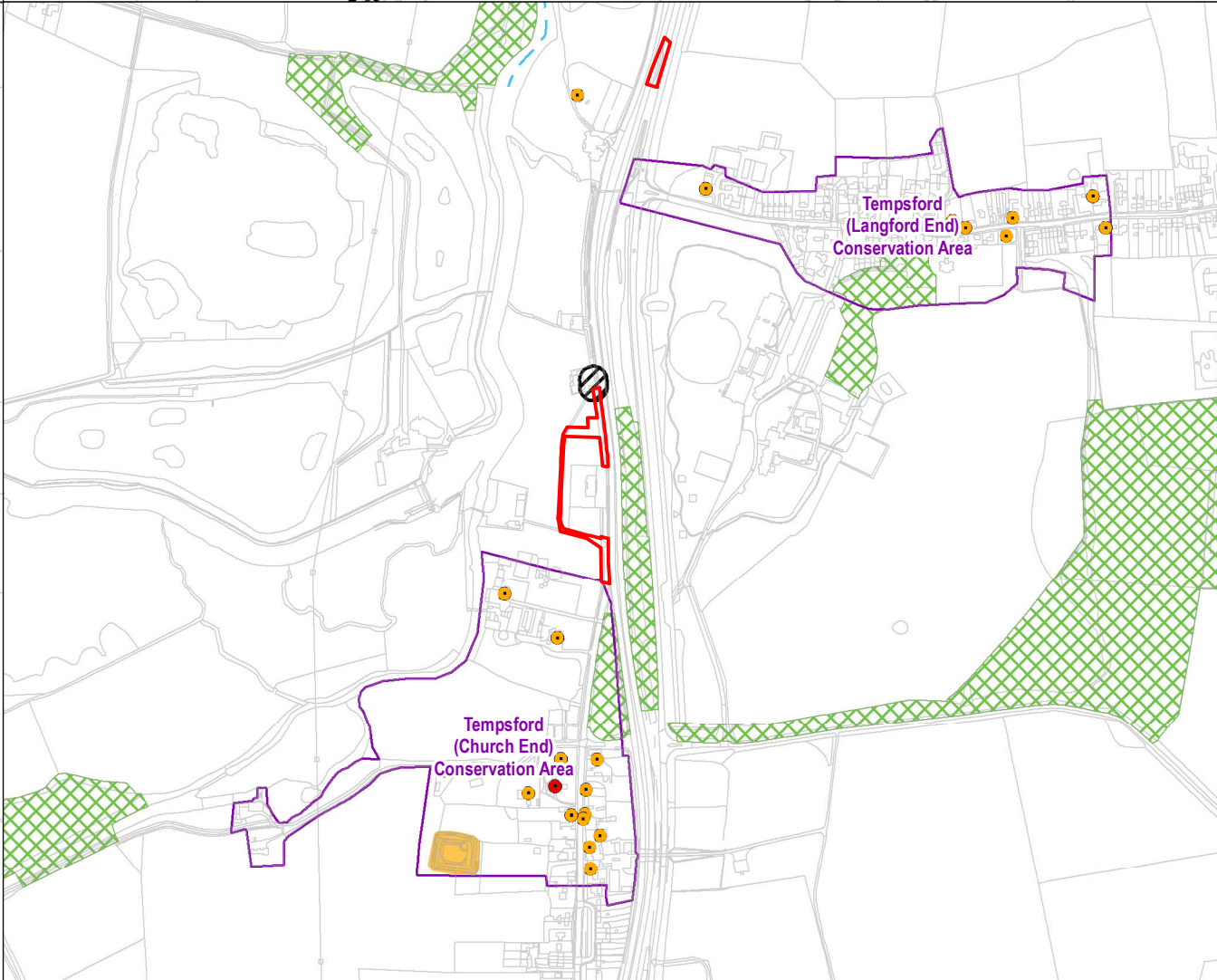
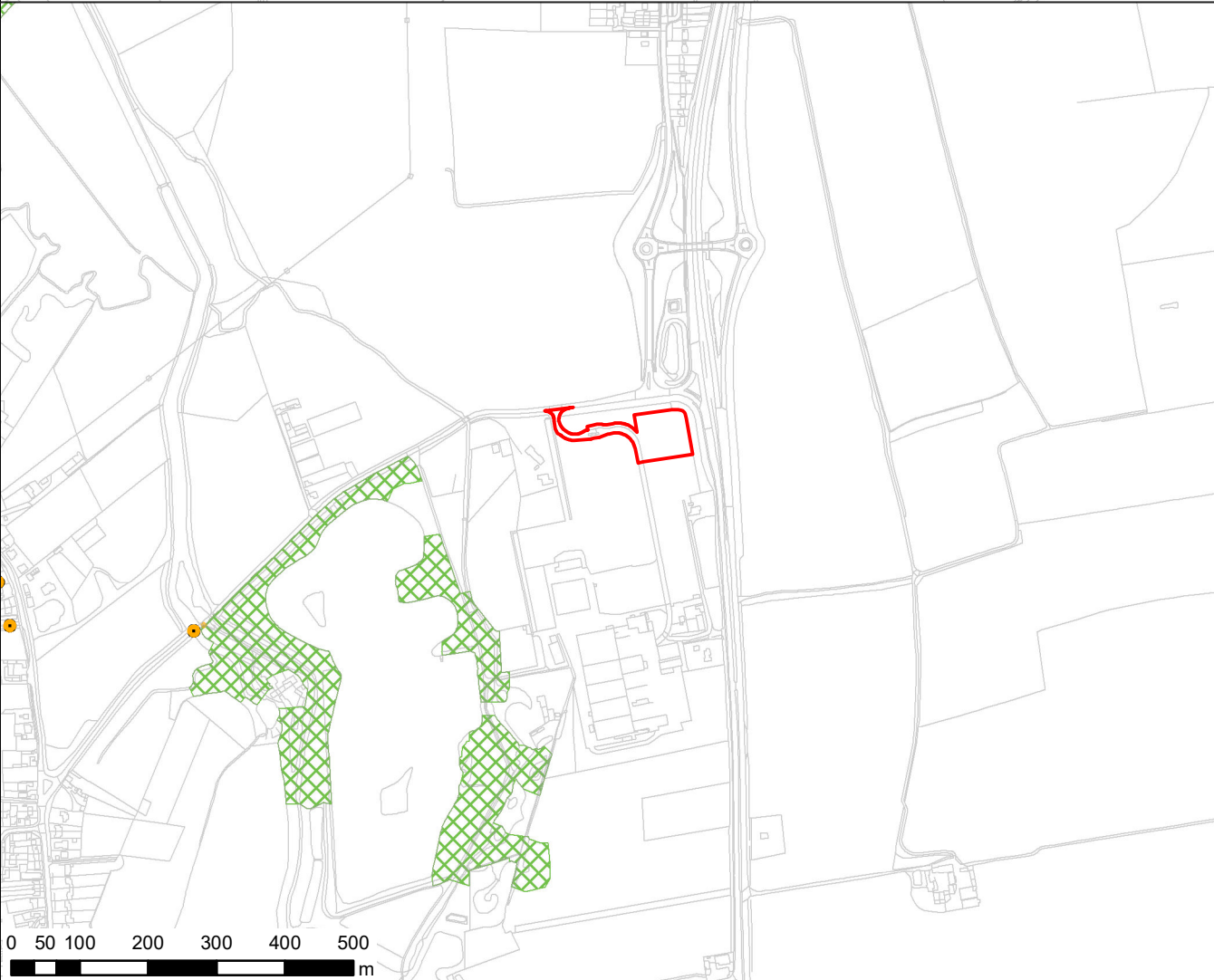
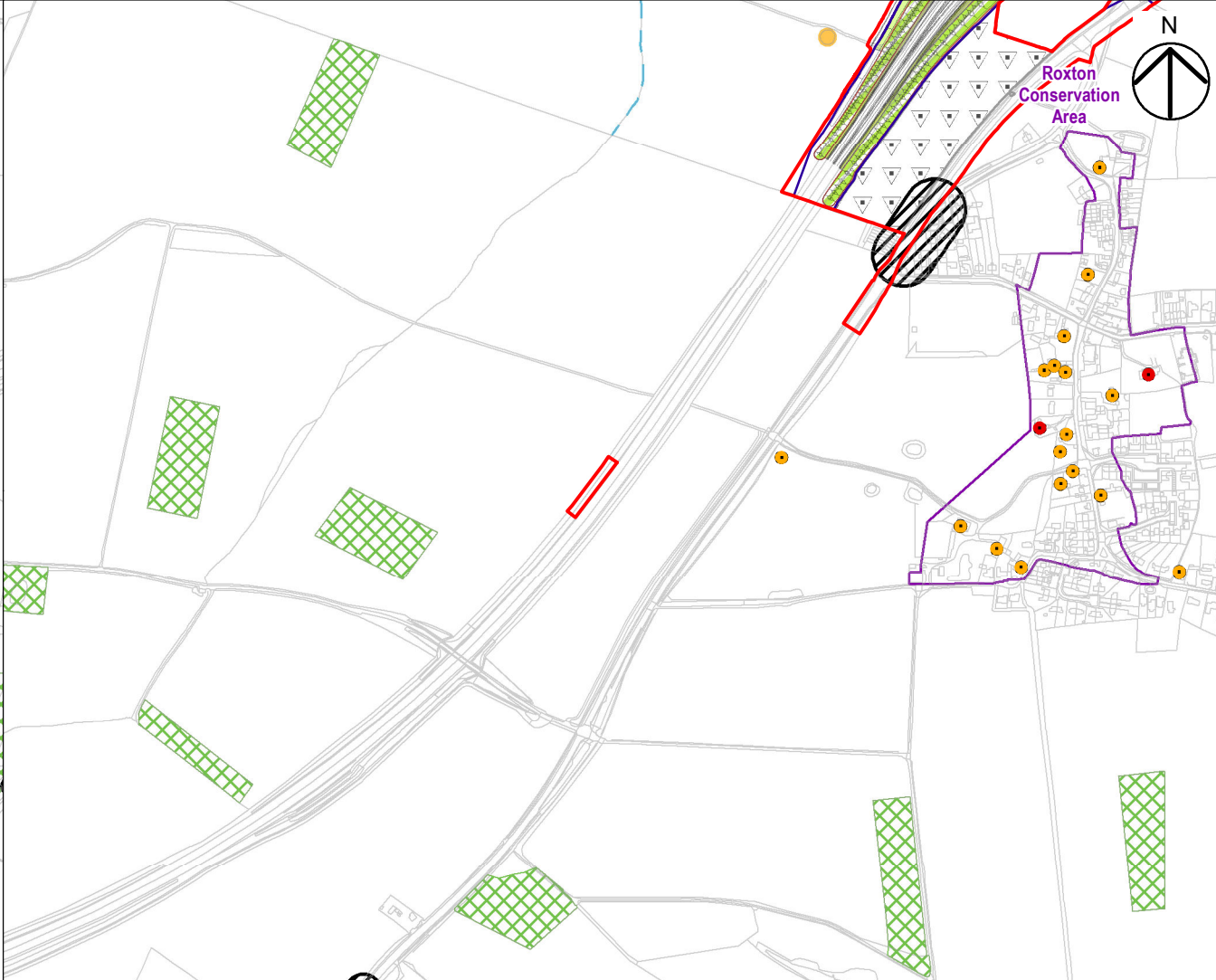
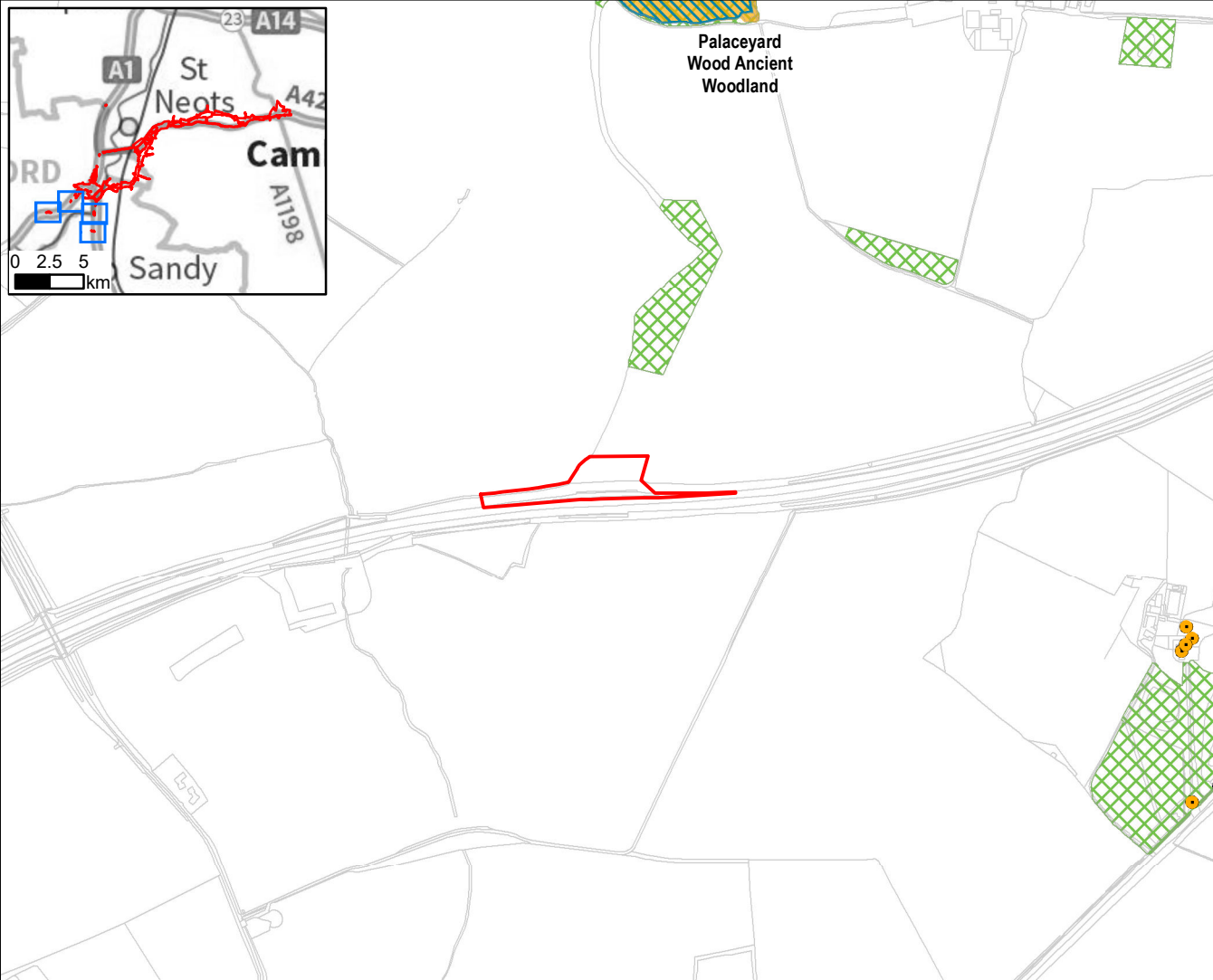
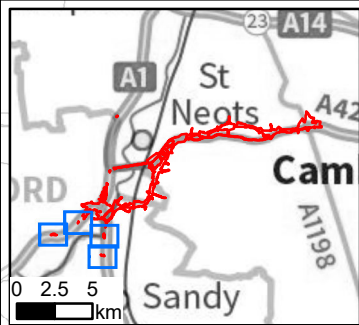
Chapter	Summary of significant (residual) environmental effects	
	Construction stage	Operational stage
	<p><b>ID005: Cambourne – S/2903/14/OL</b></p> <ul style="list-style-type: none"> <li>a. Temporary <b>moderate adverse</b> cumulative landscape effect on the local landscape</li> <li>b. <b>Moderate adverse</b> cumulative visual effect on Swansley Farm (receptor R104)</li> <li>c. Temporary <b>moderate adverse</b> cumulative visual effect on 1 - 4 Common Farm Cottages (receptor R108)</li> </ul> <p><b>ID007: Loves Farm – 1300388OUT and 0101550OUT</b></p> <ul style="list-style-type: none"> <li>a. <b>Moderate adverse</b> cumulative visual effect on the residents of Tithe Farm (receptor R66)</li> </ul>	



## 18 Next steps

- 18.1.1 Following submission of the application for a Development Consent Order, the Planning Inspectorate will consider, on behalf of the Secretary of State for Transport, whether the Application should be accepted for Examination. The documents accompanying the Application will be publicly available on the Planning Inspectorate's website:  
<https://infrastructure.planninginspectorate.gov.uk/projects/eastern/a428-black-cat-to-caxton-gibbet-road-improvement-scheme/>
- 18.1.2 Interested parties will be able to make relevant representations about the Scheme and its potential impacts. Representations received by the Planning Inspectorate will be considered as part of the Examination of the Application.

## Figure A – Non Technical Summary Figure



NOTES  
THIS DRAWING IS TO BE READ IN CONJUNCTION  
WITH ALL OTHER RELEVANT DOCUMENTATION.

REGULATION 5(2)(A)

**Legend**

- Order Limits
- The Scheme
- Permanent Land Acquisition Boundary
- Air Quality Management Area (AQMA)
- Ancient Woodland
- Conservation Area
- Existing Woodland
- Listed Building - Grade I
- Listed Building - Grade II
- Listed Building - Grade II\*
- Local Nature Reserve (LNR)
- Noise Important Area
- Registered Park and Garden
- Scheduled Monument
- Sites of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)
- Tree Protection Order (TPO)

FIRST ISSUE	TD	GC	26/02/21	P01
Revision Details	By	Check	Date	Suffix

Purpose of Issue

DCO APPLICATION

Client  
Highways England  
Woodlands  
Manton Lane  
Manton Industrial Estate  
Bedford  
MK41 7LW



Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT  
TO CAXTON GIBBET  
IMPROVEMENTS

Drawing Title

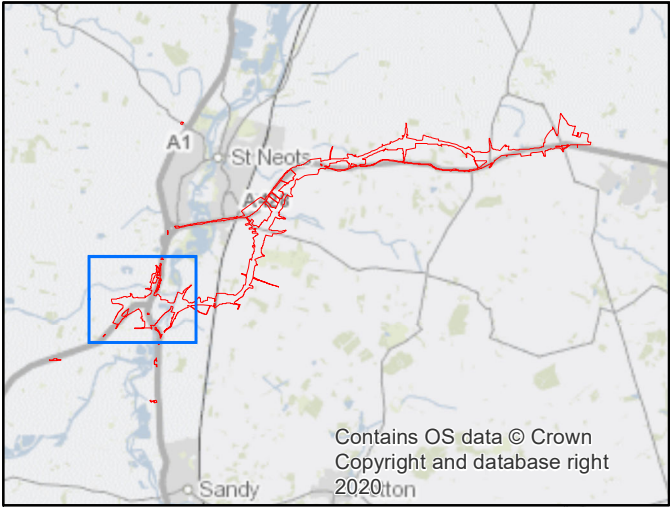
FIGURE A  
NON TECHNICAL SUMMARY  
SHEET 1 OF 8

Designed GC	Drawn TD	Checked LH	Approved JGS	Date 26/02/2021
Internal Project No 60541541			Suitability D7	
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GEN_Z_Z_ZZ	-GS -GI -0085		
Location	Type	Role	Number





Proposed Landscape

- Arable Land

Amenity Grassland

Open Grassland

Species Rich Grassland

Shrub

Shrub with Intermittent Trees

Linear Belt of Shrubs and Trees

Individual Tree

Woodland

Woodland Edge

Scrub

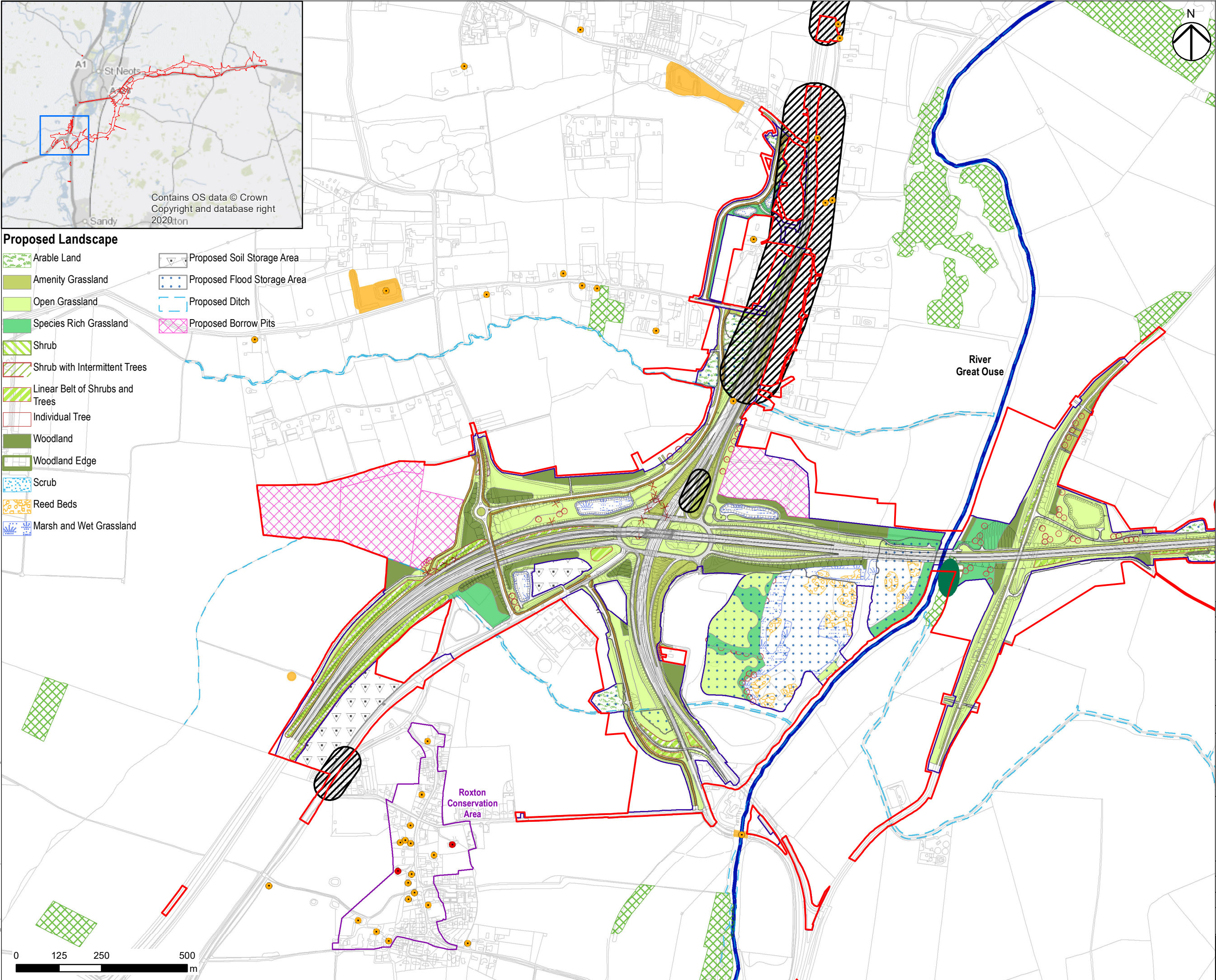
Reed Beds

Marsh and Wet Grassland
- Proposed Soil Storage Area


Proposed Flood Storage Area

Proposed Ditch

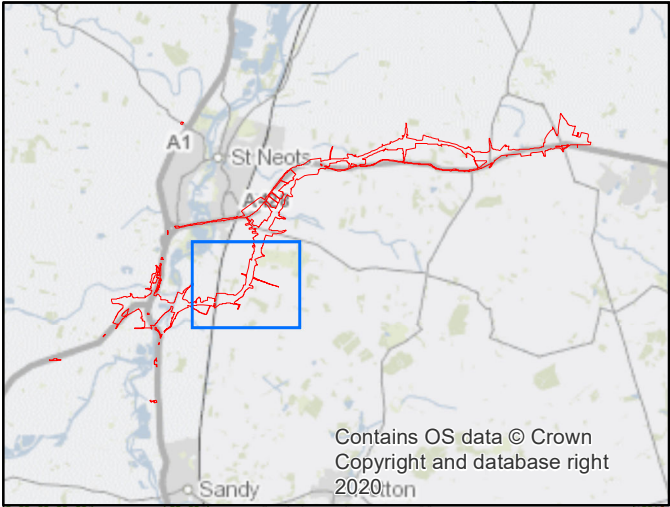
Proposed Borrow Pits



- NOTES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
- REGULATION 5(2)(A)
- Legend**
- Order Limits
  - The Scheme
  - Permanent Land Acquisition Boundary
  - Listed Building - Grade I
  - Listed Building - Grade II
  - Listed Building - Grade II\*
  - River Great Ouse
  - Air Quality Management Area (AQMA)
  - Ancient Woodland
  - Conservation Area
  - Existing Woodland
  - Existing Public Rights of Way - Stopped Up
  - Existing/Realigned Public Rights of Way
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  - Noise Important Area
  - Registered Park and Garden
  - Scheduled Monument
  - Sites of Special Scientific Interest (SSSI)
  - Special Area of Conservation (SAC)
  - Tree Protection Order (TPO)

FIRST ISSUE		TD	GC	26/02/21	P01
Revision Details		By	Check	Date	Suffix
Purpose of Issue					
DCO APPLICATION					
Client Highways England Woodlands Manton Lane Manton Industrial Estate Bedford MK41 7LW					
Development Consent Order Number					
TR010044					
Project Title					
A428 BLACK CAT TO CAXTON GIBBET PRELIMINARY ENVIRONMENTAL INFORMATION REPORT					
Drawing Title					
FIGURE A NON-TECHNICAL SUMMARY SHEET 2 OF 8					
Designed GC	Drawn TD	Checked LH	Approved JG	Date 26/02/2021	
Internal Project No 60541541		Suitability D7			
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Location		Type		Role	
				Number	
				Rev	





Proposed Landscape

- Arable Land

Amenity Grassland

Open Grassland

Species Rich Grassland

Shrub

Shrub with Intermittent Trees

Linear Belt of Shrubs and Trees

Individual Tree

Woodland

Woodland Edge

Scrub

Reed Beds

Marsh and Wet Grassland
- Proposed Soil Storage Area

Proposed Flood Storage Area

Proposed Ditch

Proposed Borrow Pits



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  - Listed Building - Grade II\*
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MK41 7LW

Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT  
TO CAXTON GIBBET  
PRELIMINARY ENVIRONMENTAL  
INFORMATION REPORT

Drawing Title

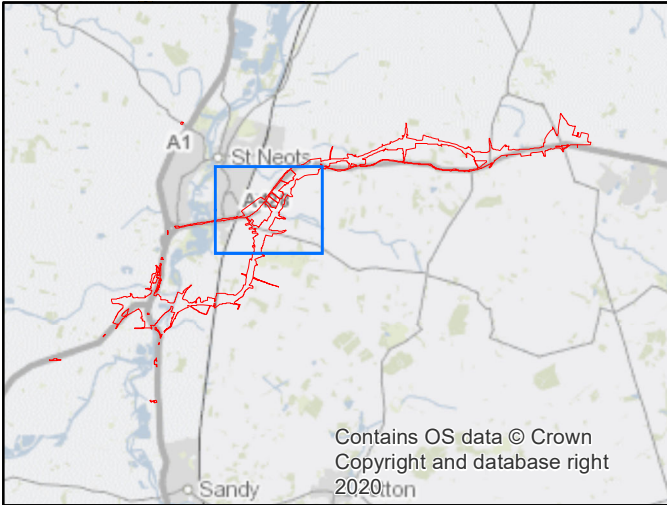
FIGURE A  
NON-TECHNICAL SUMMARY  
SHEET 3 OF 8

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Location GEN_Z_Z_ZZ		Type 	Role 	Number 





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Proposed Landscape

- Arable Land

Amenity Grassland

Open Grassland

Species Rich Grassland

Shrub

Shrub with Intermittent Trees

Linear Belt of Shrubs and Trees

Individual Tree

Woodland

Woodland Edge

Scrub

Reed Beds

Marsh and Wet Grassland
- Proposed Soil Storage Area

Proposed Flood Storage Area

Proposed Ditch

Proposed Borrow Pits

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  - Listed Building - Grade II\*
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Bedford  
MK41 7LW

Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT  
TO CAXTON GIBBET  
PRELIMINARY ENVIRONMENTAL  
INFORMATION REPORT

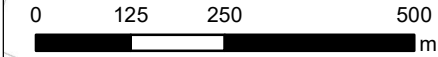
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FIGURE A  
NON-TECHNICAL SUMMARY  
SHEET 4 OF 8

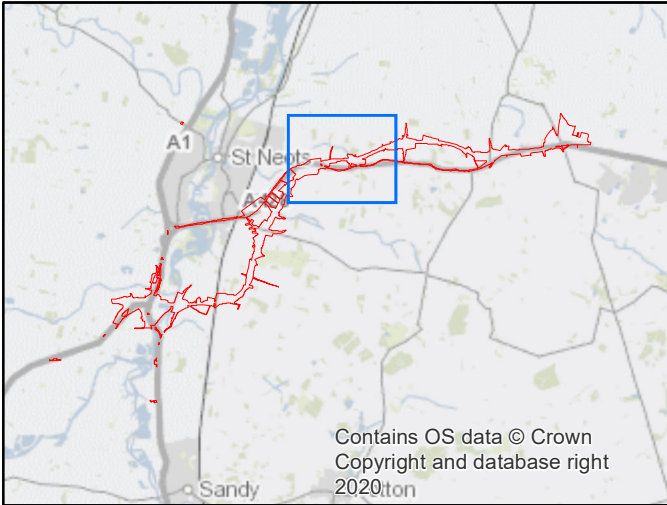
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Location		Type	Role	Number







Proposed Landscape

- Arable Land

Amenity Grassland

Open Grassland

Species Rich Grassland

Shrub

Shrub with Intermittent Trees

Linear Belt of Shrubs and Trees

Individual Tree

Woodland

Woodland Edge

Scrub

Reed Beds

Marsh and Wet Grassland
- Proposed Soil Storage Area

Proposed Flood Storage Area

Proposed Ditch

Proposed Borrow Pits



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MK41 7LW

Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT  
TO CAXTON GIBBET  
PRELIMINARY ENVIRONMENTAL  
INFORMATION REPORT

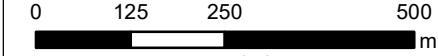
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FIGURE A  
NON-TECHNICAL SUMMARY  
SHEET 5 OF 8

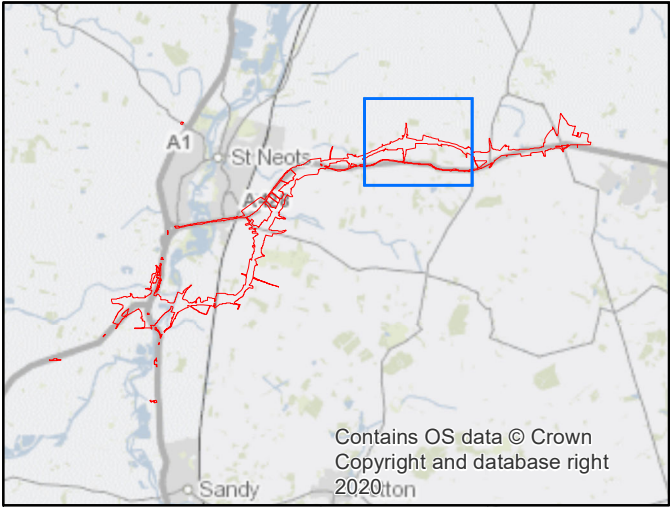
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GC	TD	LH	JG	26/02/2021
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60541541			D7	
Scale @ A3			Zone	
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Location		Type	Role	Number







Proposed Landscape

- Arable Land

Amenity Grassland

Open Grassland

Species Rich Grassland

Shrub

Shrub with Intermittent Trees

Linear Belt of Shrubs and Trees

Individual Tree

Woodland

Woodland Edge

Scrub

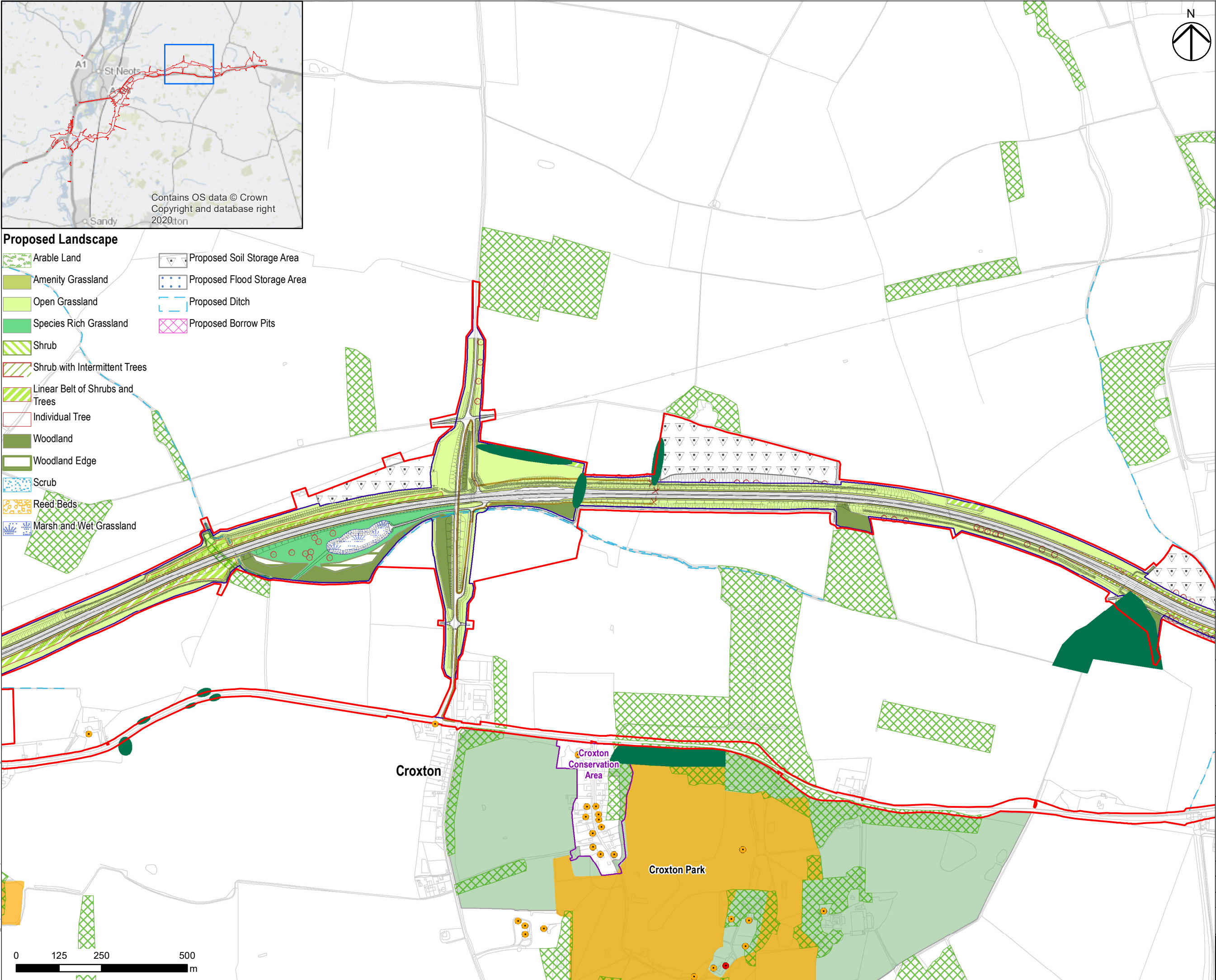
Reed Beds

Marsh and Wet Grassland
- Proposed Soil Storage Area

Proposed Flood Storage Area

Proposed Ditch

Proposed Borrow Pits



- NOTES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
- REGULATION 5(2)(A)
- Legend**
- Order Limits
  - The Scheme
  - Permanent Land Acquisition Boundary
  - Listed Building - Grade I
  - Listed Building - Grade II
  - Listed Building - Grade II\*
  - River Great Ouse
  - Air Quality Management Area (AQMA)
  - Ancient Woodland
  - Conservation Area
  - Existing Woodland
  - Existing Public Rights of Way - Stopped Up
  - Existing/Realigned Public Rights of Way
  - Local Nature Reserve (LNR)
  - Noise Important Area
  - Registered Park and Garden
  - Scheduled Monument
  - Sites of Special Scientific Interest (SSSI)
  - Special Area of Conservation (SAC)
  - Tree Protection Order (TPO)

FIRST ISSUE	TD	GC	26/02/21	P01
Revision Details	By	Check	Date	Suffix

Purpose of Issue

DCO APPLICATION

Client

Highways England

Woodlands

Manton Lane

Manton Industrial Estate

Bedford

MK41 7LW



Development Consent Order Number

TR010044

Project Title

A428 BLACK CAT TO CAXTON GIBBET

PRELIMINARY ENVIRONMENTAL INFORMATION REPORT

Drawing Title

FIGURE A

NON-TECHNICAL SUMMARY

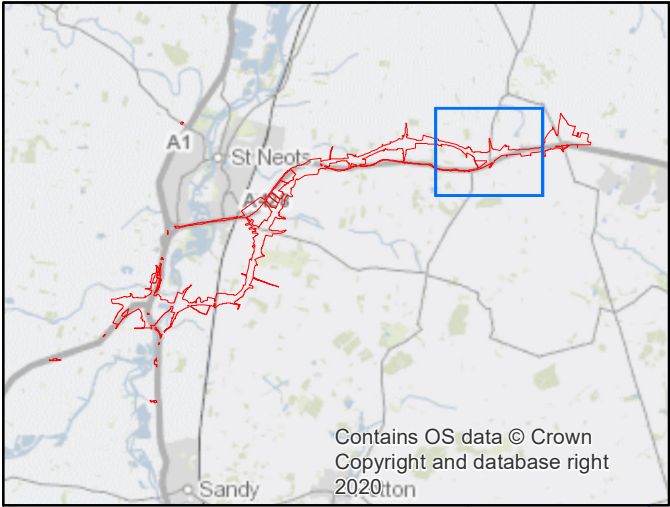
SHEET 6 OF 8

Designed	Drawn	Checked	Approved	Date
GC	TD	LH	JG	26/02/2021
Internal Project No	Suitability			
60541541	D7			
Scale @ A3	Zone			
1:10,000				

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Drawing Number	Highways England Pin	Originator	Volume	Rev
HE551495	-ACM	-EGN-		
GEN_Z_Z_ZZ		-GS -GI	-0085	
Location		Type	Role	Number





Proposed Landscape

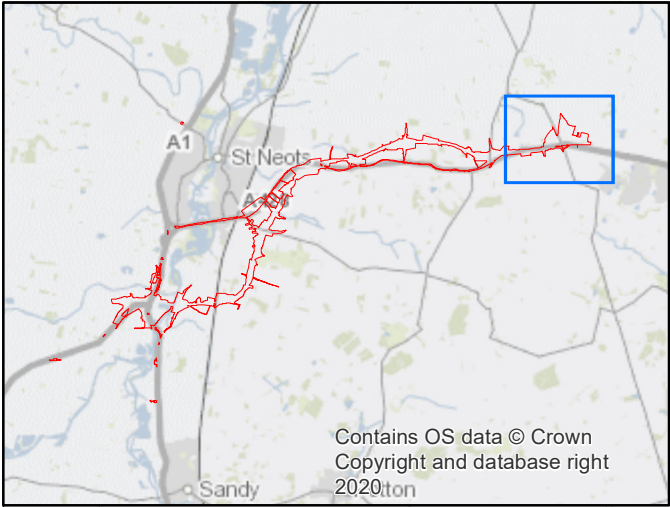
- Arable Land
- Amenity Grassland
- Open Grassland
- Species Rich Grassland
- Shrub
- Shrub with Intermittent Trees
- Linear Belt of Shrubs and Trees
- Individual Tree
- Woodland
- Woodland Edge
- Scrub
- Reed Beds
- Marsh and Wet Grassland
- Proposed Soil Storage Area
- Proposed Flood Storage Area
- Proposed Ditch
- Proposed Borrow Pits



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FIRST ISSUE			TD	GC	26/02/21	P01
Revision Details			By	Check	Date	Suffix
Purpose of Issue						
DCO APPLICATION						
Client Highways England Woodlands Manton Lane Manton Industrial Estate Bedford MK41 7LW						
Development Consent Order Number						
TR010044						
Project Title						
A428 BLACK CAT TO CAXTON GIBBET PRELIMINARY ENVIRONMENTAL INFORMATION REPORT						
Drawing Title						
FIGURE A NON-TECHNICAL SUMMARY SHEET 7 OF 8						
Designed GC	Drawn TD	Checked LH	Approved JG	Date 26/02/2021		
Internal Project No 60541541		Suitability D7				
Scale @ A3 1:10,000		Zone				
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Drawing Number HE551495		Originator -ACM		Volume -EGN-		
Location GEN_Z_Z_ZZ		Type -GS -GI		Role -0085		
				Rev		





Proposed Landscape

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Amenity Grassland

Open Grassland

Species Rich Grassland

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Shrub with Intermittent Trees

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PRELIMINARY ENVIRONMENTAL INFORMATION REPORT

Drawing Title

FIGURE A

NON-TECHNICAL SUMMARY

SHEET 8 OF 8

Designed	Drawn	Checked	Approved	Date
GC	TD	LH	JG	26/02/2021
Internal Project No			Suitability	
60541541			D7	
Scale @ A3			Zone	
1:10,000				

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