A40 Park & Ride and Bus Lane Scheme

Environmental Statement - Non-Technical Summary

Oxfordshire County Council

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Prepared for:
Oxfordshire County Council

Prepared by:

AECOM Infrastructure & Environment UK Limited
Midpoint, Alencon Link
Basingstoke
Hampshire RG21 7PP
United Kingdom

T: +44(0)1256 310200
aecom.com

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1. Introduction

1.1 Overview

1.1.1 This document presents a Non-Technical Summary (NTS) of the Environmental Statement (ES) that accompanies the planning application for the construction of the A40 Park & Ride and Bus Lane Scheme, which includes a new 850 space park & ride site at Eynsham, Oxfordshire and approximately 6.5km of new bus lane predominately along the eastbound carriageway of the A40 towards Oxford city centre. Both elements are hereafter referred to as ‘the proposed development’. The site boundary is shown in Figure 1.

1.2 Environmental Impact Assessment

1.2.1 Environmental Impact Assessment (EIA) is a process to ensure that planning decisions are made with full knowledge of the likely significant environmental effects of a proposed development. The findings of the EIA process are reported within an Environmental Statement (ES), which is submitted a part of the planning application. EIA is a requirement for certain projects, based on the criteria set out within the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended 2018) (the ‘EIA Regulations’)

1.2.2 The objective of EIA is to identify any likely significant environmental effects which may arise from the proposed development and to identify measures to prevent, reduce or offset any adverse effects and to identify beneficial effects. As part of the EIA process for the proposed development, opportunities and management measures have been identified and incorporated within the development proposals to prevent or reduce any adverse effects and to identify opportunities for environmental enhancements.

2. Existing site and surroundings

2.1.1 The site and surrounding area are shown in Figure 2. The area of the proposed park & ride site covers approximately 7.7 hectares of agricultural fields located west of the junction of Cuckoo Lane with the A40. Land use surrounding the park & ride site is predominately agricultural, consisting of pasture and individual farm buildings. The village of Eynsham is located to the south and south-east of the park & ride site.

2.1.2 The proposed bus lane would begin at the park & ride site and continue east past Eynsham and towards Oxford city centre, to the north of the A40. Land use surrounding the proposed bus lane is predominately road side vegetation, such as hedgerows and shrubs, and beyond this agricultural fields. The site includes a bridge over the River Evenlode and is in close proximity to a series of lakes located to the north of the road, at the eastern extent of the site.

3. Alternatives and design evolution

3.1.1 Alternatives analysis is a key part of the EIA process and serves to ensure that environmental considerations are built into the project design at the earliest possible stage. The alternatives to the proposed development which have been considered include:

- The ‘no development/do nothing’ option;
- Alternative sites; and
- Alternative designs.
3.1.2 Both the ‘no development’ option and the consideration of alternative sites were not considered viable, as these options would result in a range of adverse effects, including:

- Increased pressure on already congested and capacity constrained roads, as a result of planned development within West Oxfordshire, as part of the Oxfordshire Local Economic Plan, which is likely to increase traffic levels and result in traffic congestion and journey time increases; and

- Reduction in attractiveness of the district for future development and investment due to transport limitations.

3.1.3 A number of alternative options have been considered as part of the design evolution of the proposed development, as a result of consultation with the public and consideration of environmental constraints. Alternative options considered included provision of a new dual carriageway, a new railway line and tram service. On balance, it was considered that the park & ride and bus lane offered the best value for money, due to the ability to run a frequent and flexible service to a variety of destinations, as well as having fewer potential environmental impacts compared to most other options.

3.1.4 Given a review of the known constraints at the time, the most appropriate location for a remote park & ride site serving the A40 corridor was considered to be in the vicinity of Eynsham, on parcels of land to the north and south sides of the A40, west of the Cuckoo Lane junction. The land parcel selected for the proposed location of the park & ride benefited from already being within the ownership of OCC. Since then, the design of the proposed development has been progressed on this basis.

3.1.5 The consultation process has resulted in iterative amendments to the design of the proposed development. Within this process, there were four main design iterations for the park & ride site and these represent how the proposed development has evolved through a process of analysis, design testing and consultation. The key principles which have informed the design include:

- A proposed park & ride site comprising up to 1,000 spaces of mixed use, including standard parking bays, disabled parking bays and electric vehicle parking bays with charging facilities; and

- A bus lane and associated road and junction improvements to facilitate a congestion-free route for public transport along the A40 eastbound carriageway.

4. The proposed development

4.1 Overview

4.1.1 The key components of the proposed development include:

- A park and ride site including:
  - the provision of 850 car parking spaces (760 standard use, 45 disabled parking bays and 45 electric car spaces);
  - a bicycle and motorcycle parking area;
  - pick up and drop off area;
  - bus shelters;
  - A toilet block; and
  - landscaping and habitat creation, including public open spaces.

- A bus lane extending for approximately 6.5km on the eastbound side of the A40 (with some shorter sections on the westbound side), including:
  - a new grass verge;
  - new footway and cycleway adjacent to the bus lanes;
  - associated junction and roundabout improvement works;
  - new bus shelters; and
5. Construction

5.1.1 It is proposed that construction works for the proposed development will begin in January 2020 with an estimated overall duration of 15 months. It is planned that the park & ride and bus lane will be constructed simultaneously and will both become operational in April 2021.

5.1.2 The main construction compound is proposed to be at the park & ride site, with smaller satellite compounds proposed along the length of the bus lane works. The locations of construction compounds is shown in Figure 3. Access to compounds will be designed to minimise disruption to the adjacent road network, and will be formally agreed with the local highways authority and subject to a road safety audit.

5.1.3 The bus lane works will be protected by a longitudinal mass barrier, with access points provided approximately every 500 metres to 1,000 metres. All access and egress points will be referenced and agreed with the local highway authority, with appropriate signage and monitoring by a traffic control safety officer.

5.1.4 Prior to the barrier being installed, enabling works will be undertaken which will include:

- service diversions where required;
- removal of existing assets such as splitter islands, and central refuges;
- temporary replacements of such splitters where they are safety critical (such as pedestrian crossing facilities that must be maintained); and
- installation of narrowed lanes.

5.1.5 The construction vehicles will adhere to the same rights of way as other road users on the A40 carriageway. Wherever possible, site traffic will traverse the works area from within the established construction area to minimise disruption to the existing flow of traffic on the A40.

5.1.6 Once the enabling works are complete, the main earthworks and highways works will be undertaken within the area enclosed by the longitudinal mass barrier.

5.1.7 Where the A40 crosses over the River Evenlode via Cassington New Bridge, due to the narrow width of the existing bridge, the bridge structure will be extended on its northern side to provide continuation of the combined eastbound cycleway/footway.

5.1.8 Further east, the Cassington Halt Bridge crosses over the former railway. Due to the narrow width and restrictions on extending this structure, it is not possible to provide a cycleway/footway on the northern side of the A40 within this existing structure. Therefore a cycleway/footway will be provided in the form of a new footbridge that will cross over the former railway line just north of the existing Cassington Halt Bridge. The proposed footbridge will be located approximately 2m north of the Cassington Halt Bridge structure and the foundations for the proposed footbridge will be built either side of the former railway line.

5.1.9 It is anticipated that the core working hours for construction phase will be as follows, with no works normally undertaken on Sundays or Bank Holidays:

- 08:00 – 18:00 weekdays; and
- 08:00 – 13:00 Saturday.

5.1.10 Further to this it is noted that there may be the requirement for some out of hours works (e.g. for concrete pouring) that will require works outside of the core hours, subject to prior approval.

5.1.11 Measures will be implemented to minimise environmental effects during construction of the proposed development. These measures will be set out within a Construction Environmental Management Plan (CEMP) and include:

- pedestrian crossing points on the A40 and adjacent roads with associated tactile paving.
• key environmental risks related to the construction works, methods to mitigate and manage these risks, construction environmental targets and a monitoring and inspection programme

• maintenance of good relations with neighbours and the general public - the project team is currently engaged in consultation with a range of stakeholders and neighbours and this will continue through the various phases of the proposed development;

• registration with the Considerate Constructors Scheme;

• preparation of a Construction Logistics Plan to minimise adverse effects of construction traffic; and

• preparation of a Site Waste Management Plan or equivalent to minimise the generation of construction waste.

6. **EIA methodology**

6.1.1 The environmental effects of the proposed development have been assessed both during construction and once the proposed development is complete and operational. The effects are described in terms of changes to the existing baseline conditions. The significance of the environmental effects has been assessed by judging the sensitivity (that is, the importance) of a resource or receptor against the magnitude (that is, the scale or extent) of the predicted impact. The duration and geographic scale of the effects have also been taken into account.

6.1.2 The EIA has informed certain aspects of the design, such as landscaping proposals and drainage, that will help to limit the extent of potential environmental effects. It also assumes mandatory application of the measures set out within the CEMP, which the construction contractor will prepare based upon the measures set out in the ES before commencing with construction work.

6.1.3 Where significant effects are still likely to occur, additional mitigation measures are proposed to reduce effects where practicable. Any effects that remain, once these measures are taken into account, are reported as ‘residual effects’.

6.1.4 The content or ‘scope’ of the EIA was agreed within the EIA Scoping Opinion provided by OCC. The following environmental topics were addressed in detail in the EIA:

• Air quality;

• Biodiversity;

• Climate;

• Cultural heritage

• Geology and soils;

• Landscape and visual;

• Noise and vibration;

• People and communities;

• Road drainage and the water environment; and

• Traffic and transport.

6.1.5 Topics were scoped out of the EIA where it was considered that the effects to arise from the proposed development in relation to these topics are not likely to be significant and as such did not require further assessment within the EIA. The topics scoped out include contaminated land, materials and major accidents and disasters.

6.1.6 A development of this nature is likely to have some effects on the environment, both beneficial and adverse. What is important is that ‘significant’ adverse effects are identified and reduced through the design process, or through other mitigation measures. ‘Significant’ effects are considered to be those effects which represent key factors or have a material influence in the decision making process.
6.1.7 The beneficial effects are also reported in the ES to ensure that the benefits arising from the proposed development are realised and the balance of issues is understood. The remaining sections of this Non-Technical Summary set out the findings of the EIA, on a topic by topic basis.

7. Summary of the Environmental Statement

7.1 Air quality

7.1.1 During the construction phase, there is potential for the proposed development to generate adverse impacts arising from dust emissions at sensitive receptors located within 200m of construction works. Through the implementation of dust management measures, however, the impacts will be minimised and are unlikely to be significant.

7.1.2 Vehicle movements are likely to increase during the construction phase, however, heavy goods vehicle movements are anticipated to be well below 200 movements per day, which is the threshold above which significant changes in air quality are considered likely.

7.1.3 The introduction of the proposed development will not result in any exceedance of the air quality objective values for nitrogen dioxide or particulates.

7.2 Biodiversity

7.2.1 No significant effects are expected to occur to designated sites (e.g. Oxford Meadows SAC) or protected species during construction. However, the loss of hedgerow habitat along the A40 to facilitate construction of the bus lane, and therefore the disruption of the wider hedgerow network, is considered to be a significant effect.

7.2.2 No significant effects are expected to occur in relation to ecology following completion of the proposed development. Lighting generated from the park & ride and bus lane has the potential to disrupt key commuting routes and limit the foraging area within the local area, however, the implementation of a sensitive lighting design will act to minimise the potential for light spill on retained and created habitats that represent suitable foraging and/or commuting habitat for bats. As a consequence, the impact of disturbance on the local bat population during operation is not considered to be significant.

7.2.3 The effect of nitrogen deposition on the Oxford Meadows SAC and other sensitive habitats has been considered. It was concluded that there will be no significant effect on the Oxford Meadows SAC due to the potential for reduced traffic flows and an improving trend in vehicle emissions technology. Therefore nitrogen deposition at Oxford Meadows SAC (and its component nationally designated Sites of Special Scientific Interest (SSSI)) is likely to reduce.

7.3 Climate

7.3.1 The total greenhouse gas emissions from the construction phase of the proposed development are estimated to be around 21,700 tonnes of carbon dioxide equivalents. Carbon dioxide equivalent is used to describe different greenhouse gases in a common unit, and represents the amount of carbon dioxide which would have the equivalent global warming impact. Greenhouse gas emissions from the construction phase will be limited to the 15 months when construction activities will be taking place.

7.3.2 The majority of greenhouse gas emissions associated with the construction of the proposed development are linked to embodied carbon in materials, followed by transportation of materials to the site, and fuel and energy consumption during the construction activities.

7.3.3 The total greenhouse gas emissions from the operational phase of the proposed development are estimated to be in the order of 3,700 tonnes of carbon dioxide equivalents per year. Once the proposed development is complete, the majority of the GHG emissions will be associated with bus journeys to and from the site.
7.4 **Cultural heritage**

7.4.1 Two Grade II listed structures, comprising a bridge and a school building, are located within Eynsham. The Eynsham Conservation Area is located approximately 750m south-east of the park & ride site. The nearest Scheduled Monument is the Eynsham market cross, which is a 14th century cross located approximately 1.2km south-east of the park & ride site.

7.4.2 The effects of construction on cultural heritage at the park & ride site have been found to be moderate to major adverse, which is classed as a significant effect, because intrusive construction groundworks would destroy the areas of archaeological potential identified. This significant effect will however be mitigated by a programme of archaeological monitoring and recording during the construction phase.

7.4.3 The construction activity will not materially affect the significance of any designated heritage assets surrounding the site.

7.4.4 There will be no change to the setting of either of the two Grade II listed structures in Eynsham, to the Eynsham Conservation Area or to the Scheduled Monument in terms of lighting or noise resulting from the operation of the proposed development.

7.5 **Geology and soils**

7.5.1 Permanent construction effects will relate primarily to the loss of 1.5 hectares of high quality agricultural land, however this is not considered a significant effect.

7.5.2 During the construction phase, control measures will be implemented to ensure that soils are handled carefully and to reduce the risk of long-term damage to soil structure, the loss of potentially valuable soil, and biodegradation of topsoil.

7.5.3 As the permanent removal of land from agriculture would occur during the construction phase of the proposed development, no further effects on agricultural land would occur during operation of the development.

7.6 **Landscape and visual**

7.6.1 There are no statutory landscape designations within the vicinity of the park & ride site and A40. The landscape surrounding the park & ride site and bus lane comprises mainly agricultural land, with hedgerows and intermittent trees bounding the park & ride site and A40 carriageway. There is a grass verge on either side of the existing A40 carriageway, with further planting to separate the vehicle and cycleway.

7.6.2 The construction activity at the park & ride site would be visible for receptors on the A40, Cuckoo Lane and from public rights of way to the south of the A40, as land at the north of the park & ride site is slightly elevated. The bus lane works would similarly be visible at close range along the A40 and from public rights of way adjacent to the A40. The visible aspects of the construction activity would include the excavation, machinery and compounds, which would represent a change compared to the ‘settled’ state of the existing site. The visual impacts of construction are likely to be significant.

7.6.3 The reduction of hedgerows along the bus lane represents a permanent significant effect during construction and operation of the proposed development.

7.6.4 Potential adverse impacts during the operational phase are related to the change of land use and introduction of structures, hardstanding and lighting adjacent to Eynsham, on the north side of the A40, as well as the increased extent of highways infrastructure via new road junctions along the A40 and an extension to Cassington New Bridge and Cassington Halt Bridge.

7.6.5 Potential beneficial impacts for the operational park & ride include increased provision of woodland and tree cover within the park & ride site, and an increased level of green infrastructure and biodiversity value. The initial visual impacts of the park & ride are anticipated to decrease over time as new planting becomes established.
7.7 **Noise and vibration**

7.7.1 The construction noise and vibration effects are considered to be temporary and not significant with the implementation of appropriate construction environmental management measures.

7.7.2 Vehicle movements are likely to increase during the construction phase, however, the volume of construction traffic movements required is unlikely to generate significant noise and vibration impacts on nearby noise sensitive receptors.

7.7.3 It is expected that the majority of noise sensitive receptors will experience very low increases in noise as a result of the proposed development, and in some locations very low reductions in noise levels are predicted.

7.8 **People and communities**

7.8.1 Sections of the shared use footway/cycleways on the eastbound and westbound carriageways of the A40 will be temporarily closed during construction of the bus lane. Closures and diversions will be agreed in advance with the highway authority. With appropriate diversions in place, the impact of this is not considered to be significant.

7.8.2 Construction activities may temporarily impact the amenity of occupiers of local residential properties close to the park & ride site, the A40 and to Eynsham. Measures to mitigate these amenity impacts (e.g. vegetation removal, construction traffic and noise) would be managed through good construction practices, and the resulting effect is therefore considered to be minor.

7.8.3 The shared footway/cycleway on the eastbound carriageway of the A40 will be replaced with a new shared footway/cycleway, which will be constructed parallel to the bus lane along the entire length of the A40 in the study area, which is considered to result in a beneficial amenity effect.

7.8.4 In addition, there will also be the addition of three new signalised crossings over the A40 and the currently uncontrolled crossing near to the entry/exit link to the Esso Garage will be upgraded to a signalised crossing. The addition of a signalised crossing 500m west of the A40/B4449/Lower Road junction will enable users of Bridleways 206/9/10 and 206/9/20 to cross the A40.

7.8.5 There are no residential properties, commercial properties, community facilities or open space which experience impacts on their amenity arising from operation of the proposed development.

7.9 **Road drainage and the water environment**

7.9.1 The potential effects during the construction phase of the proposed development on water resources could result from an increase in sediment loads caused by site run-off containing suspended sediment; the accidental release of hydrocarbons and oils from spillages; and accidental leaks and use of hazardous materials, particularly concrete and cement products. However, with the implementation of good construction practices, the effects of any incidents that do occur are likely to be negligible.

7.9.2 The potential effects of the proposed development on water resources once operational include impacts on surface water quality from ‘routine run-off’. This refers to the water from the road surface and the pollutants contained within this, typically including sediments, hydrocarbons and metals. The surface water drainage system for the proposed development includes sustainable drainage systems (SuDS) in the form of swales, which would reduce the amount of sediments, hydrocarbons and metals from routine run-off that reaches surface waters. With SuDS in place, impacts to surface waters during operation of the proposed development are not considered to be significant.

7.9.3 For flood risk, once complete sections of the bus lane will remain as a Flood Zone 3, and calculations indicate that the maximum depth increase upon the existing floodplain is in the region of a 2.2 millimetre rise for the River Evenlode. Given that the floodplain at the locations the A40 passes through is within rural settings, it is considered that there would be a very slight rise in flood level, which is anticipated to be accommodated within the rural landscape with an almost negligible increase in existing floodplain area or to the existing flood risk for any properties located at the extremities of the floodplain.
7.10 Traffic and transport

7.10.1 The forecast traffic flow associated with the construction period and potential reduction in speed limit during highways works would not be anticipated to result in a significant change in driver stress.

7.10.2 It is expected that HGVs associated with the construction will be routed to the A40 to avoid local towns and villages, including Eynsham, unless they are delivering from local suppliers, and therefore traffic impacts on the surrounding area will be limited.

7.10.3 There may be up to 50 staff vehicles accessing the site on a daily basis. Assuming an average of 1.2 passengers per vehicle, this would equate to 60 staff. Staff would be expected to work in shifts and therefore not all travel in the same hour and therefore it is not considered that the level of traffic flow would be significant in the context of the existing traffic flows on the A40.

7.10.4 During the construction period, it may be necessary to temporarily suspend the existing bus stops on the A40. Alternative temporary bus stops will however be provided where possible.

7.10.5 Once operational, the change in traffic flow along the A40 and wider study area is not identified to result in a significant increase in traffic flows.

7.10.6 The proposed development will introduce new safety features. The A40/Cuckoo Lane junction will be reconfigured in order to improve safety at the junction as well as to accommodate the bus lane. In terms of pedestrian/cyclist amenity and delay, the proposed improvements to both links and crossings are anticipated to result in a minor beneficial effect.

7.11 Cumulative effects and effect interactions

7.11.1 For the cumulative assessment, two types of effect have been considered:

- The in-combination effects, being the combined effects of individual impacts of the proposed development, for example noise, airborne dust or traffic effects on a single receptor; and
- The cumulative effects of several development schemes which may, on an individual basis not be significant but, cumulatively, have a significant effect.

7.11.2 During the construction phase of the proposed development, neighbouring properties in Eynsham and Cassington are predicted to experience significant visual effects as a result of the visibility of on-going construction works. Although the individual air quality and noise effects are not considered significant, the potential exists for a combined impact during construction due to air quality and noise impacts occurring at the same time. There is also potential for significant visual effects with other nearby schemes, should those schemes be constructed at the same time as the proposed development. These potential combined and cumulative impacts will however be temporary and limited to the construction phase.

7.11.3 No potentially significant in-combination or cumulative effects are predicted once the proposed development is complete and in operation.

8. Environmental Statement availability

8.1.1 This ES is available for viewing by the public via the OCC public access portal: http://myeplanning2.oxfordshire.gov.uk/swiftlg/apas/run/wchvarylogin.display.

8.1.2 OCC should be contacted by telephone (01865 792422) or by email (planning@oxfordshire.gov.uk) to make arrangements to view the ES in hard copy.

8.1.3 Comments on the planning application should be made via the OCC public access portal: http://myeplanning2.oxfordshire.gov.uk/swiftlg/apas/run/wchvarylogin.display.
FIGURE 1

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OXFORDSHIRE COUNTY COUNCIL

A40 PARK & RIDE AND BUS LANE SCHEME

SITE BOUNDARY AND SURROUNDINGS

Oxfordshire A40 Park and Ride

Environmental Statement

Introduction

Figure 1-2 Site Boundary and Surroundings.mxd

WM

MC

23/05/2019

SM

500 1,000 1,500 2,000 m

LEGEND

Site Boundary
FIGURE 3

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A40 PARK & RIDE AND BUS LANE SCHEME
OXFORDSHIRE COUNTY COUNCIL

Site Boundary
Compound Boundary

Legend

Site Boundary
Compound Boundary

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FIGURE 3

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