

# A303 Sparkford to Ilchester Dualling Scheme TR010036 7.1 Case for the Scheme

APFP Regulation 5(2)(q)
Planning Act 2008
Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009
July 2018



# Infrastructure Planning

# Planning Act 2008

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

# A303 Sparkford to Ilchester Dualling

Development Consent Order 201[x]

# CASE FOR THE SCHEME

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# **GLOSSARY**

Term	Meaning	
The Act	The Planning Act 2008	
The Applicant	Highways England	
Benefit Cost Ratio (BCR)	The benefit cost ratio is a presentation of the amount of benefit being bought for every £1 of cost to the public purse – the higher the BCR the greater the benefit for every £1 spent.	
DCO	Development Consent Order	
Examining authority	The person(s) appointed by the Secretary of State (SoS) to assess the DCO application and make a recommendation to the SoS.	
Grade separated junction	Roads crossing the carriageway pass at a different level, so as not to disrupt the flow of traffic. Slip roads connect the carriageway to the junction.	
At grade junction	The meeting of two or more roads at the same level.	
Limits of Deviation	Limits of Deviation	
Net present value	Net present value (NPV) is simply calculated as the sum of future discounted benefits minus the sum of future discounted costs.	
Non-motorised users (NMUs)	Pedestrians, cyclists, equestrians.	
NSIP	Nationally Significant Infrastructure Project, further defined within Chapter 1 of the Case for the Scheme.	
NPSNN or NPS	National Networks National Policy Statement or National Policy Statement.	
Order limit	The extent of land required for the scheme	
The scheme	The A303 Sparkford to Ilchester Dualling scheme.	
Secretary of State (SoS)	The Secretary of State for Transport.	

# **Executive summary**

# Location of the scheme and description of proposals

Highways England submit this application for a Development Consent Order (DCO) under the Planning Act 2008, for the dualling of the A303 between Sparkford and Ilchester ('the scheme').

The stretch of single carriageway, between Sparkford and Ilchester, carries around 23,500 vehicles per day (in 2015) and as a result, the road suffers from severe congestion, particularly at peak times.

# Background to the scheme

The scheme will provide a dual-carriageway on the A303 between Sparkford and Ilchester in Somerset. It will connect the existing dual-carriageway sections to the east and west, between Hazlegrove Roundabout and Podimore Roundabout.

Whilst the scheme follows the existing route of the A303, the majority of the scheme consists of new dual carriageway which runs parallel to, and crosses over the existing single carriageway road, to the north and south. At its maximum distance, the new A303 is typically 100 metres either north or south of the existing A303.

# Consultation and engagement

Developments of the nature of the scheme are defined as Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008 ('the Act'). In order to comply with the Act, we are required to make an application for an order granting development consent to construct the scheme. An application for a DCO will be submitted to the Planning Inspectorate who will examine it and make a recommendation to the Secretary of State for Transport (SoS) on whether development consent should be granted. The SoS will make the final decision on whether development consent should be granted.

In compliance with the Act, statutory pre-application consultation was carried out with prescribed consultees, relevant local authorities and those with an interest in land (s42); the local community (s47), and undertook statutory publicity by placing notices about the scheme in national and local newspapers and journals (s48).

To comply with section 47 of the Act, we published a Statement of Community Consultation (SoCC) and consulted people, businesses and organisations in the vicinity of the scheme, including those that use the existing road.

Full details of the consultation and engagement we carried out, the comments received and how we had regard to them can be found in the *Consultation Report* (*document reference TR010036/APP/5.1*).

The scheme is an Environmental Impact Assessment (EIA) development as defined by the Infrastructure Planning (EIA) Regulations 2017. An *Environmental Statement (ES)* forms part of the DCO application *(document reference TR010036/APP/6.1).* The ES assesses the potential impacts of the scheme and sets out proposals for mitigation.

# Planning policy context

Section 104 of the Act states that, where a relevant, National Policy Statement (NPS) has been designated, decisions about applications for a development consent order must be

taken in accordance with it. The National Policy Statement for National Networks (NPSNN1) was designated in January 2015. The NPSNN sets out the Government's vision and policies to deliver road networks that meet the country's long-term needs, support a prosperous and competitive economy and improve the quality of life for all.

The aims of the scheme are directly in line with the Government's policies and illustrate the need for the scheme on a national level. The Government has highlighted the express need for further growth and improvements to the national networks within the NPSNN. The Road Investment Strategy (RIS), which explores these needs in further detail, has supported the scheme as a required improvement to the network.

The scheme will relieve traffic congestion on a vital link to south west of England, provide more reliable journey times and improve safety through the grade separation of Hazlegrove Roundabout and the removal of the five existing at-grade junctions and direct accesses along the A30.

The scheme is also in general accordance with policies and objectives contained in the local development plan through supporting economic development. Paragraph 2.23 of the South Somerset local plan states that the A303 has been identified as an area for investment:

"The A303 Trunk Road and A30 run east to west through the district, linking it with London and the South West peninsula and have been recognised by the Heart of the South West Local Enterprise Partnership (HoSW LEP) and Government as priorities for investment".

National Policy Statement for National Networks (NPSNN) available online at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/387222/npsnn-print.pdf

# 1 Introduction

# 1.1 Purpose of this document

- 1.1.1 This document supports the DCO application submitted by Highways England to the Planning Inspectorate, acting on behalf of the SoS. It follows the requirements of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 and statutory guidance issued by the Ministry of Housing, Communities and Local Government (MHCLG), and is in general conformity with the Planning Inspectorate's non statutory advice contained in Advice Note 6 (Preparation and Submission of Application Documents).
- 1.1.2 This document is included in the application to set out the need for the scheme, the objectives to be addressed and the options considered. It provides further key information in support of the scheme and demonstrates the robustness of the application made, following a careful consideration of alternatives. It also considers the scheme against relevant and important national and local planning policy.

# 1.2 Structure of this document

- 1.2.1 This document includes 7 chapters as described below:
  - Chapter 2 provides an introduction, confirming the details of the Applicant and includes a description of the scheme. It explains why the scheme is a NSIP, therefore requiring the submission of a DCO application.
  - Chapter 3 considers the need for the scheme, examining existing issues and considering how these could develop in the future if the scheme were not implemented.
  - Chapter 4 sets out the scheme's objectives, resulting from the need.
  - Chapter 5 explains how the scheme has been developed over time. It details
    the options considered and explains how these were refined in order to arrive
    at the scheme detailed within the DCO.
  - Chapter 6 presents the monetised and non-monetised scheme benefits and confirms the economic case for the scheme.
  - Chapter 7 considers the planning and government policy at national and local levels and confirms how the scheme follows this.
  - Chapter 8 concludes the report.
  - Appendix 1 NPSNN Accordance Table
  - Appendix 2 Economic Case

# 2 The scheme

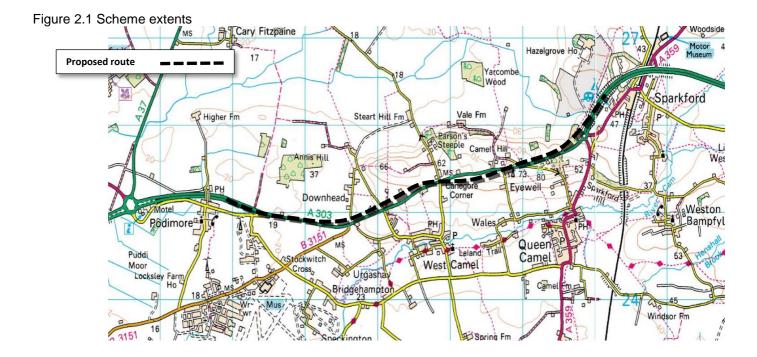
# 2.1 Description of the existing route corridor

2.1.1 The A303 forms part of the strategic road network and a strategic link between the south-west peninsula and the rest of the south, south-east and London. The route is comprised of multiple road standards including dual carriageway, single carriageway, and single carriageway sections with overtaking lanes. Speed limits

also vary between 40mph and 70mph depending on the character of the road and its surroundings.

# 2.2 Existing project road

- 2.2.1 The section of the A303 that is being upgraded as part of this project commences at the eastern limits of the existing dual carriageway Podimore Bypass. Travelling east, the route reaches the junction with the B3151 before bearing north east and rising upwards through Canegore Corner to reach the crest of Camel Hill at Eyewell. This section of the route is characterised by a single lane road, with double white lines prohibiting overtaking and subject to a 50mph speed limit. There are several priority junctions along the route giving access to the settlements of Queen Camel and West Camel to the south and Downhead to the north, as well as several farm accesses and parking laybys.
- 2.2.2 From the crest of Camel Hill, the route descends to meet the roundabout at the western limit of the dual carriageway at Sparkford Bypass (Hazlegrove Roundabout). This section comprises two lanes in the westbound direction, one lane in the eastbound direction and is also subject to a 50mph speed limit. Hazlegrove Roundabout forms a junction between the A303 and the A359 which runs south through Queen Camel and north-east through Sparkford. The roundabout also provides access to a service station, and to a school at Hazlegrove House.
- 2.2.3 The section of the A303 that is to be upgraded is almost 3.5 miles, or approximately 5.6 kilometres in length.
- 2.2.4 The extents of the scheme are illustrated in Figure 2.1. This figure also illustrates the line of the proposed route.



# 2.3 Scheme proposals

2.3.1 The proposed scheme is to provide a continuous dual carriageway on the A303 linking the Podimore Roundabout and the Sparkford Bypass. The scheme will involve the removal of at-grade junctions and direct accesses. The new junctions will be constructed to grade separated standards, or to compact grade separated standards depending upon anticipated traffic flows.

# 2.4 Planning history of the scheme

- 2.4.1 Dualling of the A303 between Sparkford and Ilchester was first investigated in the early 1990s. The preferred option reached public inquiry in 1996 and orders were prepared, but the scheme was not progressed any further. A review of the previous work was carried out in 2003 and the scheme recommended by the planning inspector in 1996 was taken to public consultation (in 2003). However, just prior to orders being published in 2004, the scheme was not progressed any further due to funding.
- 2.4.2 The preferred scheme in 2003 was a combination of online and offline dualling between Hazlegrove Roundabout in the east and the westbound deceleration lane to Podimore in the west.

# 2.5 Scheme description

- 2.5.1 The route follows the existing corridor of the A303 very closely. It is generally considered to be an online solution although is often deliberately aligned just to the side of the existing carriageway in order to allow re-use of the existing route for local access, to avoid property or facilitate construction. At its maximum offset the route is typically 100m either north or south of the existing A303.
- 2.5.2 At its western limits, the route ties in with the existing dual carriageway at A303 Podimore Bypass. Travelling eastwards, the route initially follows the existing A303 closely until the B3151 before moving north of the existing carriageway and rising up just to the south of Downhead before crossing over the existing A303 at Canegore Corner. This passes very close to the Noise Important Area at the West Camel Methodist Church (depicted by a small "+" symbol on Figure 2.1 Scheme extents, just to the west of Canegore Corner). The route then takes a southerly alignment briefly before meeting up with the existing road again to pass between a Scheduled Ancient Monument and a Ministry of Defense (MOD) signal station at the crest of Camel Hill. Finally, the route then bypasses the existing Hazlegrove Roundabout to the north through a registered park and garden associated with Hazlegrove House before tying into the existing A303 north of Sparkford Village.
- 2.5.3 A new all movements grade separated junction will be provided near the Hazlegrove Roundabout. This will enable free flowing passage of traffic on the A303. The junction will incorporate entry and exit slip roads in both directions providing connections to Hazlegrove House, the A359, access to villages south of the route, and access to properties at Camel Hill to the north of the route. A limited movements junction comprising eastbound slips only will be provided in the vicinity of Downhead. A limited movement junction will be provided in the vicinity of the junction with the B3151 comprising westbound exit and entry slip roads.

2.5.4 A connection will be provided between local roads to the north and south of the route in the vicinity of Canegore Corner via an overbridge, incorporating a link to the A303 eastbound via the junction at Downhead. At the western end of the scheme the existing westbound slip road to Podimore village will be closed. Access to Podimore village will therefore be via the A303 / A37 junction (Podimore Roundabout).

# 2.6 Requirement for Development Consent and an Environmental Impact Assessment

- 2.6.1 The scheme is a nationally significant infrastructure project ("NSIP") within sections 14(1)(h) and 22(1) of the Planning Act 2008. Under section 22 an NSIP must fall within one of the three categories specified, which are expressly stated to be alternatives. This scheme is the "construction" of a highway within the meaning of section 22(1)(a). While the scheme includes some alteration and improvement of the existing A303, the new carriageway will follow a different alignment requiring construction of sections of new highway with a speed limit in excess of 50 miles per hour on an area in excess of 12.5 hectares. The land proposed for the new carriageway and embankments alone is 62.37 hectares. The scheme is wholly located in England and Highways England, a strategic highways company, will be the highway authority for the highway to be constructed under the scheme. The scheme therefore complies with the requirements of sections 22(2) and 22(4).
- 2.6.2 To comply with the Act, we are required to secure a DCO in order to construct the scheme. An application for a DCO has been submitted to the Planning Inspectorate, who will appoint an examining authority to examine it and make a recommendation to the SoS on whether development consent should be granted.
  The SoS will make the final decision on whether development consent should be granted.
- 2.6.3 The scheme is an Environmental Impact Assessment (EIA) development, as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- 2.6.4 An EIA Scoping Report was prepared to comply with Section 10 of the Infrastructure Planning EIA Regulations 2017. The purpose of a Scoping Report is to establish the scope of the *ES* and the level of detail required.
- 2.6.5 An **ES** (document reference TR010036/APP/6.1) has been submitted as part of the DCO application. The **ES** provides an assessment of the potential impacts of the scheme and sets out our proposals for mitigation.

# 2.7 Order Limits and Limits of Deviation

- 2.7.1 The order limit (OL) represents the anticipated maximum extent of land in which the scheme would take place with is 144 hectares. Not all this land take would be permanent. Once operation, the permanent land take of the scheme is anticipated to be a total of 69 hectares. These areas are shown on the *Work Plans* (document reference TR010036/APP/2.3) and on the *Land Plans* (document reference TR010036/APP/2.2).
- 2.7.2 If made, the DCO would provide consent for the construction and operation of the

- scheme within the OL (subject to DCO requirements) including all temporary construction works.
- 2.7.3 The Limits of Deviation (LoD) whilst still within the OL, represent a reasonable area of land that may be used for the siting of infrastructure subject to detailed design. The LoD identify a maximum distance or measurement of variation within which the works must be constructed.
- 2.8 Host and neighbouring local authorities
- 2.8.1 The scheme is located entirely within the Somerset County Council and South Somerset District Council local authority boundaries.
- 2.8.2 The following adjoining local authorities have also been consulted, details of which can be found in the SoCC:
  - Bath and North East Somerset Council
  - Devon County Council
  - Dorset County Council
  - East Devon District Council
  - Exmoor National Park Authority
  - Mendip District Council
  - North Dorset District Council
  - North Somerset Council
  - Sedgemoor District Council
  - Taunton Deane Borough Council
  - West Dorset District Council
  - Wiltshire Council
- 2.8.3 Further details of the consultation undertaken with the local authorities can be found in the *Consultation Report (document reference TR010036/APP/5.1).*
- 2.8.4 Chapter 7 of this *Case for the Scheme*, provides full details of how the scheme fits within the local planning context, identifying local planning policies relevant to the scheme.

# 3 The need for the scheme

# 3.1 Introduction

- 3.1.1 Dualling of the A303 between Sparkford and Ilchester was announced in the RIS for the 2015 / 16 to 2019 / 20 road period<sup>2</sup> (RIS1).
- 3.1.2 The single carriageway section of the A303 between Sparkford and Ilchester suffers from congestion and queuing, particularly during the summer months and at weekends. It also suffers from higher than national average accident rates for single-carriageway A-class trunk roads. Numerous at-grade junctions and accesses, non-motorised user (NMU) crossing points and limited space for road workers during maintenance, create hazards for numerous user groups.
- 3.1.3 The scheme will provide a number of benefits to road users, businesses, the local community and tourists:
  - Relieving traffic congestion on a vital link to south west of England
  - Providing more reliable journey times
  - Improving safety and reducing driver stress by providing a more free-flowing network
  - Providing safer local access facilities for pedestrians, cyclists and other NMUs
  - Supporting the local economy to grow through the creation of a modernised and reliable road that reduces delays and makes the south west more accessible for tourism and businesses
  - Improving the environment by reducing pollution from queuing traffic, particularly during the busy summer months
- 3.1.4 Dualling of the A303 between Sparkford and Ilchester is therefore an appropriate solution which would meet the objectives of the Department for Transport (DfT) (see chapter 3 of this report the scheme objectives), and lessen the existing traffic problems on this section of road.

# 3.2 Local and regional growth

- 3.2.1 The strategic roads of the south west present significant challenges in connectivity and reliability, relying heavily on A road connections. Roads such as the A303, A30 and A417 have long sections of high-quality dual carriageway, but most people remember these roads for their bottlenecks and delays. These inconsistent roads have knock-on effects for businesses, communities and families.
- 3.2.2 The existing A303 between Sparkford and Ilchester includes a mix of dual and single carriageway and suffers from traffic congestion and long delays. According to existing annual average daily traffic (AADT) levels, 23,400 vehicles use the single carriageway section of the existing A303 on a normal day. As well as being the principal route between London and the south east to the south west, the A303 is the main road for road users living and working in local towns including Ilchester and Yeovil, as well as other smaller communities along the way.

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<sup>&</sup>lt;sup>2</sup> DfT (2015) Road Investment Strategy: 2015 to 2020 [online] available at: <a href="https://www.gov.uk/government/collections/road-investment-strategy">https://www.gov.uk/government/collections/road-investment-strategy</a> (last accessed March 2018).

# 3.3 Incidents, accidents and network resilience

- 3.3.1 Within the area local to the scheme and during the 5-year period between 01/01/2010 and 31/12/2014, a total of 139 collisions have been recorded. Of these, 5 Personal Injury Collisions (PICs) (3.6%) have been classified as Fatal, 21 (15.1 %) as Serious and 113 (81.3%) as Slight.
- 3.3.2 More detail on incidents can be found in section 9 of the *Transport Report* (document reference TR010036/APP/7.3).

### 3.4 Environmental considerations

- 3.4.1 EIA is a statutory process to identify, predict and evaluate the impacts that a proposed project will have on the environment. EIA considers the impacts on the environment when a scheme is open and operational, as well as during the construction stage. Guidance on environmental assessment is set out in the Design Manual for Roads and Bridges (DMRB), Volume 11<sup>3</sup>. This is added to by specific Interim Advice Notes (IANs). The outcome of the EIA process is presented in the **ES** (document reference TR010036/APP/6.1).
- 3.4.2 Chapter 15 of the **ES** provides a summary of the findings from the individual chapters of the **ES**. Table 15.1 of chapter 15 summarises the likely significant effects (those residual effects with a significance of Moderate Adverse or Beneficial or greater). The required mitigation measures are also outlined in Table 15.1.

Table 3.1 Structure of ES

Chapter	Description	
ES main text (Volume 6.1)		
Chapter 1 Introduction	Chapter 1 provides an overview of the scheme, the purpose and structure of the ES, outlines the legislative and policy framework, provides competent expert evidence in relation to the ES coordinators, and explains the availability of the ES.	
Chapter 2 The Scheme	Chapter 2 identifies the need for the scheme and the scheme objectives, provides a description of the scheme location an overview of the key environmental constraints, a description of the future baseline scenario, and provides a detailed description of the scheme (during both construction and operation).	
Chapter 3 Assessment of Alternatives	Chapter 3 explains how the scheme has developed from a number of different route options during the optioneering process, and provides an outline of the main alternatives considered.	
Chapter 4 Environmental Assessment Methodology	Chapter 4 provides a summary of the environmental scoping process undertaken, general assessment assumptions and limitations, an explanation of the significance criteria, and a summary of the environmental consultation that has been undertaken to date.	
Chapter 5 Air Quality	Chapters 5 to 13 assess and explain the likely significant impacts of the	
Chapter 6 Cultural Heritage	scheme in relation to the environmental factors specified in Schedule 5(2)	
Chapter 7 Landscape	of the Infrastructure Planning (Environmental Impact Assessment)	
Chapter 8 Biodiversity	Regulations 2017. Each of the chapters include the following:	
Chapter 9 Geology and Soils	Introduction	
Chapter 10 Materials	Competent expert	
Chapter 11 Noise and Vibration	Legislative and policy framework	
Chapter 12 People and	Assessment methodology	

<sup>&</sup>lt;sup>3</sup> Highways England (2009) Design Manual for Roads and Bridges (DMRB) Volume 11, Section 4; Part 1 Assessment of Implications (of highways and / or road projects) on European sites (including appropriate assessment).

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Chapter	Description	
Communities	Assessment assumptions and limitations	
Chapter 13 Climate	Study area	
	Baseline conditions	
	Potential impacts	
	Design, mitigation and enhancement measures	
	Assessment of likely significant effects	
	Monitoring	
	Conclusions	
Chapter 14 Combined and Cumulative Effects	Chapter 14 presents the assessment for combined effects as a result of the scheme (the interrelationships between different environmental factors) and cumulative effects from different proposed developments (with the scheme being assessed). The chapter also provides a summary of the likely effects associated with human health and wellbeing, taking into consideration effects described in individual discipline chapters.	
Chapter 15 Summary	Chapter 15 provides a summary of the findings of the ES within a summary table.	
Chapter 16 Glossary	Chapter 16 provides a glossary of the key terms and acronyms used.	
ES figures (Volume 6.2)		
Figures have been produced to support a number of the above ES chapters.		
ES technical appendices (Volume 6.3)		
Technical appendices support a number of the above ES chapters, and have either been produced as part of		
the ES or comprise previous material referenced to support the ES.		
ES Non-Technical Summary (Volume 6.4)		
Non-Technical Summary	The Non-Technical Summary includes the following:	
	The Scheme	
	Alternatives	
	<ul><li>Assessment of likely significant effects</li><li>Description of mitigation measures</li></ul>	

# 3.5 Habitat Regulations Assessment

- 3.5.1 A *Habitat Regulations Assessment: Findings of No Significant Effects* (*FNSE*) report (document reference *TR010036/APP/6.6*) has been produced in parallel to the EIA process to comply with the Conservation of Habitats and Species Regulations 2017, in relation to European designated sites. It follows guidance set out in DMRB HD 44/09 (assessment of implications (of highways or roads projects) on European sites (including appropriate assessment)) and PINS Advice note 10<sup>4</sup>.
- 3.5.2 For European designated qualifying features such as bats, the FNSE has concluded that there is no requirement for specific mitigation. Please refer to the FNSE report for further details.

# 3.6 Highways England Delivery Plan and Strategic Business Plans 2015-2020

- 3.6.1 The Delivery Plan builds on the Strategic Business Plan (SBP) which was published in response to the Government's RIS.
- 3.6.2 The SBP was the first plan published and details how we will deliver the performance requirements set by the Government and progress delivery of the RIS Investment Plan. Within the SBP, the A303 Sparkford to Ilchester Dualling

<sup>&</sup>lt;sup>4</sup> Planning Inspectorate advice note 10 (November 2017) Habitats Regulation Assessment [online] available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/06/Advice-note-10v4.pdf (last accessed June 2018)

- scheme is identified as a scheme requiring further examination, and was chosen for a feasibility study.
- 3.6.3 The Delivery Plan sets out in detail how we will deliver our strategic outcomes, how we will measure success and how we will identify future goals and plans. The Delivery Plan identifies a number of upcoming improvement schemes.
- 3.6.4 These documents identify the future plans for the SRN, and highlight the need for the scheme, and its compliance with the Government's National Infrastructure Delivery Plan and RIS.
- 3.6.5 The scheme will contribute to the conclusions set out in the Delivery Plan, as follows:
  - Supporting economic growth:
    - Reducing congestion and ensuring connectivity of businesses in the local area.
    - Contributing to the future aspiration to connect London with the south west, supporting the continued economic growth of the local area and the south west more widely.
  - A safe and serviceable network:
    - Designing to required standards whilst keeping in mind future safety and maintainability requirements.
    - Removing at grade junctions (both left and right turns) onto this section of the A303, creating a safer means of access for traffic, including local traffic movements.
  - A more free-flowing network:
    - This section of the existing A303 currently suffers from congestion at peak times, and dualling this section will help to create a more resilient road with a higher capacity.
  - An improved environment:
    - Working closely with statutory environmental bodies to ensure flood risk (of particular local interest) is accurately modelled and appropriately mitigated.
    - Liaising closely with Historic England to ensure the protection of a Scheduled Monument.
  - An accessible and integrated network:
    - Working with local NMU groups to identify a design acceptable to pedestrians, equestrians and cyclists.

# 4 Scheme objectives

- 4.1.1 Improvements are needed to this section of the A303 to improve journey times, reduce congestion and decrease the number of accidents. Without improvement, the performance of the route will deteriorate, congestion and delays will increase and road access will be an ever-bigger barrier to economic growth and prosperity.
- 4.1.2 The DfT has an aspiration for the SRN to be smoother, smarter and sustainable by 2040. The DfT aims to achieve this by focusing on 8 key performance areas as set out in part 3, chapter 1 of the RIS1, and shown below:
  - Making the network safer
  - Improving user satisfaction
  - Supporting the smooth flow of traffic
  - Encouraging economic growth
  - Delivering better environmental outcomes
  - Helping cyclists, walkers and other vulnerable users of the network
  - Achieving real efficiency
  - Keeping the network in good condition.
- 4.1.3 The objectives for the scheme are:
  - Capacity: Reduce delays and queues that occur during peak hours at seasonal times of the year
  - **Safety**: Improve safety for all users of the A303 between Sparkford and Ilchester, as well as the wider A303 / A358 corridor
  - Support economic growth: Facilitate growth in jobs and housing by providing a free-flowing and reliable connection between the south east and the south west
  - Environment: Avoid unacceptable impacts on the surrounding natural and historic environment and landscape and optimise opportunities for enhancement
  - Local communities: Reduce community severance and promote opportunities for improving their quality of life
  - **Connectivity**: Improve the connectivity of the south west to the rest of the UK and improve business and growth prospects
  - Resilience: Improve journey time reliability and resilience, and provide extra capacity to make it easier to manage traffic when incidents occur

# 5 Scheme development and options considered

# 5.1 Introduction

5.1.1 This chapter looks at how the scheme has been developed over time. It includes how the requirement for the scheme was identified, and details of alternative options that were considered.

# 5.2 Feasibility study

- 5.2.1 Highways England (known at the time as the Highways Agency) commissioned CH2M Hill to conduct a feasibility study<sup>5</sup> of the A303 / A30 / A358 corridor. The study informed the RIS and particularly the RIS Investment Plan.
- 5.2.2 The study aimed to identify opportunities and understand the case for future investment on the A303, A358 and A30 corridor.
- 5.2.3 The study was split into 3 stages:
  - Stage 1: Review evidence and identify problems and issues
  - Stage 2: Finalise the range of proposals that could address the problems
  - **Stage 3**: Assess the affordability, value for money and deliverability of the proposals
- 5.2.4 At stage 1 of the study, the Sparkford to Ilchester dualling scheme was identified as one of 3 sections to be performing particularly poorly with regard to resilience, road safety, journey times, reliability and connectivity.
- 5.2.5 Stage 3 of the study highlighted that the Sparkford to Ilchester section of the A303 / A30 / A358 corridor showed a high benefit cost ratio, and that it provides considerable value for money in alleviating congestion and reducing delay at key points along the corridor.
- 5.2.6 The overall conclusions drawn from the feasibility study were that the route experiences issues of congestion and journey time reliability, the majority of which is caused by the reduction in the number of carriageway lanes between areas of dual carriageway and single-lane carriageway.
- 5.2.7 The feasibility study identified three key schemes to be taken forward for further development, in order to alleviate the issues seen in the corridor. These included the Sparkford to Ilchester dualling scheme.

# 5.3 Assessment methodology

5.3.1 Initial option sifting was undertaken to comply with the Transport Analysis Guidance – The Transport Appraisal Process and WebTAG. The sift used the Early Assessment Sifting Tool 7 (EAST 7), which forms part of step 6 of WebTAG – Initial Sifting. However, EAST 7 does not provide a numeric score and so the assessment team produced a scoring mechanism to allow each option to be directly compared and ranked.

Planning Inspectorate Scheme Ref: TR010036 Application Document Ref: TR010036/APP/7.1

<sup>&</sup>lt;sup>5</sup> Highways England (2015) A303, A358 and A30 Corridor Feasibility Study Reports [online] available at: <a href="https://www.gov.uk/government/publications/a303-a358-and-a30-corridor-feasibility-study-technical-report">https://www.gov.uk/government/publications/a303-a358-and-a30-corridor-feasibility-study-technical-report</a> (Last accessed April 2018)

- 5.3.2 Following the completion of the EAST sifting process, initial environmental assessment (a scoping level of assessment) was undertaken for the reduced number of options to comply with DMRB. The environmental assessment was further refined for the two route options taken to public consultation during 2017, to a DMRB Simple Level of assessment. Of these two options, one was chosen as the proposed scheme.
- 5.3.3 The scheme is now subject to a detailed environmental impact assessment, reported within the ES.

# 5.4 Alternative options considered

- 5.4.1 13 potential route options were originally identified to ensure a broad range of possibilities were considered. These can be broadly classified as central, northern, or southern routes as follows:
  - **Central**: Option A1, option A1 (south), and option A2 (now the proposed scheme). These options broadly followed the existing route of the A303, with varying degrees of separation from the existing alignment.
  - **Northern**: Option B2, option B4, option D1, option E1, option E2, option E4, option F1, and option G1. These options all included a new dual carriageway to the north of the existing A303 between Sparkford and Ilchester.
  - **Southern**: Southern Route (i), Southern Route (ii). These options proposed a new stretch of dual carriageway to the south of the existing A303 between Sparkford and Ilchester.

# 5.5 Sifting of options

- 5.5.1 Initial option sifting was undertaken in accordance with the Transport Analysis Guidance the Transport Appraisal Process or WebTAG. The sift used the EAST 7, which forms part of Step 6 of WebTAG Initial Sifting. EAST 7 allows for the analysis of options against economics, management, financial and commercial criteria, which includes environmental under the economic case.
- 5.5.2 On completion of the EAST process, the following short-listed options were then taken forward for further assessment:
  - Option B4
  - Option F1 (became Option 2)
  - Option A2 (became Option 1)
  - Option E4
- 5.5.3 The four shortlisted options were subject to a technical appraisal, which concluded that a central and a northern route option should be taken forward to the non-statutory public consultation. Four public consultation events were held between Thursday 23 February and Friday 10 March 2017.
- 5.5.4 These two options were subject to further environmental, economic, and technical assessment. We used the results of these assessments, along with the outcomes of the consultation, to inform the identification of the preferred option. This was announced as Option 1 in October 2017.

- 5.5.5 The assessment of alternatives is presented within the ES which examines the design variations of the preferred option, in line with the Infrastructure Planning (EIA) Regulations 2017. This includes:
  - "a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed scheme and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."
- 5.5.6 This assessment demonstrates the rationale and decisions made for the final preliminary design to be submitted as part of the DCO application.
- 5.5.7 The design has evolved following completion of the statutory consultation, as well as a result of discussions with environmental bodies during the Environmental Technical Working Group (TWG), to take account of feedback received as part of this consultation, including amendments to the size, scale and location of junctions.
- 5.5.8 The scheme development is further detailed within chapter 3 of the **ES** (document reference TR010036/APP/6.1) including the key features of the design presented at consultation and how they have been revised (found in Table 3.3 of the **ES**). Further details of the consultation undertaken can also be found in the **Consultation Report** (document reference TR010036/APP/5.1).

# 6 Economic Case

# 6.1 Introduction

- 6.1.1 This chapter discusses the economic, environmental, and social and distributional impacts relating to the Preferred Route for dualling the A303 between Sparkford and Ilchester. It provides an assessment as to whether the scheme offers value for money.
- 6.1.2 The overall Economic Case has been prepared in line with WebTAG (the Department for Transport's online appraisal guidance) and the impacts are summarised in the standard Appraisal Summary Table (AST).
- 6.1.3 The value for money assessment and option comparison has taken into account the full range of costs and benefits of the scheme. Costs and benefits have been quantified, or 'monetised' as part of a cost benefit analysis, wherever possible.
- 6.1.4 In accordance with Department for Transport value for money guidance, Initial and Adjusted Benefit to Cost Ratios (BCRs) have been estimated. These indicate that the scheme is likely to offer Medium Value for Money.
- 6.1.5 The Economic Case has been prepared in line with WebTAG (the Department for Transport's online appraisal guidance) and has taken into account the full range of economic, environmental, social and public accounts impacts of the scheme. The costs and benefits have been quantified, or 'monetised' as part of a cost benefit analysis, wherever possible.
- 6.1.6 Initial and Adjusted Benefit to Cost Ratios (BCRs) have been estimated for the scheme. The Initial BCR is 1.50 and the adjusted BCR, which includes monetised reliability benefits and wider economic benefits (imperfect competition benefits) is 1.71. With the BCRs in the range of 1.5 and 2.0, the scheme offers Medium Value for Money.
- 6.1.7 The following economic benefits, are expected to arise from the scheme:
  - Journey time benefits of up to £122.2 million (2010 prices, discounted to 2010) for business users, as a direct result of capacity improvements, achieved by converting the single carriageway section to modern dual carriageway with associated junction improvements and
  - Business user reliability benefits of over £10.2 million (2010 prices, discounted to 2010)
- 6.1.8 Dualling the A303 between Sparkford and Ilchester is expected to lead to the following environmental impacts, which have been identified in the Appraisal Summary Tables (found within appendix 2 of this *Case for the Scheme*):
  - A small overall dis-benefit due to a greater number of households experiencing daytime traffic noise increases than decreases, within the calculation area.
  - An overall net worsening in local air quality within the study area. However, the scheme would not result in a new exceedance of the NO2 or PM10 annual mean air quality objectives.

- In terms of greenhouse gases, the scheme is estimated to cause an increase of 631,167tCO2e in non-traded emissions and increase by 5,972tCO2e in traded emissions over 60 years.
- Moderate adverse effects are anticipated for the historic environment, whilst slight adverse effects are anticipated for landscape and biodiversity, and no effects anticipated for the water environment.
- 6.1.9 The following social benefits, identified in the Appraisal Summary Tables in appendix 2 of this *Case for the Scheme*, are expected to arise from the scheme:
  - Journey time benefits of up to £74.5 million (2010 prices, discounted to 2010)
     for commuting and other users, as a direct result of capacity improvements.
  - Commuting and other user reliability benefits of over £16.4 million (2010 prices, discounted to 2010).
  - Accident reduction benefits valued at up to £11 million (2010 prices, discounted to 2010) over the appraisal period.
  - Journey quality benefits as a result of reduced traveller stress.

# 7 Policy context

# 7.1 Introduction

- 7.1.1 This chapter provides an overview of the scheme's compliance with the relevant national and local planning policies that will guide the decision processes. As set out by the Planning Act 2008, the primary policy consideration for a NSIP highway scheme in the National Network National Policy Statement (NPSNN), which was designated in January 2015, following parliamentary approval. Section 104 of the Act requires the SoS to determine an application for an NSIP in accordance with a relevant NPS except in a limited number of specified circumstances.
- 7.1.2 In addition to the NPS, there are other key policy documents at the national and local level that may also be important and relevant matters that the SoS has regard to. These are listed throughout this chapter, as they demonstrate the government's continued commitment to invest in the SRN.

# 7.2 National planning policy overview

- 7.2.1 The following national level documents provide important and relevant considerations against which the scheme has been assessed:
  - National Networks National Policy Statement 2015
  - National Infrastructure Delivery Plan 2016-2021<sup>6</sup>
  - National Planning Policy Framework 2012<sup>7</sup>
  - Road Investment Strategy 2015- 2020<sup>8</sup> (RIS1)

# 7.3 Strategic alignment and conformity of the scheme with national planning and government policy

# **National Policy Statement for National Networks (2015)**

- 7.3.1 Section 104 of the Act requires that decisions made by the SoS on NSIPs must be in accordance with a designated NPS.
- 7.3.2 NPSs are produced by the relevant government body and provide policy on specific aspects of national infrastructure. They clarify how the infrastructure:
  - contributes to sustainable development
  - takes account of the mitigation of, and adaptation to, climate change
  - demonstrates how objectives have been integrated with other government policies
  - details how actual and projected capacity and demand have been taken into account
  - considers relevant issues in relation to safety or technology
  - looks at circumstances where it would be particularly important to address the adverse impacts of development

<sup>&</sup>lt;sup>6</sup> National Infrastructure Delivery Plan 2016-2021 available online at <a href="https://www.gov.uk/government/publications/national-infrastructure-delivery-plan-2016-to-2021">https://www.gov.uk/government/publications/national-infrastructure-delivery-plan-2016-to-2021</a>

<sup>&</sup>lt;sup>7</sup> National Planning Policy Framework 2012 available online at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/6077/2116950.pdf

Road Investment Strategy 2015-2020 available online at <a href="https://www.gov.uk/government/collections/road-investment-strategy">https://www.gov.uk/government/collections/road-investment-strategy</a>

- 7.3.3 In January 2015, the government designated the NPSNN. This statement sets out the Governments vision and policy specifically regarding the strategic road and rail network.
- 7.3.4 Paragraph 1.2 of the NPSNN states that:

"The Secretary of State will use this NPS as the primary basis for making decisions on development consent applications for national networks nationally significant infrastructure projects in England. Under section 104 of the Planning Act the Secretary of State must decide an application for a national networks nationally significant infrastructure project in accordance with this NPS unless he / she is satisfied that to do so would:

- Lead to the UK being in breach of its international obligations;
- Be unlawful;
- Lead to the Secretary of State being in breach of any duty imposed by or under any legislation;
- Result in adverse impacts of the development outweighing its benefits; or
- Be contrary to legislation about how the decisions are to be taken".
- 7.3.5 The NPSNN is not scheme specific and does not set out a programme of road schemes, but instead deals with road and rail networks and strategic rail freight interchanges. It also sets out the principles by which applications for road and rail schemes should be assessed.
- 7.3.6 NPSNN paragraph 2.2 states that:

"There is a critical need to improve the national networks to address road congestion and crowding on railways to provide safe, expeditious and resilient networks that better support social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth".

7.3.7 The Government has set out a Summary of Need, explaining why National Network infrastructure is a necessary tool for growth:

"The Government will deliver national networks that meet the country's longterm needs; supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system. This means:

- Networks with the capacity and connectivity to support national and local economic activity and facilitate growth and create jobs.
- Networks which support and improve journey quality, reliability and safety.
- Networks which support the delivery of environmental goals and the move to a low carbon economy.
- Networks which join up our communities and link effectively to each other".
- 7.3.8 If implemented, the scheme aims to increase the capacity of the road network, improve journey quality, reliability and safety, to support and allow the delivery of residential and employment development either proposed or permitted within Somerset and the south west. This will lead to increased economic growth,

regionally and nationally, which is directly in line with the summary of need.

7.3.9 Paragraph 2.1 of the NPSNN states that:

"well-connected and high-performing networks with sufficient capacity are vital to meet the country's long-term needs and support a prosperous economy".

- 7.3.10 The scheme aims to combat congestion, by removing bottlenecks to make the A303 more reliable and safer.
- 7.3.11 The NPSNN then states in paragraph 2.23 that:

"enhancements to the existing national road network will include junction improvements, new slip roads and upgraded technology to address congestion and improve performance and resilience at junctions, which are a major source of congestion".

7.3.12 Paragraph 2.24 continues:

"Individual schemes will be brought forward to tackle specific issues, including those of safety, rather than to meet unconstrained traffic growth (that is, 'predict and provide')".

- 7.3.13 Implementation of the scheme will reduce congestion and create a safer route, whilst also improving journey time reliability on the SRN.
- 7.3.14 Paragraph 2.9 of the NPSNN states that:

"broader environment, safety and accessibility goals will also generate requirements for development. In particular, development will be needed to address safety problems, enhance the environment or enhance accessibility for non-motorised users. In their current state, without development, the national networks will act as a constraint to sustainable economic growth, quality of life and wider environmental objectives".

7.3.15 The scheme is designed to improve safety by meeting modern highway standards and providing adequate capacity for predicted traffic levels which also aligns with the Government's expectation that:

"promoters are expected to take opportunities to improve road safety, including introducing the most modern and effective safety measures where proportionate" (NPSNN, paragraph 3.10).

7.3.16 The compliance of the scheme's objectives with the vision and strategic objectives, contained within Chapter 2 of the NPSNN Summary of Need, is set out in Table 7.1 below.

### Table 7.1 NPSNN Accordance

NPSNN Summary of Need - Vision and Strategic Objectives	Scheme Conformity
The Government will deliver national networks that meet the country's long-term needs; supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system.	The <i>Transport Report (document reference TR010036/APP/7.3)</i> demonstrates that the scheme improves traffic flows; provides more reliable journey times, and improves the safety of the route. These improvements mean that the scheme contributes towards making the region more attractive for businesses to locate there and
Networks with the capacity and connectivity	would help in promoting a competitive regional economy.

NPSNN Summary of Need - Vision and Strategic Objectives	Scheme Conformity
and resilience to support national and local economic activity and facilitate growth and create jobs.	
Networks which support and improve journey quality, reliability and safety.	The objectives of the scheme are to improve journey times, improve network resilience and journey time reliability and improve safety. This is enabled through creating a two-lane carriageway and removing at-grade junctions.
Networks which support the delivery of environmental goals and the move to a low carbon economy.	The results of the air quality assessment completed for this scheme (presented in Chapter 5 of the <i>ES</i> (document <i>TR010036/APP/6.1)</i> ) demonstrates that the scheme would not have a significant air quality impact. The scheme also provides improvements for pedestrians and cyclists, which helps to reduce local traffic on the strategic network.
Networks which join up our communities and link effectively to each other.	The scheme will significantly reduce congestion and accidents, which often lead motorists to divert off the strategic network, and onto side roads, which impacts on the local road network and the communities they connect.

7.3.17 The scheme has been developed to comply with the NPSNN. A full assessment of how the scheme complies with the NPSNN objectives, including its technical assessment requirements, is provided in appendix 1 of this document.

# **National Planning Policy Framework (March 2012)**

- 7.3.18 The National Planning Policy Framework (NPPF) sets out the government's national planning policies for England and how it expects these to be applied strategically in the development plan system and in the management of development.
- 7.3.19 Paragraph 1.17 of the NPSNN states that the overall strategic aims of the NPSNN and NPPF are consistent. Paragraph 1.18 goes on to say that the NPPF will be an important and relevant consideration 'but only to the extent relevant to [the] project'. Therefore, it is necessary to consider the extent of any such relevance and compliance with the policies that it contains.
- 7.3.20 The NPPF is explicit about the role of NPS being the primary decision-making document for NSIP under the Act. Paragraph 3 of the NPPF states:

"This Framework does not contain specific policies for nationally significant infrastructure projects for which particular considerations apply. These are determined in accordance with the decision-making framework set out in the Planning Act 2008 and relevant national policy statements for major infrastructure, as well as any other matters that are considered both important and relevant (which may include the National Planning Policy Framework)".

- 7.3.21 It continues to reiterate that NPSs:
  - "form part of the overall framework of national planning policy, and are a material consideration in decisions on planning applications." (Paragraph 3, NPPF).
- 7.3.22 It is recognised that the NPPF is an important and relevant consideration in the determination of the application. With this considered, this document will illustrate

- how the scheme adheres to the relevant principles of the NPPF.
- 7.3.23 The NPPF promotes a "presumption in favour of sustainable development". This presumption requires that economic, social and environmental considerations should be assessed in the determination of development proposals. The document is clear that development proposals that are considered sustainable should be approved without delay.
- 7.3.24 Within the overarching roles that the planning system ought to play, NPPF paragraph 17 sets out a list of 12 core land-use planning principles that should underpin both plan-making and decision-taking. Those relevant to the scheme include:
  - Proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs.
  - Contribute to conserving and enhancing the natural environment and reducing pollution.
  - Encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value.
- 7.3.25 NPPF paragraph 19 advises that:

"The Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth.....Therefore, significant weight should be placed on the need to support economic growth through the planning system".

- 7.3.26 NPPF paragraph 30 goes on to say:
  - "Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion."
- 7.3.27 These policies within the NPPF support the need for the scheme, as they emphasise the government's requirement to facilitate economic growth and reduce congestion. Implementation of the scheme would deliver on both of these commitments, economic growth and reducing congestion, as highlighted within the aims of the scheme in Chapter 2 of this report.

# National Infrastructure Delivery Plan 2016-2021

- 7.3.28 The National Infrastructure Delivery Plan (NIDP) updates and replaces the National Infrastructure Plan, and outlines details of £483 billion of investment in over 600 infrastructure projects and programmes, spread across the UK to 2020-21 and beyond.
- 7.3.29 This plan includes sections on how infrastructure will support large-scale housing and regeneration projects, alongside key social infrastructure.
- 7.3.30 The NIDP sets out what will be built and where, focusing specifically on nearly £300 billion of infrastructure that will be delivered over the next 5 years to 2020-21. Chapter 3 of the NIDP sets out how the government is investing over £15 billion to support us in transforming the SRN, with over 100 major schemes

completed or in construction by the end of 2020-21. Ministers have established a clear regulatory framework for us, setting up investment periods with legally-guaranteed funding levels. The first of these, Road Period 1, runs from 2015 to 2020. The goals and objectives of Road Period 1 are detailed within the RIS. In response to this, we have published a number of strategic delivery plans, to detail how they will invest this funding, as per the NIDP and the RIS.

# Road Investment Strategy (2015 - 2020) (RIS1)

- 7.3.31 The Infrastructure Act was adopted in 2015 to make provision for strategic highways companies, the funding of transport services by land, and to make provision for NSIPs.
- 7.3.32 According to part 1 section 3 of the Infrastructure Act, the SoS may at any time appoint a road investment strategy for a strategic highways company. The SoS and the company must comply with this RIS1.
- 7.3.33 The RIS1 was published in December 2014, and outlines a long-term programme for UK motorways and major roads with the stable funding needed to plan ahead.
- 7.3.34 The RIS1 comprises:
  - A long-term vision for England's motorways and major roads, outlining how the government will create smooth, smart and sustainable roads
  - A multi-year investment plan that will be used to improve the network and create better roads for users
  - High-level objectives for the first roads period 2015 to 2020
- 7.3.35 The RIS1 is the government's long-term programme for UK motorways and major roads, in particular, the SRN, of which the A303 Sparkford to Ilchester dualling scheme, is included as a 'fully committed project'.
- 7.3.36 The 'Strategic Vision' set out on page 9 of the RIS1 sets out the Government's aim for Highways England:
  - "To make the network safer and improve user satisfaction, while smoothing traffic flow and encouraging economic growth. We want to see [Highways England] delivering better environmental outcomes and helping cyclists, walkers and other vulnerable users of the network at the same...time as achieving real efficiency and keeping the network in good condition".
- 7.3.37 The Strategic Vision recognises that the SRN has a vital role to play in delivering the government's goals for national networks as outlined in the 4 strategic goals of the NPSNN:
  - 1. Providing capacity and connectivity to support national and local economic activity
  - 2. Supporting and improving journey quality, reliability and safety
  - 3. Joining our communities and linking effectively to each other
  - 4. Supporting delivery of environmental goals and the move to a low carbon economy

- 7.3.38 The Strategic Vision sets out that the SRN is vital to British businesses and to local and national economies, but that capacity problems leading to increased congestion have become a major issue.
- 7.3.39 It recognises that the SRN has a good safety record and provides the lifeline for the logistics of everyday life, such as next day delivery and supermarket supply, but that congestion is having a major effect on reliability.
- 7.3.40 The Strategic Vision acknowledges that the SRN links people, places and different transport modes, but that busy roads can generate noise and sever access in towns and villages, impeding cyclists and walkers. It also explains that, moving forward, the SRN needs to be designed and constructed to the highest environmental standards, with low noise road surfacing to be used where possible.
- 7.3.41 The Strategic Vision sets out the problems that increased congestion across the SRN would cause if action and investment were not undertaken:
  - 16 hours stuck in traffic for every household each year
  - 28 million working days lost per year
  - £3.7 billion annual cost to the freight industry, which could see prices increase on the high street and beyond
  - Impeded travel between regions, hampering business
  - Longer travel times that constrain possible job opportunities
  - Negative impacts on efforts to spur economic growth, with enterprise zones, potential housing sites and areas of high growth held back by bottlenecks
  - Increased stress on roads to ports and airports, making it harder for British businesses to access export markets
  - Safety and the environment suffering as congested traffic is more polluting and there is an increased risk of accidents
- 7.3.42 A feasibility study of the scheme is included within the Strategic Vision. Here it is stated that the A303 / A30 / A358 corridor is a 'vital connection between the south west and London and the south east.
- 7.3.43 As part of the improvement works to this corridor, at the time of publishing, the DfT intended to proceed with 3 major projects worth £2 billion, including the A303 Sparkford to Ilchester dualling.
- 7.3.44 This indicates that The DfT are committed to the full anticipated funding for the scheme.

# **Summary**

- 7.3.45 In summary, the scheme complies with the national policy frameworks identified above. The criteria identified within NPSNN are adhered to, with mitigation measures incorporated into the scheme. Mitigation will ensure that there are no unnecessary impacts on the surrounding environment, and that any impacts that may be incurred are not without sufficient justification.
- 7.3.46 The aims of the scheme are directly in line with the national frameworks and illustrate the need for the scheme on a national level. The Government has highlighted the express need for further growth and improvements to the national

networks within the NPSNN. The RIS, which explores these needs in further detail, has supported the scheme as a required improvement to the network. Therefore, it can be concluded that the NPSNN is in support of the scheme and it therefore should receive full national support.

# 7.4 Strategic alignment and conformity of the scheme with local development plans and strategies

# The development plan (local plans)

- 7.4.1 Although NPSs are the primary planning policy documents for decision making on NSIPs, development plans are still relevant to the scheme as they provide local land use designations and allocate land for future development. The local plans and policies deemed relevant to the scheme are detailed below and justification as to how the scheme meets the identified policy requirements are set out in table 6.2.
- 7.4.2 The scheme is wholly located in the South Somerset District Council area, within the county of Somerset. The local development plan for the area consists of the South Somerset Local Plan<sup>9</sup>, the Somerset Minerals Plan<sup>10</sup> and the Somerset Waste Core Strategy<sup>11</sup>.
- 7.4.3 The South Somerset Local Plan 2006-2028 (adopted March 2015) sets out the scale, type, and broad location of development across South Somerset. It outlines the importance of ensuring that the growth of the district is supported by infrastructure to create sustainable communities.
- 7.4.4 The Somerset Minerals Plan (2015) and the Somerset Waste Core Strategy (2013) also form part of the local development framework and are important and relevant when considering the scheme. A review of the local plan policies relevant to the scheme is set out below.

# South Somerset District Council Local Plan (2006 – 2028)

- 7.4.5 The South Somerset Local Plan was adopted in March 2015 and contains policies which set out the long-term vision and strategic context for managing and accommodating growth within South Somerset up to 2028.
- 7.4.6 Whilst the Local Plan promotes the development of sustainable public transport, it identifies that South Somerset is a predominantly rural district with subsequent diverse travel patterns meaning that the car will remain an essential mode of travel.
- 7.4.7 The significance of the A303 is noted throughout the local plan, its association with the fortunes of Yeovil is noted in the spatial portrait in Chapter six and its role in providing opportunities for growth in association with strategic employment sites (Policy EP1: Strategic Employment Sites) and tourism is identified in Chapter nine.
- 7.4.8 Paragraph 2.23 of the local plan states that the A303 has been identified as an area for investment:

<sup>&</sup>lt;sup>9</sup> South Somerset Local Plan available online at <a href="https://www.southsomerset.gov.uk/media/707200/south\_somerset\_local\_plan\_2006-2028\_adoption\_version\_march\_2015.pdf">https://www.southsomerset.gov.uk/media/707200/south\_somerset\_local\_plan\_2006-2028\_adoption\_version\_march\_2015.pdf</a>

<sup>10</sup> Somerset Minerals Plan available online at http://www.somerset.gov.uk/policies-and-plans/plans/somerset-minerals-plan/

<sup>11</sup> Somerset Waste Core Strategy available online at http://www.somerset.gov.uk/policies-and-plans/policies/somerset-waste-core-strategy/

"The A303 Trunk Road and A30 run east to west through the district, linking it with London and the South West peninsula and have been recognised by the Heart of the South West Local Enterprise Partnership (HoSW LEP) and Government as priorities for investment".

# 7.4.9 Paragraph 5.69 of the Local Plan states that:

"the growth planned in the local plan needs to be supported by infrastructure, community facilities, and services to ensure the development of sustainable places."

Table 7.2 South Somerset Local Plan (adopted March 2015) key policies and objectives relevant to the scheme

# Key policies and objectives

The Strategic objectives considered relevant to the scheme include:

- An integrated sustainable transport system developed both within and between towns, whilst promoting enhanced delivery of services direct to rural areas.
- A natural and built environment able to attract and retain visitors, a vibrant tourism industry and encourage inward investment.
- Address climate change through both mitigation and adaptation and move towards a Carbon Neutral economy by the Government target date of 2030.
- Protection and enhancement of our natural environment, historic environment and biodiversity, retaining the distinctiveness of settlements and reflecting known environmental constraints, including flood risks in locating growth.

Policy SD1: Sustainable Development states that "when considering development proposals, the Council will take a proactive approach to reflect the presumption in favour of sustainable development contained in the National Planning Policy Framework and seek to secure development that improves the economic, social and environmental conditions within the District."

# Schemes conformity with policy

The scheme will provide vital improvements to the SRN. The increased capacity resulting from the scheme will deliver the vital infrastructure required to support economic growth, whilst improved connectivity, safety and journey time reliability will benefit local communities, businesses and tourists alike.

Chapter 14 of the *ES (document reference TR010036/APP/6.1)*, details climate change considerations for the scheme. Overall, once operational, the effects on climate change are considered to be neutral.

The scheme is considered to be an online solution reducing the impact on landscape character and visual receptors by keeping the impacts of major road corridors limited to an isolated area already characterised by a major highway.

The scheme objectives support the core principles of sustainable development through the provision of improved highway infrastructure to support sustainable economic growth, whilst having minimal impact on the environment. Delivery of the scheme would provide improved capacity, safety and improved journey time reliability of the SRN. The scheme would also help provide connectivity between local communities through

IZ POLICE CONTRACTOR	
Key policies and objectives	Schemes conformity with policy
	the provision of safe local
	connections, (such as new junctions
	at Camel Cross, Downhead and
	Hazlegrove), and the retention of the
	existing A303 single carriageway for local access.
The Legal Dian strategy for growth is identified in	
The Local Plan strategy for growth is identified in	The A303 forms part of the SRN and
policies SS1: Settlement Strategy, SS3:	is a strategic link between the south
Delivering New Employment Land and SS5: Delivering New Housing Growth. Paragraph 5.69	west and the rest of the south, the south east and London. The scheme
of the plan states that:	helps to achieve the local plan growth
"the growth planned in the local plan needs to	strategy by reducing congestion and
be supported by infrastructure, community	improving links both within South
facilities, and services to ensure the	Somerset and to the rest of the
development of sustainable places."	country. The improvements seek to
do to opinion of oddianidate piaces.	benefit residents, tourists and the
	business community alike.
Chapter 11 contains policies to improve transport	Chapter 11 of the local plan seeks
and accessibility. Whilst the local plan promotes	opportunities to develop public
the development of sustainable public transport,	transport, but due to the rural
paragraph 11.1 identifies that South Somerset is	location, it recognises the importance
predominantly rural, with subsequent diverse	of the SRN to business.
travel patterns meaning that the car will remain	
an essential mode of travel. The importance of	The A303 provides a vital part of the
the SNR for business is also recognised in	SRN, forming part of the A303/A358
paragraph 11.6, where it is noted that whilst	corridor. Considerable support exists
improvements to modern rail freight are sought to	across the south west of England for
increase rail usage, inadequate infrastructure and	improvements to this corridor in order
poorly located stations are not conducive to the	to provide the necessary
aim and HGV usage on the SRN will continue.	infrastructure to support economic
	growth.
Policy EQ1: Addressing Climate Change in South	Chapter 14 of the <b>ES</b> (document
Somerset, addresses climate change in the	reference TR010036/APP/6.1),
District and states that the Council will support	provides details of climate change
proposals for new development where they have	considerations for the scheme.
demonstrated how climate change mitigation and	Overall, once operational, the effects
adaptation will be delivered.	on climate change are considered to
Policy FOO: Conoral Povalanasat of the level	be neutral.
Policy EQ2: General Development, of the local	The online alignment of the scheme
plan focuses on the design elements of	reduces the impact on landscape
development, stating that the character and appearance of the District should be preserved.	character and visual receptors by keeping the impacts of major road
The primary objective of this policy is to achieve	corridors limited to an isolated area
high quality design which promotes local	already characterised by a major
distinctiveness and preserves or enhances the	highway. The existing A303 single
character and appearance of the district. There	carriageway would also be retained to
are several criteria against which proposals are	be used for local access.
considered including, sustainable construction	20 200 101 10001 200001
	1

Key policies and objectives	Schomos conformity with noticy
principles, creation of quality places, conserving	Schemes conformity with policy The increased capacity of the
and enhancing the landscape character of the	scheme would help to conserve the
area, accessibility and making efficient use of	character of local communities by
land.	reducing the number of vehicles
lariu.	diverting off the A303 onto local
	roads, and attempt to avoid delays on
	the SRN.
Policy EQ3: Historic Environment requires	Less than substantial harm on a
heritage assets to be conserved and where	Grade II listed asset (RPG) has been
appropriate enhanced for their historic	identified within the cultural heritage
significance and important contribution to local	assessment (chapter 6 of the <b>ES</b>
distinctiveness, character and sense of place. It is	(document reference
noted that their potential to contribute towards the	TR010036/APP/6.1)).
economy, tourism, education and local identity	/// // // // // // // // // // // // //
will be exploited.	However, it should be noted that the
The second secon	most significant areas, will be largely
	unaffected by the scheme. The
	overriding benefits of the scheme in
	terms of increasing capacity, reducing
	congestion, improving journey time
	reliability and improved safety, and
	what this helps to achieve in terms of
	economic growth and tourism, will
	outweigh any harm associated with
	the less significant parts of RPG.
Policy EQ4: Biodiversity, states that all	The impacts of the scheme on
development must consider any potential	biodiversity have been assessed as
implications on biodiversity	part of <b>ES</b> Chapter 8 – Biodiversity
	(document reference
	<i>TR010036/APP/6.1)</i> . This confirms
	that the scheme would have a slight
	adverse effect during construction
	and operation on a number of local
	wildlife sites (LWS) (including
	Hazlegrove Park LWS, Downhead
	Manor Farm LWS and Camel Hill
	transmitter site LWS) and slight
	adverse effects during construction
	on a number of wildlife species
	(including bats, badgers, barn owls,
	great crested newts and
	invertebrate), and priority habitat
	areas (including broadleaved semi-
	natural woodland and broadleaved
	plantation woodland). However, many
	of the effects identified are temporary
	and the overall economic and social
	benefits of the scheme clearly

Key policies and objectives	Schemes conformity with policy
	outweigh these marginal temporary effects on biodiversity.
Policy EQ5: Green Infrastructure, promotes the provision of Green Infrastructure throughout the district, as it is essential to the character and appearance of an area and contributes positively to cultural heritage, the health and well-being of the local community and the general quality of life. In addition, it can also contribute to natural drainage and reduce surface water run-off, helping mitigate for the consequences of climate change.	The online alignment of the scheme, helps to reduce the impact of the scheme on local communities and due to the retention of the existing A303 single carriageway, provides additional local links, connecting communities and providing better provision for NMUs.
Policy EQ6: Woodland and Forest supports the implementation of the South West Woodland and Forestry Framework, ensuring the environmental, social and economic value and character of the district's trees, woods and forests are protected and enhanced in a sustainable way. Woodland areas, including ancient and semi-natural woodland should be maintained at least at 2005 levels and expanded where possible to provide a buffer to core areas of woodland. The loss of ancient woodland as well as ancient or veteran trees should be protected against loss wherever possible. Where secondary woodland is unavoidably lost through development it should be replaced with appropriate new woodland on at least the same scale.	An arboricultural impact assessment has been undertaken, and is contained within <i>ES</i> Appendix 7.3 (document reference <i>TR010036/APP/6.3)</i> . This confirms that tree removal is required to facilitate development, including the removal of 1 category C woodland. However, the works do not require the removal of any trees protected by tree preservation orders (TPOs) or the loss of ancient woodland. The impact to trees and woodland is therefore considered to be minimal. Mitigation to compensate for any loss is proposed, loosely, replacing 2 trees for every 1 removed.
Policy EQ7: Pollution Control states that new development should not exacerbate air quality problems in existing and potential Air Quality Management Areas (AQMA's).	The Yeovil AQMA is approximately 4.3 miles (6.9km) south of the scheme, and it is not expected that the scheme will have any significant impacts on air quality within the
The Policy also states that development that, on its own or cumulatively, would result in air, light, noise, water quality or other environmental pollution or harm to amenity, health or safety will only be permitted if the potential adverse effects would be mitigated to an acceptable level by other environmental controls, or by measures included in the proposals.	Yeovil AQMA.

7.4.10 The Local Plan is currently being reviewed. The review is in its early stages, with South Somerset District Council having been out to Issues and Options consultation in October 2017 to January 2018. Much of the evidence base which supported the adopted Local Plan has been reconsidered for the review. The importance of the A303 corridor as a strategic transport route has been reaffirmed

in the Strategic Housing Market Assessment and Functional Economic Market Assessment work which will underpin the review. Adoption of the plan is anticipated to be late 2020.

# **Somerset Waste Core Strategy**

- 7.4.11 The Somerset Waste Core Strategy was adopted in 2013 and includes policies for waste management development in Somerset until the year 2028.
- 7.4.12 The scheme will not have any direct impact on existing or proposed waste management sites and it is therefore considered that the scheme is compliant with the policies within the strategy.

# **Somerset Minerals Plan**

- 7.4.13 The Somerset Minerals Plan was adopted in 2015 and sets out how and broadly where minerals will be worked in Somerset until the year 2030. The document covers all land-based minerals in Somerset, with detailed information on various mineral types.
- 7.4.14 The scheme runs through a building stone safeguarding area and a sand and gravel safeguarding area. Policy SMP9 of the Minerals Plan states that:
  - "Planning permission should not be granted for non-mineral development that would lead to the sterilisation of mineral resources within a safeguarded area unless it can be demonstrated that the mineral resource, operations or facilities will not be detrimentally affected and the development proposal would not suffer unacceptable adverse impacts as a result of the mineral operations."
- 7.4.15 Mitigation of effects to directly underlying geological resources as a result of new or modified earthworks is relatively limited, as the geological material must be built over to facilitate the new carriageway alignment.
- 7.4.16 The alignment of the scheme predominantly along the existing A303 minimises the additional footprint of the works and helps to limit effects on geology at these locations. In addition, the excavation and re-use of site-won materials (both superficial deposits and bedrock) would act to minimise the sterilisation of geological resources.
- 7.4.17 Policy SMP9 refers to a list of exemptions, set out in Table 6 of the Minerals Plan. This includes an exemption for development with a demonstrable over-riding need, where prior extraction is not practicable and / or viable. The scheme is identified as a key priority for facilitating economic growth in the south west of England. NPSNN states that there is a critical need to improve national networks to address road congestion and the RIS includes the A303 Sparkford to Ilchester improvement scheme as a priority for investment. Therefore, there is national policy support for the scheme, which is considered to demonstrate an over-riding need for the scheme.

### Summary

7.4.18 The scheme conforms with the local development plan policies and objectives through supporting economic development and improving the quality of life for travellers (both local and from further afield) through reduced journey times, more

reliable journeys and creating a safer road network. The design has sought to minimise environmental impacts and includes mitigation where the need has been identified within the *ES* (*document reference TR010036/APP/6.1*). The scheme's conformity with the objectives of the development plan are considered further in appendix 1 of this report in the context of NPSNN objectives. Each specialist environmental chapter of the *ES* (*document reference TR010036/APP/6.1*) also sets out the planning policies which are relevant to the assessment of each individual environmental topic.

# Local transport plans

7.4.19 Local authority transport plans set out the transport strategy for their area, and identify local transport schemes prioritised for funding. Whilst the Local Transport Plan is not formally part of the Local Development Plan, in the context of the scheme it is likely to be an important and relevant matter for the SoS to take into consideration, and it has an important influence on the Local Plan making process. The Local Transport Plan also includes consideration of the strategic highway network, due to impacts on local transport strategies.

# **Somerset's Future Transport Plan**

- 7.4.20 As the development management structure in Somerset is two-tier, the local transport plan has been produced by Somerset County Council as the highway authority. Somerset's Future Transport Plan 2011-2026 sets out a long-term strategy for helping to deliver the priorities of the county.
- 7.4.21 Whilst Somerset's Future Transport Plan does not form part of the local development framework, it is considered to be important and relevant due to the nature of the scheme. The Plan includes various documents, including the Schedule of Policies and the Implementation Plan

# Somerset's Future Transport Plan - Schedule of Policies

- 7.4.22 The Schedule of Policies document was adopted in April 2011, and sets out Somerset County Council's transport policies, which relate to the 'Goals for 2026' written by the Council.
- 7.4.23 Policy ECN1 states that the Council will work to better manage the traffic on the roads and improve the most congested junctions and routes. It also says that the Council will work with developers to make sure new development does not make conditions worse. The scheme is in general conformity with this policy by increasing capacity, reducing congestion and helping to put the required infrastructure in place to facilitate future development.
- 7.4.24 Policy HLT 3 states that the Council will work to minimise the effect any changes to Somerset's transport systems have on air pollution. The results of the air quality assessment completed for the scheme (presented in chapter 5 of the ES) demonstrate that the scheme would not have a significant air quality impact and therefore mitigation is not required.
- 7.4.25 Policy SUS 4 states that the Council will encourage people to cycle more and will support the provision of appropriate and well-connected cycling facilities. Policy SUS 6 shows the intent of the Council to ensure that the Rights of Way network is maintained and improved where possible. To ensure this, the Council will ensure

- that improvements to the public rights of way network are secured through development where appropriate.
- 7.4.26 Whilst some journey times will increase for NMUs, removing at grade junctions will increase the safety element of these journeys, providing more assurance to NMUs and encouraging them to use rights of way.
- 7.4.27 Additionally, a new right of way is proposed between Bridleway Y 30/28 and Footpath Y 27/10 at Downhead, to allow for NMUs to safely travel between Podimore and Downhead.
- 7.4.28 As within the South Somerset Local Plan, there is an emphasis to ensure that the landscape of Somerset is not adversely impacted by development. Policy SUS 10 states that the Council will protect the landscape by working to minimise the effect that transport schemes has on it. As per Table 6.2 of this report (below), the scheme follows the local topography, and will be in the context of the existing A303, which would reduce the impact on receptors by not introducing an additional element into the landscape.

# Somerset's Future Transport Plan – Implementation Plan

- 7.4.29 Once adopted, it was proposed that this Implementation Plan (IP) would run for a period of 4 years, from 2013 to 2017, to mirror the County Council electoral cycle.
- 7.4.30 The IP looks at progress to date since 2011 and examining many of the new initiatives that are now in place such as Somerset's Small Improvement Scheme process, the Local Sustainable Transport Fund (LSTF) for Bridgewater and the Local Enterprise Partnership and associated Local Transport Board, set up to deliver major transport schemes.
- 7.4.31 Working with Highways England to deliver a workable solution to improving the A303, is listed as one of the actions that the Somerset County Council will undertake to address challenges identified within the IP.
- 7.4.32 Whilst the IP is outdated, it is clear that the intention of the Somerset County Council is to support the improvement of the A303.

## Local economic strategies

7.4.33 As with the transport plan, the economic strategies are not formally included within the local development framework. However, it is considered that these strategies highlight the economic case for the scheme.

## **South Somerset Economic Development Strategy**

7.4.34 The Council does not currently have an up-to-date Economic Development Strategy. It is expected to have one in place by autumn 2018. The Council Plan (2016-2021) does however identify a key economic aim, which is:

"To promote a strong and growing economy with thriving urban and rural businesses and improving productivity".

- 7.4.35 To achieve this, key actions are identified, which are to:
  - Work with businesses and use our assets
  - Advise and support initiatives that ensure worker skills meet the employers' needs.

- Lobby for and support infrastructure improvements to enable growth.
- Capitalise on our high-quality culture, leisure and tourism opportunities to bring people to South Somerset.
- 7.4.36 One of the key outcomes of the scheme is the provision of vital infrastructure to support economic growth. Increased capacity, journey time reliability and improved safety all help to provide improved connectivity which is of great benefit to business, local commuters and tourists to Somerset and the south west, which are the key actions identified within the Economic Strategy.

#### Somerset Growth Plan 2017-2030

- 7.4.37 The Somerset Growth Plan is produced by Somerset County Council in partnership with the Somerset Local Authorities and sets out the framework for promoting growth up to 2030. The Somerset Growth Plan sits below the HoSW's plans and guides interventions and investments in Somerset.
- 7.4.38 By 2030 Somerset aims to have:
  - A productive and innovative business community and economy
  - · A labour force with the skills that businesses need
  - The infrastructure to support productivity and innovation
- 7.4.39 Sitting beneath these three aims are 18 strategic objectives. The objectives relating to infrastructure to support productivity and innovation are:
  - Strategic connectivity into Somerset, including road, rail and public/community transport, will be improved
  - There will be excellent digital connectivity across the county to every business location and home, with ultrafast broadband available in key business locations.
     All businesses will have been offered support to understand the potential and make the best use of digital technologies
  - Somerset will have a good market supply of employment sites and premises, including a network of enterprise centres. The Local Plans will ensure a sufficient supply of viable and deliverable sites allocated for development
  - There will be sufficient housing of all tenures to meet the needs of the population, in both rural and urban areas
  - Somerset's communities will be vibrant and sustainable, providing a range of retail, leisure, cultural and public services throughout the day and evening
  - Increased flood resilience will improve the resilience of Somerset's transport infrastructure, and will enable previously marginal sites to be fully developed for housing and employment
  - Somerset will still be renowned for the high quality of its environment, and the quality of life that can be achieved
- 7.4.40 The scheme would directly deliver the objective which seeks to improve strategic connectivity into Somerset, by removing many of the constraints that exist on the current A303 between Sparkford and Ilchester. In addition, the capacity enhancements of the scheme, would provide the required transport infrastructure to support housing and employment, whilst benefiting existing communities through local connections and improvements for NMUs and public rights of way. Environmental impacts have been minimised by the scheme's online alignment and through mitigation measures identified within the *ES* (document reference

### TR010036/APP/6.1).

# Heart of the South West Local Enterprise Partnership – Strategic Economic Plan 2014-30 and Growth Deal 2015/16

- 7.4.41 Strategic Economic Plans (SEPs) are produced by Local Enterprise Partnerships (LEPs) and are used to negotiate Growth Deals between themselves and the Government.
- 7.4.42 The existing infrastructure issues highlighted in the SEP include transport corridors cut off in bad weather, long rail journeys to London, flooding causing significant damage and dislocation of networks, lack of transport to access employment and training in rural areas, further investment required to deliver superfast broadband. The LEP's Growth Deal 2015/16 focusses on measures that will be most beneficial now, whether through the Local Growth Fund, through influencing national government, or through greater flexibility for a different approach to tackling issues. The Heart of the South West LEP (HoSW LEP) SEP contains three core aims:
  - Creating the conditions for growth improving infrastructure and services to underpin growth including improvements to transport and accessibility, digital infrastructure, sustainable solutions for flood management, skills infrastructure and facilities, and energy infrastructure;
  - Maximising productivity and employment opportunities stimulating jobs and growth across the whole economy through creating more and better employment through enterprise infrastructure, strategic employment sites and unlocking housing growth;
  - Capitalising on distinctive assets utilising distinctive assets to create opportunities for business growth and better jobs.
- 7.4.43 The plan also includes 3 priority areas: enhancing transport connectivity across the area; building on Hinckley C opportunities; and maximising productivity, innovation and employment. The plan identifies that addressing the vulnerability of critical infrastructure and investing in strategic enablers are key to unleashing growth potential.

## **Somerset County Council Rights of Way Improvement Plan**

- 7.4.44 The Rights of Way Improvement Plan (RoWIP) is the prime means by which Somerset County Council (SCC) will manage the Rights of Way Service for the benefit of walkers, equestrians, cyclists, and those with visual or mobility difficulties.
- 7.4.45 This is the 2<sup>nd</sup> Improvement Plan, which was published in 2015 which aims to:
  - Raise the strategic profile of the public rights of way network
  - Deliver statutory functions in an efficient way
  - Develop a safe and improved access network
  - Improve access information
  - Work in partnership with volunteers and key organisations
- 7.4.46 The proposed scheme will provide safer local access facilities for pedestrians,

- cyclists and other NMUs.
- 7.4.47 Whilst it is recognised that some journey times will increase for some NMUs on some routes, the removal of at grade junctions will increase safety and may encourage the use of public rights of way. Additionally, a new right of way is proposed between bridleway Y 30/28 and footpath Y 27/10 at Downhead, allowing a direct route for NMUs between Podimore and Downhead.

### **Summary**

- 7.4.48 By increasing capacity and removing many of the constraints associated with the existing single carriageway between Sparkford and Ilchester, the scheme meets many of the objectives contained in the transport and economic strategies for the area. Improvements to the SRN are considered to be key priorities for the delivery of economic growth in South Somerset and the south west of England as a whole by:
  - Reducing traffic congestion;
  - Improving safety on the road network and reducing accidents;
  - Improving connectivity (both for local communities and the wider community), helping to unlock local and national growth potential and encouraging investment and regeneration; and
  - Improving journey time reliability which will enable better public transport provision, as well as helping local communities and commuters, businesses and tourists.

## 8 Conclusion

- 8.1.1 This *Case for the Scheme* and accompanying NPSNN accordance table (see appendix 1) sets out the policy context against which the scheme should be viewed. It has been prepared to demonstrate that there is a clear case for the scheme grounded in national and local planning policy.
- 8.1.2 The NPSNN, NIDP and the RIS set out a strong position of support in delivering national networks that meet the country's long-term needs, whilst supporting a prosperous and competitive economy and improving the quality of life for all.
- 8.1.3 The existing single carriageway section of the A303 between Sparkford and lichester suffers from congestion and queuing, particularly during the summer months and at weekends. It also suffers from higher than national average accident rates for single-carriageway A-class trunk roads. Numerous at-grade junctions and accesses, non-motorised user (NMU) crossing points and limited space for road workers during maintenance, create hazards for numerous user groups.
- 8.1.4 Dualling of the A303 between Sparkford and Ilchester is an appropriate solution to dealing with the issues, and the scheme meets the objectives of the DfT, and lessen the existing traffic problems on this section of road.
- 8.1.5 The scheme is supported by an environmental impact assessment to establish the impacts and mitigation measures needed to meet the scheme objective of avoiding unacceptable impacts on the surrounding natural and historic environment and landscape and optimise opportunities for enhancement. *ES* (document reference TR010036/APP/6.1)
- 8.1.6 The increased capacity, reducing congestion, improved safety and journey time reliability are consistent with national and local planning objectives for transport, economy and the environment. Through the increased capacity and improved journey time reliability, the scheme would assist in making the region more attractive for businesses and provide the required infrastructure for development including housing and employment.
- 8.1.7 The assessment has demonstrated the schemes overall compliance with the relevant national and local policies, local transport plans and economic strategies, particularly the NPSNN.

# **APPENDIX 1: NPSNN Accordance Table**

Table 1: Compliance with NPSNN Chapter 2

Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
The national road and rail networks that connect our cities, regions and international gateways play a significant part in supporting economic growth, as well as existing economic activity and productivity and in facilitating passenger, business and leisure journeys across the country. Well-connected and high-performing networks with sufficient capacity are vital to meet the country's long-term needs and support a prosperous economy.	The <i>Transport Report (document reference TR010036/APP/7.3)</i> shows the scheme improves traffic flows and provides more reliable journey times. These improvements mean that the scheme would assist in making the region more attractive for businesses to locate and would help in promoting a competitive regional economy.  Chapter 6 of the <i>Case for the Scheme (document reference TR010036/APP/7.1)</i> provides an overview of	
	the economic case for the scheme.	
	The <i>Transport Report</i> (document reference TR010036/APP/7.3) demonstrates that the scheme has a significant effect on reducing the delay in both directions  In the eastbound direction, the average savings provided by the scheme across the three weekday time periods are 2.21 minutes in 2023 and 2.98 minutes in 2038. In the summer, the savings are 5.65 minutes in 2023 and 3.33 minutes in 2038.  In the westbound direction, the scheme saves an average of 1.56 minutes in 2023 and 2.30 minutes in 2038 across the three weekday time periods, while in the summer, the savings are 3.28 minutes in 2023	
	The national road and rail networks that connect our cities, regions and international gateways play a significant part in supporting economic growth, as well as existing economic activity and productivity and in facilitating passenger, business and leisure journeys across the country. Well-connected and high-performing networks with sufficient capacity are vital to meet the country's long-term needs and support a prosperous economy.  There is a critical need to improve the national networks to address road congestion and crowding on the railways to provide safe, expeditious and resilient networks that better support social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth. Improvements may also be required to address the impact of the national networks on quality of life and environmental	The national road and rail networks that connect our cities, regions and international gateways play a significant part in supporting economic growth, as well as existing economic activity and productivity and in facilitating passenger, business and leisure journeys across the country. Well-connected and high-performing networks with sufficient capacity are vital to meet the country's long-term needs and support a prosperous economy.  There is a critical need to improve the national networks to address road congestion and crowding on the railways to provide safe, expeditious and resilient networks that better support social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth. Improvements may also be required to address the impact of the national networks on quality of life and environmental factors.  Compliance with the NPSNN  The Transport Report (document reference TR010036/APP/T.3) shows the scheme improves traffic flows and provides more reliable journey times. These improvements mean that the scheme would assist in making the region more attractive for businesses to locate and would help in promoting a competitive regional economy.  Chapter 6 of the Case for the Scheme (document reference TR010036/APP/T.1) provides an overview of the economic case for the scheme.  There is a critical need to improve the national networks to address road congestion and crowding on the railways to provide as fe, expeditious and resilient networks that better support social and economic assist in making the region more attractive for businesses to locate and would help in promoting a competitive regional economy.  Chapter 6 of the Case for the Scheme (document reference TR010036/APP/T.1) provides an overview of the economic assist in making the region more attractive for businesses to locate and would help in promoting a competitive regional economy.  In the eastbound direction, the average savings provided by the scheme across the three weekday time periods

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
2			
		<b>Environmental Statement (ES) (document reference TR010036/APP/6.1)</b> ; a summary of the benefits is provided in this appendix, in the response to NPSNN paragraph 3.2, below.	
2.4	The pressure on our networks is expected to increase even further as the long term drivers for demand to travel - GDP and population - are forecast to increase substantially over coming years. Under central forecasts, road traffic is forecast to increase by 30% and rail journeys by 40%, rail freight has the potential to nearly double by 2030.	Section 7 of the <i>Transport Report (document reference TR010036/APP/7.3)</i> states that for the scheme, the A303 traffic flows are expected to increase to 33,700 in 2023 and 43,600 in 2038, indicating 15% and 20% increases on the Do-Minimum flows respectively	
2.6	There is also a need for development on the national networks to support national and local economic growth and regeneration, particularly in the most disadvantaged areas. Improved and new transport links can facilitate economic growth by bringing businesses closer to their workers, their markets and each other. This can help rebalance the economy.	The results of the economic assessment, detailed within section 8.2 of the <i>Transport Report</i> (document reference TR010036/APP/7.3) indicate that scheme is capable of providing an initial Benefits to Costs Ratio (BCR) of 1.50. The adjusted BCR, which includes wider economic and reliability benefits, is 1.71. Under the DfT's value for money criteria, both values represent medium value for money with the BCRs between 1.5 and 2.	
2.7	In some cases, there may be a need for development to improve resilience on the networks to adapt to climate change and extreme weather events rather than just tackling a congestion problem.	Chapter 13, section 13.9 of the <i>ES</i> (document reference <i>TR010036/APP/6.1</i> ) details the proposed mitigation to increase the scheme's resilience to climate change. These include design measures, such as using specific non-frost / heave susceptible layers to reduce the risk of the pavement expanding in the winter due to increased rainfall and shrinking in the summer due to reduced rainfall resulting in the pavement heaving.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
2			
		Furthermore, the drainage systems have been designed to facilitate and increase in precipitation with the potential for filter drains to be added.	
2.9	Broader environment, safety and accessibility goals will also generate requirements for development. In particular, development will be needed to address safety problems, enhance the environment or enhance accessibility for Non-Motorised Users. In their current state, without development, the national networks will act as a constraint to sustainable	Section 9 of the <i>Transport Report (document reference TR010036/APP/7.3)</i> has assessed the number of casualties expected once the scheme is operational, and found that the scheme reduces the numbers of casualties in the scheme area. In a 60-year period, the Personal Injury Casualty Savings are expected to be 4.6 fatalities, 25.8 serious injuries and 229.5 slight injuries.	
2.10	The Government has therefore concluded that at a strategic level there is a compelling need for development of the national networks - both as individual networks and as an integrated system. The Examining Authority and the Secretary of State should therefore start their assessment of applications for infrastructure covered by this NPS on that basis	The Case for the Scheme (document reference TR010036/APP/7.1) supported by this accordance table sets out the overall objectives for the scheme and demonstrates how these are met. Chapter 4 of the Case for the Scheme explains the broader objectives of the RIS programme for the A303 corridor.	
2.12	Roads are the most heavily used mode of transport in England and a crucial part of the transport network. By volume roads account for 90% of passenger miles and two thirds of freight. Every year road users travel more than 431 billion miles by road in Great Britain.	The <i>Transport Report (document reference TR010036/APP/7.3)</i> sets out the benefits of the scheme in terms of improving the operation of the Strategic Road Network and providing additional highways capacity along this strategically important corridor.	
2.13	The Strategic Road Network provides critical links between cities, joins up communities, connects our major ports, airports and rail terminals. It provides a vital role in people's journeys, and drives prosperity by supporting new and existing development, encouraging trade and attracting investment. A well-functioning Strategic Road Network is critical in	The A303 links the M3 and the M5 to create one of the most direct strategic routes between the south west and south east.  The <i>Transport Report (document reference TR010036/APP/7.3)</i> sets out the benefits of the scheme in terms of improving the operation of the Strategic Road	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
2			
	enabling safe and reliable journeys and the movement of goods in support of the national and regional economies.	Network and providing additional highways capacity along this strategically important corridor which serves the southwest of England.	
2.14	The Strategic Road Network, although only making up 2% of roads in England, carries a third of all road traffic and two thirds of freight traffic. Some 85% of the public use the network as drivers or passengers in any 12-month period. Even those that never drive on the Strategic Road Network are reliant on it to deliver many of the goods that they need.		
2.16	<ul> <li>Traffic congestion constrains the economy and impacts negatively on quality of life by:         <ul> <li>Constraining existing economic activity as well as economic growth, by increasing costs to businesses, damaging their competitiveness and making it harder for them to access export markets. Businesses regularly consider access to good roads and other transport connections as key criteria in making decisions about where to locate.</li> <li>Leading to a marked deterioration in the experience of road users. For some, particularly those with time-pressured journeys, congestion can cause frustration and stress, as well as inconvenience, reducing quality of life.</li> <li>Constraining job opportunities as workers have more difficulty accessing labour markets.</li> </ul> </li> </ul>	The A303/A30/A358 corridor forms a key strategic link between the far South West Peninsula connecting Cornwall and Devon with Dorset, Somerset and Wiltshire, as well as with the rest of the south, south east, and London. The route is also on the Trans-European Network-Transport (TEN-T) comprehensive network.  One of the objectives of the scheme is to support economic growth by providing a free-flowing and reliable connection between the south-east and the south-west of England. The scheme objectives are listed in section 2.2 of chapter 2 of the <i>ES</i> (document reference <i>TR010036/APP/6.1</i> ).	
	<ul> <li>inconvenience, reducing quality of life.</li> <li>Constraining job opportunities as workers have more difficulty accessing labour markets.</li> </ul>		

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
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	nearby.  This is especially true where traffic is routed through small communities or sensitive environmental areas.		
2.17	The national road network is already under significant pressure. It is estimated that around 16% of all travel time in 2010 was spent delayed in traffic, and that congestion has significant economic costs: in 2010 the direct costs of congestion on the Strategic Road Network in England were estimated at £1.9 billion per annum.	Section 8.1 of the <i>Transport Report (document reference TR010036/APP/7.3)</i> demonstrates that the scheme has a significant effect on reducing the delay in both directions  In the eastbound direction, the average savings provided by the scheme across the three weekday time periods are 2.21 minutes in 2023 and 2.98 minutes in 2038. In the summer, the savings are 5.65 minutes in 2023 and 3.33 minutes in 2038.  In the westbound direction, the scheme saves an average of 1.56 minutes in 2023 and 2.30 minutes in 2038 across the three weekday time periods, while in the summer, the savings are 3.28 minutes in 2023 and 3.93 minutes in 2038.	
2.20	Annex B sets out the Department's latest road traffic forecasts for all roads and the Strategic Road Network. Traffic forecasts are not a policy goal and do not in themselves generate a need for development - the need for development arises from the pressures created by increases in traffic. Increased traffic without sufficient capacity will result in more congestion, greater delays and more unpredictable journeys. As with the congestion forecasts, these traffic forecasts will change over time as our understanding improves and circumstances change. Updated forecasts will be	Section 6 of the <i>Transport Report (document reference TR010036/APP/7.3)</i> provides details of the traffic modelling undertaken for the Scheme.  As per Annex B of the NPSNN, the traffic forecasting within the Transport Report has used up to date Road Traffic Forecasts (RTF) 2015, as well as National Trip End Model (NTEM) / TEMPRO v7.2.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
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	published, generally on an annual basis. Local forecasts will be used for the assessment of any specific road Scheme being assessed under the NN NPS.	The population in the South Somerset district is predicted to steadily increase, by approximately 1,000 per year <sup>12</sup> . This highlights the need for development in the area, including additional housing and infrastructure such as increased highway capacity to improve connectivity.	
2.21	There is a range of options to address the identified need. These options are described in more detail below. However, relying solely on alternatives (or a combination of alternatives as set out below) is not viable or desirable as a means of managing need.	The scheme provides dualling of the A303. The overall scheme benefits are derived from this dualling. This benefits all direct users of the Strategic Road Network, as well as everyone who obtains goods and services that are delivered by road.	
	Maintenance and asset management A well maintained and managed national road network makes for safer roads with less congestion and ensures value for money on whole life costs. Maintenance and asset management are a high	The scheme will be a high quality dual carriageway. The high standards being imposed will help to ensure that the road is more resilient and will therefore require less maintenance going forwards.	
	priority for funding and investment plans. However, they will do nothing to enhance capacity, tackle existing and future pressures on the network or unlock economic development and housing.	Currently NMUs can travel between Sparkford and Hazlegrove House or Sparkford Hall. However, to do so NMUs currently have to travel along Footpath WN 27/16 which was severed by the original construction of the A303. Therefore, NMUs are unable to safely cross this	
	Demand management Non-fiscal measures to influence the use of the national road network for journeys, including provision of information and traffic management are important. New technologies can also help improve and make more efficient use of capacity. However, demand management and technology can only make a contribution to alleviating the damaging	dual carriageway. Providing a new grade separated junction will allow for a safer access for NMUs and will help to encourage utilisation of the footpaths.	

 $<sup>^{\</sup>rm 12}$  2012-based Subnational Population Projections for Local Authorities in England

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
Paragraph	effects of congestion across the network. Some areas have undertaken significant demand constraint measures or used smarter choices to reduce car use, which has resulted in reductions in urban traffic. However, this has not translated into significantly less pressure on the Strategic Road Network. The Government has ruled out the introduction of national road pricing to manage demand on the Strategic Road Network on deliverability and public acceptability grounds.  Modal Shift Across Government, policies are being implemented and considered which encourage sustainable transport modes including public transport, significant improvements to rail capacity and quality, cycling and walking. However, it is not realistic for public transport, walking or cycling to represent a viable alternative to the private car for all journeys, particularly in rural areas and for some longer or multi-leg journeys. In general, the nature of some journeys on the Strategic Road Network means that	Compliance with the NPSNN	
	there will tend to be less scope for the use of alternative transport modes. If rail use was to increase by 50% (in terms of passenger kilometres) this would only be equivalent to a reduction of 5% in all road use. If freight carried by rail was to increase by 50% (in terms of tonne kilometres) this would only be equivalent to a reduction of around 7% in goods carried by road.		

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
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2.22	Without improving the road network, including its performance, it will be difficult to support further economic development, employment and housing and this will impede economic growth and reduce people's quality of life. The Government has therefore concluded that at strategic level there is a compelling need for development of the national road network.	The scheme supports this objective through delivering a scheme that will support economic development in the area and support the Government's aspirations to develop the national road network.	
		The population in the South Somerset district is predicted to steadily increase, by approximately 1,000 per year <sup>13</sup> . This highlights the need for development in the area, including additional housing and infrastructure such as increased highway capacity.	
		The scheme is located in a rural area, meaning that cars are a dominant mode of transport. Yeovil provides nearly half of the jobs in the South Somerset district, showing the	
		high volume of commuters in the area. As the prime economic driver for South Somerset, improved connectivity to the town of Yeovil is a key driver for economic growth.	
2.23	The Government's wider policy is to bring forward improvements and enhancements to the existing Strategic Road Network to address the needs set out earlier. Enhancements to the existing national	The scheme will provide a dualling of a single carriageway, thereby supporting the Government's wider policy to enhance the existing Strategic Road Network.	
	road network will include:  • junction improvements, new slip roads and upgraded technology to address congestion and improve performance and resilience at	The construction of the grade separated junctions will improve the road network and will also help to reduce congestion.	
	junctions, which are a major source of congestion;  implementing "smart motorways" (also known as "managed motorways") to	Congestion is particularly an issue during summer months, and these measures will help to resolve a key issue for the region.	

<sup>&</sup>lt;sup>13</sup> 2012-based Subnational Population Projections for Local Authorities in England

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
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	<ul> <li>increase capacity and improve performance;</li> <li>improvements to trunk roads, in particular dualling of single carriageway strategic trunk roads and additional lanes on existing dual carriageways to increase capacity and to improve performance and resilience.</li> </ul>		
2.24	The Government's policy on development of the Strategic Road Network is not that of predicting traffic growth and then providing for that growth regardless. Individual Schemes will be brought forward to tackle specific issues, including those of safety, rather than to meet unconstrained traffic growth (that is, 'predict and provide').	The <i>Transport Report (document reference TR010036/APP/7.3)</i> demonstrates that the scheme is required to alleviate existing congestion and delays whilst also providing additional capacity to accommodate future growth in traffic, both as a result of population growth and planned economic growth.  The issue of congestion is particularly prevalent during summer months which affects the wider tourist economy of the south-west of England. The scheme will help to relieve congestion and therefore have a positive effect on the tourism industry in the south-west.	

Table 2: Compliance with NPSNN Chapter 3

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
3	WIDER GOVERNMENT POLICY ON THE NATIONAL	NETWORKS	
3.2 (Environment and social impacts)	The Government recognises that for development of the national road and rail networks to be sustainable these should be designed to minimise social and environmental impacts and improve quality of life.	One of the objectives of the scheme is to reduce community severance and promote opportunities for improving their quality of life.  Current access arrangements and capacity issues cause severance for local communities. Providing gradeseparated junctions will help to overcome this issue as improved traffic flows will make it easier for rural communities to access amenities, improving the quality of life of the local residents. A comprehensive Environmental Impact Assessment (EIA) has been carried out, identifying proposals for mitigation of likely significant environmental impacts arising from the scheme. This is reported in the	
		Environmental Statement (ES) (document reference TR010036/APP/6.1).	
3.3	In delivering new schemes, the Government expects applicants to avoid and mitigate environmental and social impacts in line with the principles set out in the NPPF and the Government's planning guidance. Applicants should also provide evidence that they have considered reasonable opportunities to deliver environmental and social benefits as part of schemes.	At the core of the NPPF is a presumption in favour of sustainable development. The scheme will provide better links amongst the rural communities, and potential benefits for public transport of a more resilient and reliable road network which may reduce the reliance on cars.  The principles of the NPPF relevant to each of the topics covered in the ES, and local planning policies that need to be considered, are set out in chapter 7	
		the Case for the Scheme (document reference TR010036/APP/7.1).  Each chapter of the ES (document reference	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
3	WIDER GOVERNMENT POLICY ON THE NATIONAL	NETWORKS	
		TR010036/APP/6.1) sets out how environmental impacts of the scheme would be mitigated, in line with current relevant guidance and accepted principles. Reasonable opportunities for environmental and social benefits have also been considered as part of the EIA process.	
		A full list of the mitigation measures proposed as part of the scheme is provided in Table 3.1 of the <i>Outline Environmental Management Plan (OEMP)</i> (document reference TR010036/APP/6.7).	
3.5	Outside the nationally significant infrastructure project regime, Government policy is to bring forward targeted works to address existing environmental problems on the Strategic Road Network and improve the performance of the network. This includes reconnecting habitats and ecosystems, enhancing the settings of historic and cultural heritage features, respecting and enhancing landscape character, improving water quality and reducing flood risk, avoiding significant adverse impacts from noise and vibration and addressing areas of poor air quality.	Wider Government policy in relation to specific environmental topics is addressed in the introductions for each chapter of the <i>Environmental Statement</i> (document reference TR010036/APP/6.1). The chapters that consider the environmental issues mentioned in paragraph 3.5 of the NPSNN are:  Chapter 5 Air Quality Chapter 6 Cultural Heritage Chapter 7 Landscape Chapter 8 Biodiversity Chapter 11 Noise and Vibration	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
3 3.6	WIDER GOVERNMENT POLICY ON THE NATIONAL Transport will play an important part in meeting the Government's legally binding carbon targets and other environmental targets. As part of this there is a need to shift to greener technologies and fuels, and to promote lower carbon transport choices. Over the next decade, the biggest reduction in emissions from domestic transport is likely to come from efficiency improvements in conventional vehicles, specifically cars and vans, driven primarily by EU targets for new vehicle CO2 performance. Electrification of the railway will also support reductions in carbon.	ES (document reference TR01036/APP/6.1) chapter 5 Air Quality assesses the impact of the scheme on air quality, whilst chapter 13 Climate considers the impacts of the scheme on climate change and the potential impacts of climate change upon the scheme.  The scheme is predicted to cause an increase in regional emissions of NOx, PM10 and CO2. The NPSNN acknowledges small increase in aggregate levels of emissions is likely as a result of road developments but these should be seen in the context projected reductions as a result of current and future policies. Therefore, it can be concluded that the scheme does not conflict with the NPSNN.	
3.10 (Safety)	The Government's overall vision and approach on road safety is set out in the Strategic Framework for Road Safety. It is a vision in which Britain remains a world leader in road safety; where highway authorities are empowered to take informed decisions within their area; where driver and rider training gives learners the skills they need to be safe on our roads; and where tough measures are taken against the minority of offenders who deliberately choose to drive dangerously. As set out in paragraphs to 4.66, Scheme promoters are expected to take opportunities to improve road safety, including introducing the most modern and effective safety measures where proportionate.	One of the objectives of the scheme is to improve safety for all users of the A303 between Sparkford and Ilchester.  Section 9 of the <i>Transport Report (document reference TR010036/APP/7.3)</i> has assessed the number of casualties expected once the scheme is operational, and found that the scheme reduces the numbers of casualties in the scheme area. In a 60-year period, the Personal Injury Casualty Savings are expected to be 4.6 fatalities, 25.8 serious injuries and 229.5 slight injuries.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
3	WIDER GOVERNMENT POLICY ON THE NATIONAL NETWORKS		
3.15	The Government is committed to providing people with options to choose sustainable modes and making door-to-door journeys by sustainable means an attractive and convenient option. This is essential to reducing carbon emissions from transport.	Chapter 12 People and Communities of the <i>ES</i> (document reference TR010036/APP/6.1) notes that whilst the scheme will result in some increased journey times for NMUs, there will be an increase in safety for NMUs by removing unsafe crossings.  Changes to key NMU journeys range from a decrease of 170m between Sparkford and Camel Hill, to an increase of 2.1km between Slow Court Lane and Downhead.  Further details of NMU journey times can be found in table A.8 of Appendix 12.3 People and communities – assessment of likely significant effects of the ES (document reference TR010036/APP/6.3).	
3.17 (Sustainable transport)	There is a direct role for the national road network to play in helping pedestrians and cyclists. The Government expects applicants to use reasonable endeavors to address the needs of cyclists and pedestrians in the design of new schemes. The Government also expects applicants to identify opportunities to invest in infrastructure in locations where the national road network severs communities and acts as a barrier to cycling and walking, by correcting historic problems, retrofitting the latest solutions and ensuring that it is easy and safe for cyclists to use junctions.	Chapter 12 (People and Communities) of the <i>ES</i> (document reference TR01036/APP/6.1) includes details of the likely impacts on NMUs, including pedestrians, cyclists and equestrians. The scheme will impact upon NMUs, resulting in some increased journey times. Diversions would be provided at appropriate locations, as would new NMU routes, to counterbalance adverse impacts resulting from journey length increases.  The design team have attempted to minimise the impacts on NMU journey times, working with the local highway authority (Somerset County Council) to find the most appropriate solution.  Table 3.1 of the OEMP (document reference TR010036/APP/6.7) provides a detailed list of the mitigation measures proposed for the scheme.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required	
3	WIDER GOVERNMENT POLICY ON THE NATIONAL NETWORKS			
		It is anticipated that there would be an overall slight adverse effect on people and communities during construction which would be managed through the implementation of a Construction Environmental Management Plan (CEMP) and a Traffic Management Plan. These plans will be developed upon the appointment of a contractor, and will be based upon the information within the OEMP.		
3.19	The Government is committed to creating a more accessible and inclusive transport network that provides a range of opportunities and choices for people to connect with jobs, services and friends and family.	The objectives of the scheme include reducing community severance and improving the connectivity of the south west to the rest of the UK, improving business and growth prospects.  The assessment within chapter 12 People and Communities of the ES (document reference TR010036/APP/6.1) shows that during operation there would be a Moderate Beneficial effect on Community Land and Community Facilities due to improved access.		
3.20	<ul> <li>The Government's strategy for improving accessibility for disabled people is set out in Transport for Everyone: an action plan to improve accessibility for all. In particular:         <ul> <li>The Government will continue to work to ensure that the bus and train fleets comply with modern access standards by 2020, and to improve rail station access for passengers with reduced mobility. The private car will continue to play an important role, providing disabled people with independence where other forms of transport</li> </ul> </li> </ul>	Passengers with reduced mobility are more reliant on the private car, particularly in this rural context. As the scheme will improve reliability and resilience on this part of the A303, access to local shops and services for those with reduced mobility will improve.		

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
3	WIDER GOVERNMENT POLICY ON THE NATIONAL	NETWORKS	
	<ul> <li>are not accessible or available.</li> <li>The Government expects applicants to improve access, wherever possible, on and around the national networks by designing and delivering Schemes that take account of the accessibility requirements of all those who use, or are affected by, national networks infrastructure, including disabled users. All reasonable opportunities to deliver improvements in accessibility on and to the existing national road network should also be taken wherever appropriate.</li> </ul>		
3.21	Applicants are reminded of their duty to promote	The Equalities Act 2010 requires decision making to	
(Accessibility)	equality and to consider the needs of disabled people as part of their normal practice. Applicants are expected to comply with any obligations under the Equalities Act 2010.	have due regard to the need to remove discrimination and support equality of opportunity for a range of 'protected characteristic' groups.  Table 4.7 of the <i>Consultation Report (document reference TR010036/APP/5.1)</i> provides details of the consultation undertaken and how these complied with the commitments within the <i>Statement of Community Consultation (SoCC) (document reference TR010036/APP/5.4 Annex C)</i> .  One of the commitments of the SoCC was to engage with hard to reach groups using appropriate and proportionate consultation tools.  Hard to reach groups were identified at the start of consultation and were sent packs designed to support	

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3	WIDER GOVERNMENT POLICY ON THE NATIONAL	NETWORKS	
		offer of direct engagement.	
		All venues used for consultation events were chosen to be compliant with the Equalities Act 2010.	
		An Equality Impact Assessment (EqIA) was undertaken as part of the scheme development, and an Equality, Diversity and Inclusion sifting Tool (EDIT) was used for this assessment. EDIT uses scheme information, social and demographic data, current research, and the wider evidence base to identify which schemes are likely to have the greatest equality impact.	
3.22	Severance can be a problem in some locations.  Where appropriate applicants should seek to deliver improvements that reduce community severance and improve accessibility.	The objectives of the scheme include reducing community severance and improving the connectivity of the south west to the rest of the UK.  The existing road conditions and at grade junctions make access onto the A303 between Sparkford and Ilchester difficult. The scheme will make access and egress onto/off the dual carriageway safer and easier, affording better accessibility between the rural settlements and the and shops and services provided in Yeovil and other nearby district centres.	
		The scheme will also alleviate congestion on the local road network. This will improve journey time to access community facilities in the study area.  For example, a new access route to Hazlegrove Preparatory School (featuring a new slip road stemming	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
3	WIDER GOVERNMENT POLICY ON THE NATIONAL	. NETWORKS	
		from a new grade separated junction) would separate local and through traffic. This has the potential to ease congestion around the school entrance, ultimately improving access.	
		Further details of the impact that the scheme will have on local communities can be found in Chapter 12 (People and Communities) of the ES (document reference TR01036/APP/6.1).	

**Table 3: Compliance with NPSNN Chapter 4** 

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates required post application
4	ASSESSMENT PRINCIPALS		
4.3	In considering any proposed development, and in particular, when weighing its adverse impacts against its benefits, the Examining Authority and the Secretary of State should take into account: its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any long term or wider benefits its potential adverse impacts, including any longer-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.	Each chapter of the <i>ES</i> (document reference TR010036/APP/6.1) sets out how environmental impacts of the scheme would be mitigated, in line with current relevant guidance and accepted principles. Reasonable opportunities for environmental and social benefits have also been considered as part of the EIA process.  The population in the South Somerset district is predicted to steadily increase, by approximately 1,000 per year <sup>14</sup> . This would in turn create more traffic on the roads, leading to more congestion, and ultimately constrain growth. The scheme will provide improved connectivity to the key economic centres of the district and south west, which the growth ambitions of the county (as set out in the Somerset County Council Economic Strategy) are reliant upon. More detail of the SCC Economic Strategy and other local economic documents can be found in chapter 7 of the Case for the Scheme (document reference TR010036/APP/7.1).  This highlights the need for the scheme, as one of the objectives of the scheme is to create a more free-flowing network, which would help to alleviate congestion problems.	

<sup>&</sup>lt;sup>14</sup> 2012-based Subnational Population Projections for Local Authorities in England

Planning Inspectorate Scheme Ref: TR010036 Application Document Ref: TR010036/APP/7.1

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates required post application
4	ASSESSMENT PRINCIPALS		
		A full list of the mitigation measures proposed as part of the scheme is provided in Table 3.1 of the <i>Outline Environmental Management Plan (OEMP)</i> (document reference TR010036/APP/6.7).	
4.4	In this context, environmental, safety, social and economic benefits and adverse impacts, should be considered at national, regional and local levels. These may be identified in this NPS, or elsewhere.	The ES (document reference TR010036/APP/6.1) reports on the Environmental Impact Assessment, which has been carried out with consideration for potential effects at national, regional and local levels.  The scheme has been assessed against national and local planning policy within the chapter 7 of the Case for the Scheme (document reference TR010036/APP/7.1).	
4.5 (General principles of assessment – Business Case)	Applications for road and rail projects (with the exception of those for SRFIs, for which the position is covered in paragraph 4.8 below) will normally be supported by a business case prepared in accordance with Treasury Green Book principles. This business case provides the basis for investment decisions on road and rail projects. The business case will normally be developed based on the Department's Transport Business Case guidance and WebTAG guidance. The economic case prepared for a transport business case will assess the economic, environmental and social impacts of a development. The information provided will be proportionate to the development. This information will be important for the Examining Authority and the Secretary of State's consideration of the adverse impacts and	Chapter 6 and Appendix 2 of the <i>Case for the Scheme (document reference TR010036/APP/7.1)</i> outlines the scheme's economic assessment. It presents the anticipated benefits and dis-benefits and the scheme's overall value for money.  The Present Value of Benefits (PVB) for the scheme is £156.4 million. The present value of costs (PVC) for the scheme is £108.1 million, which has been calculated based on the costs of the scheme adjusted to 2010 prices and discounted to 2010. By subtracting the PVC from the PVB, the Net Present Value (NPV) has been calculated, which is £48.4 million. The adjusted Benefit Cost Ratio, which includes monetised reliability and wider economic benefits as part of the PVB is 1.71.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates required post application
4	ASSESSMENT PRINCIPALS		
	benefits of a proposed development. It is expected that NSIP schemes brought forward through the development consent order process by virtue of Section 35 of the Planning Act 2008, should also meet this requirement.		
4.6 (local transport model)	Applications for road and rail projects should usually be supported by a local transport model to provide sufficiently accurate detail of the impacts of a project. The modelling will usually include national level factors around the key drivers of transport demand such as economic growth, demographic change, travel costs and labour market participation, as well as local factors. The Examining Authority and the Secretary of State do not need to be concerned with the national methodology and national assumptions around the key drivers of transport demand. We do encourage an assessment of the benefits and costs of schemes under high and low growth scenarios, in addition to the core case. The modelling should be proportionate to the scale of the scheme and include appropriate sensitivity analysis to consider the impact of uncertainty on project impacts.	A local transport model has been produced in line with Department for Transport (DfT) guidelines. Details are provided in the <i>Transport Report (document reference TR010036/APP/7.3)</i> .  The model represents three weekday time periods that are consistent with the South West Regional Traffic Model (SWRTM) time periods. These are an average AM peak period hour (07:00-10:00), an average hour in the interpeak (10:00–16:00) and an average PM peak period hour (16:00–19:00) for an average Monday to Friday weekday in March 2015 (excluding school holidays and bank holidays).  To represent the higher traffic flows that occur at weekends and during holiday periods, a separate summer model covering an average hour between 10:00-19:00 Friday – Sunday in August was also developed to represent these peak traffic periods in the economic	
4.9	The Examining Authority should only recommend, and the Secretary of State should only impose, requirements in relation to a development consent, that are necessary, relevant to planning, relevant to the development to be consented, enforceable,	appraisal.  The draft <i>Development Consent Order (document reference TR010036/APP/3.1)</i> includes draft requirements that are subject of ongoing engagement with the relevant authorities. Each requirement has been considered against national guidance on the use of	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates required post application
4	ASSESSMENT PRINCIPALS		
	precise, and reasonable in all other respects.  Guidance on the use of planning conditions or any successor to it, should be taken into account where requirements are proposed.	planning conditions and precedent, with regard to their effectiveness and reasonableness.	
4.10	Planning obligations should only be sought where they are necessary to make the development acceptable in planning terms, directly related to the proposed development and fairly and reasonably related in scale and kind to the development.	Not applicable. No planning obligations are anticipated to be necessary for this scheme.	
4.12	In considering applications for linear infrastructure, decision-makers will need to bear in mind the specific conditions under which such developments must be designed. The generic impacts section of this NPS has been written to take these differences into account.	The scheme has been assessed against the generic impacts as listed in the NPS and these are detailed within table 4 of this appendix.	
4.13	This NPS does not identify locations at which development of the road and rail networks should be brought forward. However, the road and rail networks provide access for people, business and goods between places and so the location of development will usually be determined by economic activity and population and the location of existing transport networks.	The scheme involves the upgrade of the existing A303 and as such, by definition is located in the corridor of that existing transport network.  The RIS1 states that the scheme will provide a number of benefits to road users, businesses, the local community and tourists. These objectives can be found in chapter 4 of the Case for the Scheme (document reference TR010036/APP/7.1).	
4.15 (Environment al Impact Assessment)	All proposals for projects that are subject to the European Union's Environmental Impact Assessment Directive and are likely to have significant effects on the environment, must be accompanied by an environmental statement (ES), describing the aspects of the environment likely to	A comprehensive EIA has been carried out, to comply with the EIA Directive. This is reported in the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ), which describes the aspects of the environment likely to be significantly affected by the scheme.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates required post application
4	ASSESSMENT PRINCIPALS		
	be significantly affected by the project. The Directive specifically requires an environmental impact assessment to identify, describe and assess effects on human beings, fauna and flora, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 sets out the information that should be included in the environmental statement including a description of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project, and also the measures envisaged for avoiding or mitigating significant adverse effects. Further guidance can be found in the online planning portal In this NPS, the terms 'effects', 'impacts' or 'benefits' should accordingly be understood to mean likely	Chapter 4 Environmental assessment methodology of the <i>ES</i> provides details of the process undertaken for the EIA, including the EIA scoping.  Table 15.1 within chapter 15 Summary of the <i>ES</i> provides details of the environmental effects and mitigation measures in place for any predicted adverse effects.	
4.16	significant effects, impacts or benefits.	Chapter 14 (Combined and Cumulative Affects) of the	
4.16	When considering significant cumulative effects, any environmental statement should provide information on how the effects of the applicant's proposal would combine and interact with the effects of other development (including projects for which consent has been granted, as well as those already in existence).	Chapter 14 (Combined and Cumulative Affects) of the <i>ES (document reference TR010036/APP/6.1)</i> draws together the findings from the respective topic-specific technical chapters of the <i>ES</i> ; defines interrelationships between these assessments and any other developments in the surrounding area; and establishes whether there are any other residual	
4.17	The Examining Authority should consider how significant cumulative effects and the	effects on the identified sensitive receptors which may require additional mitigation not previously identified.	

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	interrelationship between effects might as a whole affect the environment, even though they may be acceptable when considered on an individual basis with mitigation measures in place.	The assessment for combined effects has involved the identification of impact interactions associated with the proposed scheme upon separate environmental receptors. The methodology for the assessment of combined effects followed DMRB Volume 11 Section 2 Part 5: Assessment and Management of Environmental Effects.	
		In summary, the residual combined effect during construction and operation for the proposed scheme is anticipated to be Slight Adverse and therefore, not considered to be significant.	
		The assessment for cumulative effects has involved the identification of incremental changes likely to be caused by other developments together with the proposed scheme. Two developments were identified which met the criteria for inclusion in this assessment. This assessment has followed the methodology outlined in PINS Advice Note 17: Cumulative Effects Assessment <sup>15</sup> .	
4.18	In some instances, it may not be possible at the time of the application for development consent for all aspects of the proposal to have been settled in precise detail. Where this is the case, the applicant should explain in its application which elements of the proposal have yet to be finalised,	Detail of the scheme design is shown on the <i>Engineering Drawings and Sections</i> (document reference TR010036/APP/2.17) and provided within Chapter 2 of the ES (document reference TR010036/APP/6.1).  A 1 metre (plus or minus) limit of deviation for vertical	
4.19	and the reasons why this is the case.  Where some details are still to be finalised, applicants are advised to set out in the	structures has been incorporated into the design. In terms of horizontal alignment, the limit of deviation is the extent of the red line boundary, as shown on Figure 2.2, Volume	

<sup>&</sup>lt;sup>15</sup> The Planning Inspectorate (PINS) (2015) Advice Note 17: Cumulative Effects Assessment relevant to nationally significant infrastructure projects. Available online at: <a href="http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/12/Advice-note-17V4.pdf">http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/12/Advice-note-17V4.pdf</a>

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	environmental statement, to the best of their knowledge, what the maximum extent of the proposed development may be (for example in terms of site area) and assess the potential adverse effects which the project could have to ensure that the impacts of the project as it may be constructed have been properly assessed.	All members of the design team and project environment team were briefed on the horizontal and vertical limits of deviation and the worst case scenario has been applied for the Environmental Impact Assessment.  Consultees have also had input into design considerations, to ensure the impacts of the project have been assessed. For example, Somerset County Council (as the local highway authority) were involved in developing the solution at the Hazlegrove roundabout.	
4.21	In cases where the EIA Directive does not apply to a project, and an environmental statement is not therefore required, the applicant should instead provide information proportionate to the project on the likely environmental, social and economic effects	Not applicable. The scheme is subject to an EIA under the Infrastructure Planning (EIA) Regulations 2017.	
4.22 (Habitats Regulations Assessment)	Prior to granting a Development Consent Order, the Secretary of State must, under the Habitats Regulations, consider whether it is possible that the project could have a significant effect on the objectives of a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects. Applicants should also refer to paragraphs 5.20 to 5.38 of this national policy statement on biodiversity and geological conservation and to paragraphs 5.3 to 5.15 on air quality. The applicant should seek the advice of Natural England and, where appropriate, for cross-	An initial ecology consultation meeting was held with Natural England, the Lead Ecologist, Environmental Co-ordinator and Highways England on 2 May 2017. The purpose of the meeting was to discuss the proposed survey methodology for bats, general protected species surveys and to develop mitigation ideas and to confirm Natural England's current biodiversity principles.  Further consultation meetings have been held with Natural England as part of the Environmental Technical Working Group (TWG). Discussions have included the following topics:	

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	boundary impacts, Natural Resources Wales and Scottish Natural Heritage to ensure that impacts on European sites in Wales and Scotland are adequately considered.	<ul> <li>Protected species survey methodology</li> <li>Phase 2 protected species survey results and mitigation measures</li> <li>An outline of habitat losses and the draft Environmental Masterplan</li> <li>Habitat Regulations Assessment</li> </ul>	
4.23	Applicants are required to provide sufficient information with their applications for development consent to enable the Secretary of State to carry out an Appropriate Assessment if required. This information should include details of any measures that are proposed to minimise or avoid any likely significant effects on a European site. The information provided may also assist the Secretary of State in concluding that an appropriate assessment is not required because significant effects on European sites are sufficiently unlikely that they can be excluded.	For European designated sites such as those with qualifying features as bats, an assessment has concluded that there is no requirement for specific mitigation. The Sweetman ruling has been considered in concluding that the scheme does not result in any significant effects.  Please refer to the Habitat Regulations Assessment: Findings of No Significant Effects Report (FNSE) report (document reference TR010036/APP/6.6) for further details.	
4.26 (Alternatives)	Applicants should comply with all legal requirements and any policy requirements set out in this NPS on the assessment of alternatives. In particular:  The EIA Directive requires projects with significant environmental effects to include an outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects.  There may also be other specific legal requirements for the consideration of alternatives,	There has been consideration of alternative options. Thirteen potential route options were originally identified to ensure a broad range of possibilities were considered.  Initial option sifting was undertaken in accordance with the Transport Analysis Guidance – The Transport Appraisal Process or WebTAG.  At the options identification stage, an Environmental Scoping Report was produced to DMRB Scoping Level for four options. As a result of the assessment and appraisal work it was concluded that 1 central and 1	

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	for example, under the Habitats and Water Framework Directives. There may also be policy requirements in this	northern route option should be taken forward to the non- statutory public consultation which was held in February and March 2017.	
	NPS, for example the flood risk sequential test and the assessment of alternatives for developments in National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB).	These 2 options were subject to further environmental, economic, and technical assessment. The results of these assessments, along with the outcomes of the consultation, were used to inform the identification of the preferred route which was announced as Option 1 in October 2017.	
		Further details of the scheme development can be found in chapter 3 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> )	
4.27	All projects should be subject to an options appraisal. The appraisal should consider viable modal alternatives and may also consider other options (in light of the paragraphs 3.23 to 3.27 of this NPS). Where projects have been subject to full options appraisal in achieving their status within Road or Rail Investment Strategies or other appropriate policies or investment plans, option testing need not be considered by the examining	The scheme was identified within the Road Investment Strategy 2015 – 2020 (RIS1), which presents the options assessment undertaken.	
		The Combined Modelling and Appraisal (ComMA) Report (document reference TR010036/APP/7.6) includes details of the assessment of alternative modes of transport available in the area.	
	authority or the decision maker. For national road and rail schemes, proportionate option consideration of alternatives will have been undertaken as part of the investment decision making process. It is not necessary for the	The primary alternative mode for the dominant long-distance trips on the A303 corridor would be rail. There are three main rail routes between the south-east and the south-west peninsular listed below. The first two broadly follow the A303 corridor.	
	Examining Authority and the decision maker to reconsider this process, but they should be satisfied that this assessment has been undertaken.	<ul> <li>The London Waterloo to Exeter line via Salisbury, approximately hourly on weekdays</li> <li>The Hants and Berks line via Newbury and Westbury, approximately hourly on weekdays</li> </ul>	

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	ACCEPTANT FRANCIS ALE	The Great Western Main Line via Bristol, approximately once or twice hourly on weekdays.  The South West and South Wales Multi-Modal Study (SWARMMS) strategy identified improvements required to these lines, and a number of these have been implemented. Whilst further improvements would deal with existing capacity and speed issues, it would be impossible for a rail improvement to entirely solve the identified problems in the A303 Sparkford to Ilchester Dualling scheme location.  The nearest railway line is between Castle Cary and Charlton Mackrell, approximately 4 kilometres to the north of Sparkford. Castle Cary is the nearest railway station, located approximately 8 kilometres north-east of Sparkford.	
4.28 - 4.29	Applicants should include design as an integral	Please refer to 4.26 of this table for details of the options	
(Criteria for "good design" for national network Infrastructure)	Visual appearance should be a key factor in considering the design of new infrastructure, as well as functionality, fitness for purpose, sustainability and cost. Applying "good design" to national network projects should therefore produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction, matched by an appearance that demonstrates good	assessment undertaken as part of the EIA for the scheme.  The scheme and environmental mitigation proposals were designed with reference to guidelines in DMRB Volume 10 Environmental Design and Management and PINS Advice Note 10.  There are 10 principles of good design which should be implemented by a scheme, as identified within	

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	aesthetics as far as possible.	Highways England's Good Design report <sup>16</sup> .	
		Chapter 10 Materials of the <i>ES</i> (document reference <i>TR010036/APP/6.1</i> ) provides details of the opportunities take to ensure sustainable design. Opportunities include reducing the length of pipes and making use of surface water channels, sourcing acoustic barriers from sustainable materials, re-using existing signs, using passive posts removing the need for vehicle restraint systems (VRS), and chipping green waste on-site to be used in the landscaping.  The full list of opportunities identified can be found in Appendix A of the <i>Outline SWMP</i> ( <i>OSWMP</i> ) (Annex B.1	
4.33	The applicant should therefore take into account, as far as possible, both functionality (including fitness for purpose and sustainability) and aesthetics (including the scheme's contribution to the quality of the area in which it would be located). Applicants will want to consider the role of technology in delivering new national networks projects. The use of professional, independent advice on the design aspects of a proposal should be considered, to ensure good design principles are embedded into infrastructure proposals.	of the OEMP) (document reference TR010036/APP/6.7).  The scheme has been designed to meet the scheme's objectives which include both functionality (relieve congestion and improve safety) and aesthetic requirements (assessed as part of the Environmental Statement (document reference TR010036/APP/6.1).  Mott MacDonald Sweco Joint Venture (MMSJV) designed the scheme (ensuring good design principles are embedded into infrastructure proposals) and the applicant have reviewed the scheme. Furthermore, consultation has been carried out with statutory and non-statutory stakeholders as shown in the Consultation Report (document reference TR010036/APP/5.1) and the	

<sup>&</sup>lt;sup>16</sup> Highways England (2017) Highways England Strategic Design Panel report [online] available at: <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/645302/Design\_Panel\_progress\_report.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/645302/Design\_Panel\_progress\_report.pdf</a> (last accessed April 2018).

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		consultation responses have informed the final application scheme.	
4.34	Whilst the applicant may only have limited choice in the physical appearance of some national networks infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting and design measures relative to existing landscape and historical character and function, landscape permeability, landform and vegetation.	In following the local topography, the scheme will be in the context of the existing A303, which would reduce the impact on receptors by not introducing an additional element into the landscape.  When viewed on plan the layout of the proposed local roads, particularly at the Hazlegrove Junction, appear unconventional. This layout has been influenced by the need for appropriate context and scale, and to reduce the impact to Hazlegrove House Registered Park and Garden.  Chapter 7 Landscape of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) provides details of the mitigation measures and enhancements proposed as part of the scheme.  With regard to the temporary impacts of the scheme during construction, mitigation measures include ensuring that the offices and welfare facilities within site compounds are of a recessive colour to blend in with the local surroundings.  With regard to operational mitigation and enhancements, a series of landscape bunds and false cuttings have been incorporated into the scheme design to reduce adverse visual impacts, as shown in the <i>Environmental Masterplan</i> (Figure 2.13,	
4.35	Applicants should be able to demonstrate in their	document reference TR010036/APP/6.2).  Details of the options assessment process for the scheme	
1.50	Applicante officiale po abio to definitionate in their	Dotalio of the options assessment process for the sentine	<u> </u>

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	application how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected	can be found above, in response to 4.26 of the NPSNN.  The scheme was presented at Statutory Consultation and was subject to change, following consideration of the responses received and the ongoing design process. The design of the scheme has been influenced by discussions with environmental consultees during the Environmental Technical Working Group (TWG).	
4.40 (Climate change adaptation)	New national networks infrastructure will be typically long-term investments which will need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change when planning location, design, build and operation. Any accompanying environment statement should set out how the proposal will take account of the projected impacts of climate change.	Chapter 13 Climate of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) looks at effects on climate and vulnerability of the scheme to climate change during construction and operation, which includes potential for increased CO <sup>2</sup> emissions.  Following an assessment of the schemes assets, it is not considered that changes in climate would have a significance effect on the scheme assets.	
4.41	Where transport infrastructure has safety-critical elements and the design life of the asset is 60 years or greater, the applicant should apply the UK Climate Projections 2009 (UKCP09) high emissions scenario (high impact, low likelihood) against the 2080 projections at the 50% probability level.	The scheme has been assessed against the Climate Projections 2009 (UKCP09), details of which can be found in the chapter 13 Climate of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ).	
4.42	The applicant should take into account the potential impacts of climate change using the latest UK Climate Projections available at the time and ensure any environment statement that is prepared identifies appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure	Information on the climate baseline and future projections (found in chapter 13 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> )) are based on information from third parties available at the time of writing, including the historical meteorological variables recorded by the Met Office and the UK Climate Projections (UKCP09) developed by the Met	

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		Office.	
4.43	The applicant should demonstrate that there are no critical features of the design of new national networks infrastructure which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections. Any potential critical features should be assessed taking account of the latest credible scientific evidence on, for example, sea level rise (for example, by referring to additional maximum credible scenarios such as from the Intergovernmental Panel on Climate Change or Environment Agency) and on the basis that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime through potential further mitigation or adaptation.	Table 13.11 in chapter 13 Climate of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) highlights the potential impacts that climate change may have on the schemes assets. A number of scenarios have been included within this assessment, such as increased rainfall.  There are some adverse impacts identified, but with mitigation measures in place these impacts are not considered to be significant.	
4.44	Any adaptation measures should be based on the latest set of UK Climate Projections, the Government's national Climate Change Risk Assessment and consultation with statutory consultation bodies. Any adaptation measures must themselves also be assessed as part of any environmental impact assessment and included in the environment statement, which should set out how and where such measures are proposed to be secured.	The climate baseline and future projections (found in chapter 13 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> )) are based on information from third parties available at the time of writing, including the historical meteorological variables recorded by the Met Office and the UK Climate Projections (UKCP09) developed by the Met Office.	
4.52 (Pollution control and other	There is a statutory duty on applicants to consult the Marine Management Organisation (MMO) on nationally significant projects which would affect, or would be likely to affect, any relevant marine areas	Not applicable. The A303 Sparkford to Ilchester Dualling scheme is in an inland location and will not have an effect on marine areas.	

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environment al protection Regimes)	as defined in the Planning Act (as amended by section 23 of the Marine and Coastal Access Act 2009)		
4.53	When an applicant applies for an Environmental Permit, the relevant regulator (the Environment Agency) requires that the application demonstrates that processes are in place to meet all relevant Environmental Permit requirements	Discussions between Highways England and the Environment Agency will take place in relation to the Environmental Permit and Water Resources Act requirements in relation to the scheme. The aim of the discussions will be for the necessary agreements to be obtained before or during the examination of its application, in exchange for Highways England proposing to include in the DCO appropriate Protective Provisions, which have been included in the <i>OEMP</i> (document reference TR010036/APP/6.7). Further details of the consenting strategy are in the Consents and Agreements Position Statement (document reference TR010036/APP/3.3).	
4.54	Applicants are encouraged to begin preapplication discussions with the Environment Agency as early as possible. It is however expected that an applicant will have first thought through the requirements as a starting point for discussion. Some consents require a significant amount of preparation; as an example, the Environment Agency suggests that applicants should start work towards submitting the permit application at least 6 months prior to the submission of an application for a Development Consent Order, where they wish to parallel track the applications. This will help ensure that applications take account of all relevant environmental considerations and that the	A meeting was held with the Environment Agency (EA) in July 2017 to discuss surveys, drainage and flood risk requirements. The EA provided input as to what surveys would be required and the assessment to be undertaken.  Further consultation meetings have been held with Natural England as part of the Environmental Technical Working Group (TWG). Discussions have included the following topics:  Protected species survey methodology Phase 2 protected species survey results and mitigation measures An outline of habitat losses and the draft Environmental Masterplan Habitat Regulations	

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	relevant regulators are able to provide timely advice and assurance to the Examining Authority.	Assessment Statements of common ground have been agreed with the Environment Agency (document reference TR010036/APP/8.1), Somerset County Council and South Somerset District Council (document reference TR010036/APP/8.4) and the Internal drainage board (document reference TR010036/APP/8.6). These reports provide details of the agreements made with the parties involved.	
		Further details of the consultation undertaken to date, can be found in Chapter 4 of the <i>ES</i> (document reference <i>TR010036/APP/6.1</i> ).	
4.58	It is very important that during the examination of a nationally significant infrastructure project, possible sources of nuisance under section 79(1) of the 1990 Act, and how they may be mitigated or limited are considered by the Examining Authority so they can recommend appropriate requirements that the Secretary of State might include in any subsequent order granting development consent. More information on the consideration of possible sources of nuisance is at paragraphs 5.81-5.89.	The Statement of Statutory Nuisance (document reference TR010036/APP/6.5) considers the potential for the scheme to cause a statutory nuisance under Section 79(1) of the Environmental Protection Act 1990.  The construction activities that have the potential to create a nuisance would be controlled through mitigation as prescribed in the Construction Environmental Management Plan (CEMP). Mitigation measures are currently detailed within the OEMP (document reference TR010036/APP/6.7).  The potential nuisance created through operational lighting would be reduced through the detailed design	
		lighting would be reduced through the detailed design of the scheme, minimising the impact of road lighting through careful placement where such a system was deemed essential. The use of modern, controllable	

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		light sources with good cut-off properties, coupled with dynamic systems of operation, would reduce the effect of lighting on the surrounding environment.	
		With mitigation in place, none of the statutory nuisances identified in Section 79(1) of the Environmental Protection Act 1990 are predicted to arise.	
4.61 (Safety)	The applicant should undertake an objective assessment of the impact of the proposed development on safety including the impact of any mitigation measures. This should use the methodology outlined in the guidance from DfT (WebTAG) and from the Highways Agency.	The <i>Transport Report</i> ( <i>document reference TR010036/APP/7.3</i> ) provides an analysis of accidents, using guidance from DfT (WebTAG), and concludes overall that the scheme will have a beneficial impact in terms of reducing accidents. Further details on safety can be found in 2.7 above.	
4.62	They should also put in place arrangements for undertaking the road safety audit process. Road safety audits are a mandatory requirement for all trunk road highway improvement schemes in the UK (including motorways).	A Stage 1 Road Safety Audit (document reference TR010036/APP/7.7) has been carried out, and the issues/proposed responses have been reviewed.	
4.64	The applicant should be able to demonstrate that their scheme is consistent with the Highways Agency's Safety Framework for the Strategic Road Network and with the national Strategic Framework for Road Safety. Applicants will wish to show that they have taken all steps that are reasonably required to:  • minimise the risk of death and injury arising from their development;  • contribute to an overall reduction in road casualties;  • contribute to an overall reduction in the	One of the scheme objectives is to improve safety for all users.  The <i>Transport Report</i> ( <i>document reference TR010036/APP/7.3</i> ) provides an analysis of accidents, using guidance from DfT (WebTAG), and concludes overall that the scheme will have a beneficial impact in terms of reducing accidents. Further details on safety can be found in 2.7 above.  The <i>Transport Report</i> identifies 3 distinct collision cluster locations: Podimore Roundabout; Hazlegrove	

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	number of unplanned incidents; and	Roundabout; and at the A303/B3151 junction.	
	<ul> <li>contribute to improvements in road safety for walkers and cyclists.</li> </ul>	Current at grade Hazlegrove and A303 / B3151 junctions will be superseded by grade separated junctions.	
4.65	They will also wish to demonstrate that:	Please see 4.64 above for details of the safety	
	<ul> <li>they have considered the safety implications of their project from the outset; and</li> </ul>	implications of the scheme.	
	<ul> <li>they are putting in place rigorous processes for monitoring and evaluating safety.</li> </ul>	The <i>Transport Report (document reference TR010036/APP/7.3)</i> also provides recommendations with regard to monitoring.	
		It is recommended that a Closed Circuit Television (CCTV) system is installed to facilitate accurate traffic management directions and accurate responses to incidents. It is also recommended that a vehicle recovery service is deployed. This could be in the form of site based vehicles operating from a static compound(s); or in the form of a call out service managed from a remotecontrol room such that have been implemented on other schemes.	
4.76 - 4.77 (Security considerations)	Where national security implications have been identified, the applicant should consult with relevant security experts from CPNI [Centre for the Protection of National Infrastructure] and the Department for Transport, to ensure that physical, procedural and personnel security measures have been adequately considered in the design process and that adequate consideration has been given to the management of security risks. If CPNI and the Department for Transport (as appropriate) are satisfied that	No national security issues have been identified in developing the scheme, as confirmed by the Ministry of Defence (MoD). A <b>Statement of Common Ground with MoD</b> has been submitted and details the discussions that have taken place with the MoD (document reference TR010036/APP/8.8).	

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	security issues have been adequately addressed in the project when the application is submitted, they will provide confirmation of this to the Secretary of State, and the Examining Authority should not need to give any further consideration to the details of the security measures during the examination.		
	The applicant should only include such information in the application as is necessary to enable the Examining Authority to examine the development consent issues and make a properly informed recommendation on the application.		
4.81 - 4.82 (Health)	As described in the relevant sections of this NPS, where the proposed project has likely significant environmental impacts that would have an effect on human beings, any environmental statement should identify and set out the assessment of any likely significant adverse health impacts. The applicant should identify measures to avoid, reduce or compensate for adverse health impacts as appropriate. These impacts may affect people simultaneously, so the applicant, and the Secretary of State (in determining an application	Human health effects are covered within the Air Quality, Geology and Soils, Noise and Vibration and People and Communities chapters of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ). Where human health effects from more than one topic occur, a qualitative description of the overall population and human health effects are provided within chapter 14 Combined and Cumulative Effects of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ).  Chapter 14 concludes that there would be a slight adverse	
	for development consent) should consider the cumulative impact on health.	effect on human health during construction, and no likely significant effects during operation, for combined effects on human health.	

Table 4: Compliance with NPSNN Chapter 5

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5	GENERIC IMPACTS		
5.6 - 5.9 (Air quality)	Where the impacts of the project (both on and off-scheme) are likely to have significant air quality effects in relation to meeting EIA requirements and / or affect the UKs ability to comply with the Air Quality Directive, the applicant should undertake an assessment of the impacts of the proposed project as part of the environmental statement. The environmental statement should describe:  • existing air quality levels; • forecasts of air quality at the time of opening, assuming that the scheme is not built (the future baseline) and taking account of the impact of the scheme; and • any significant air quality effects, their mitigation and any residual effects, distinguishing between the construction and operation stages and taking account of the impact of road traffic generated by the project.  Defra publishes future national projections of air quality based on evidence of future emissions, traffic and vehicle fleet. Projections are updated as the evidence base changes. Applicant's assessment should be consistent with this but may include more detailed modelling to demonstrate local impacts.  In addition to information on the likely significant effects of a project in relation to EIA, the Secretary of State must be provided with a judgement on the risk as to whether the project would affect the UK's ability to comply with the Air Quality Directive.	The results of the air quality assessment completed for this scheme (presented in Chapter 5 of the ES (document reference TR010036/APP/6.1)).  The air quality assessment demonstrates that the scheme would not have a significant air quality impact. The scheme will also not affect reported compliance with the Air Quality Directive and therefore mitigation is not required.	

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5	GENERIC IMPACTS		
5.13	The Secretary of State should refuse consent where, after taking into account mitigation, the air quality impacts of the scheme will:  • result in a zone/agglomeration which is currently reported as being compliant with the Air Quality Directive becoming noncompliant; or  • affect the ability of a non-compliant area to achieve compliance within the most recent timescales reported to the European Commission at the time of the decision.	The results of the air quality assessment completed for this scheme (presented in Chapter 5 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> )) demonstrate that the scheme would not have a significant air quality impact. The scheme will would also not affect reported compliance with the Air Quality Directive and therefore mitigation is not required.	
5.14 - 5.15	The Secretary of State should consider whether mitigation measures put forward by the applicant are acceptable. A management plan may help codify mitigation at this stage. The proposed mitigation measures should ensure that the net impact of a project does not delay the point at which a zone will meet compliance timescales. Mitigation measures may affect the project design, layout, construction, operation and/or may comprise measures to improve air quality in pollution hotspots beyond the immediate locality of the scheme. Measures could include, but are not limited to, changes to the route of the new scheme, changes to the proximity of vehicles to local receptors in the existing route, physical means including barriers to trap or better disperse emissions, and speed control. The implementation of mitigation measures may require working with partners to support their delivery.	The air quality assessment demonstrates that the scheme would not have a significant air quality impact. The scheme will also not affect reported compliance with the Air Quality Directive and therefore mitigation is not required. However, the scheme will follow best practice to ensure minimal impact on receptors.  Details of other mitigation measures can be found in the OEMP (document reference TR010036/APP/6.7).	

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5	GENERIC IMPACTS		
5.17 (Carbon emissions)	Carbon impacts will be considered as part of the appraisal of scheme options (in the business case), prior to the submission of an application for DCO. Where the development is subject to EIA, any Environmental Statement will need to describe an assessment of any likely significant climate factors in accordance with the requirements in the EIA Directive. It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets. However, for road projects applicants should provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets.	As part of the assessment of effects on climate for the scheme, set out in chapter 13 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ), the significance of effects has been assessed by comparing estimated GHG emissions arising from the scheme with UK carbon budgets, and the associated reduction targets.  It is considered that during operation, effects on climate are anticipated to be neutral.	
5.19	Evidence of appropriate mitigation measures (incorporating engineering plans on configuration and layout, and use of materials) in both design and construction should be presented. The Secretary of State will consider the effectiveness of such mitigation measures in order to ensure that, in relation to design and construction, the carbon footprint is not unnecessarily high. The Secretary of State's view of the adequacy of the mitigation measures relating to design and construction will be a material factor in the decision-making process.	Section 10.9 of Chapter 10 Material Assets and Waste of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) includes details of the proposed mitigation measures to reduce the impact of the use of materials for the scheme.  Opportunities include reducing the length of pipes and making use of surface water channels, sourcing acoustic barriers from sustainable materials, re-using existing signs, using passive posts removing the need for vehicle restraint systems (VRS), and chipping green waste onsite to be used in the landscaping.  The full list of opportunities identified can be found in Appendix A of the <i>Outline SWMP (OSWMP)</i> (Annex B.1 OEMP) ( <i>document reference TR010036/APP/6.7</i> ).	
5.22 - 5.23	Where the project is subject to EIA the applicant	Chapter 8 (Biodiversity) of the <i>ES (document reference</i>	
(Biodiversity and	should ensure that the environmental statement	TR010036/APP/6.1) provides details of the assessment	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
ecological conservation)	clearly sets out any likely significant effects on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England) on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that the statement considers the full range of potential impacts on ecosystems.  The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.	undertaken on the likely effects that the scheme will have on designated sites (sections 8.10.2 – 8.10.9 and 8.10.51 – 8.10.60.	
importance (including those outside Englar protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that statement considers the full range of potential impacts on ecosystems.  The applicant should show how the project taken advantage of opportunities to conservation and geological conservations.		The scheme is located within 30 kilometres of Mells Valley, North Somerset & Mendip Bats and Bracket's Coppice which are designated for bat conservation. However, due to the distance between the SACs designated for bats and the works footprint, no direct adverse impacts are anticipated on the primary reason or qualifying features of the designated sites as a result of the works. As the scheme follows a similar alignment to the current A303 and is considered unlikely to affect roosts, foraging or commuting routes, no impact on any of the bat SACs is considered likely and the effect is considered to be Neutral.	
		As the scheme is located over 7 kilometres from the Somerset Levels and Moors SPA and Ramsar, it is not considered that construction activities would have a direct effect on the designated sites. Therefore, the effect is considered to be Neutral.	
		A Neutral effect on the integrity of Sparkford Wood SSSI is anticipated as the site is over 1 kilometre away from the scheme.	
		This chapter also indicates opportunities for biodiversity enhancement, including:	
		Building three attenuation ponds as part of the scheme, which will provide foraging opportunities for bats.	

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5	GENERIC IMPACTS		
		Habitat creation would be undertaken to provide foraging habitats of higher quality than the existing.	
5.25	As a general principle, and subject to the specific policies below, development should avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives. The applicant may also wish to make use of biodiversity offsetting in devising compensation proposals to counteract any impacts on biodiversity which cannot be avoided or mitigated. Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought.	Chapter 8 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) details the anticipated effects that the scheme will have on biodiversity.  The potential impacts scoped into the assessment for biodiversity are as follows:  Land take resulting in habitat loss from designated sites, and important and supporting habitats, and during vegetation clearance during the construction phase.  Change in air quality during the operational phase with potential effects (habitat degradation) on statutory designated sites and sensitive habitats of high value as a result of vehicular emissions.  Direct mortality of protected species during the construction phase.  Change in light levels during operation. Ecological resources sensitive to lighting include crepuscular and nocturnal species.  Noise and vibration during the construction and operational phase resulting in potential disturbance to protected species.  All mitigation measures are detailed in the <i>OEMP</i> ( <i>document reference TR010036/APP/6.7</i> ) and include:	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		All vehicles being required to switch off engines when stationary to mitigate air pollution, noise and vibration disturbance during construction.	
		Hoods will be used during night works, to direct lighting away from features and habitat considered to be suitable for protected species, such as hedgerows, retained scrub and woodland.	
		Where hedgerows are required to be removed to facilitate the works, these will be replaced within the same location and any existing gaps planted with appropriate native species.	
		The chapter concludes that the overall significance of effects on Nature Conservation as a result of the scheme is Slight Adverse for construction and Slight Adverse for operation.	
5.26	In taking decisions, the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national and local importance, protected species, habitats and other species of principal importance for the conservation of biodiversity, and to biodiversity and geological interests within the wider environment.	As per 5.22 – 5.23	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.29 (Biodiversity- SSSIs)	Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect on the site's notified special interest features is likely, an exception should be made only where the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs. The Secretary of State should ensure that the applicant's proposals to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest, are acceptable. Where necessary, requirements and/or planning obligations should be used to ensure these proposals are delivered.	The scheme will result in traffic travelling at higher speeds compared to the existing A303. However, as the Sparkford Wood SSSI is located over 1km and is considerably outside the Zone of Interest for air quality impacts (>200 metres), it is considered that the SSSI will not to be directly or indirectly affected by the scheme.  With regard to the Whitesheet Hill SSSI (located within 200 metres of the ARN for the scheme) works will be carried out in accordance with the best practicable means, as described in Section 79 (9) of the Environmental Protection Act (EPA) 1990, to reduce fumes or emissions which may impact upon air quality.  It is therefore considered that the overall effect of SSSI's will be Neutral, during both construction and operation.  Further details can be found in Chapters 5 and 8 of the ES (document reference TR010036/APP/6.1).	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.32 (Biodiversity - Irreplaceable habitats including ancient woodland and veteran trees)	Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.	The scheme is within close proximity to Parson's Steeple ancient woodland, but the scheme will not require the removal of any of the trees within the ancient woodland.  The Arboricultural Constraints Report (Appendix 7.1 of the ES) (document reference TR010036/APP/6.3) provide details of the trees that are required to be removed as part of the scheme. There are areas of woodland that will need to be removed to facilitate the scheme, however these areas have all been classed as Category C of low value.  Mitigation measures during construction include the erection and maintenance of tree protection fencing in compliance with BS5837:2012.  Additionally, the attenuation ponds proposed as environmental enhancements have been positioned to maximise retention of mature trees and hedgerows.  Further details can be found within the chapter 8 Biodiversity of the ES (document reference TR010036/APP/6.1), the Arboricultural Constraints Report and the Arboricultural Impact Assessment (Appendix 7.3 of the ES) (document reference TR010036/APP/6.3).	
5.35 (Biodiversity - Protection of other habitats	Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and therefore requiring conservation action. The Secretary of	Chapter 8 (Biodiversity) of the <b>ES</b> ( <b>document reference TR010036/APP/6.1</b> ) provides details of the assessment	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
and species)	State should ensure that applicants have taken measures to ensure these species and habitats	undertaken on the likely effects that the scheme will have on species.	
	are protected from the adverse effects of development. Where appropriate, requirements or planning obligations may be used in order to deliver this protection. The Secretary of State	The scheme is anticipated to have a Moderate Adverse effect during construction on hedgerows, bats and barn owls and a Slight Adverse effect once operational.	
should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm.	For badgers, great crested newts and invertebrates, a Sligh Adverse effect is considered to be likely at the construction phase and operational phase, providing all mitigation is implemented.	t	
		The significance of effect for breeding birds and reptiles is assessed as being Slight Adverse during construction, reverting to Neutral during operation.	
		For riparian mammals, the effect is considered to be Neutra during construction and Slight Beneficial once operational	ı
		Mitigation measures are listed within the <b>OEMP</b> (document reference TR010036/APP/6.7) and include:	•
		No works will take place within 20m of an active barn owl nest	
		Light emissions to be reduced during the hours of darkness Ten metre buffer zone to be put in place around hedgerows and woodland, and where bat roosts have been identified	
		All trees to be felled for the scheme should be re-inspected for bats prior to felling	
		Gaps in hedgerows to be restricted to 10m wide, to reduce the potential for severing commuting lines for bats.	

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5	GENERIC IMPACTS		
5.36 (Biodiversity – Mitigation)	Applicants should include appropriate mitigation measures as an integral part of their proposed development, including identifying where and how that:  • during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works; • during construction and operation, best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised (including as a consequence of transport access arrangements); • habitats will, where practicable, be restored after construction works have finished; • developments will be designed and landscaped to provide green corridors and minimise habitat fragmentation where reasonable; • opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals, for example through techniques such as the 'greening' of existing network crossing points, the use of green bridges and the habitat improvement of the network verge.	An <i>OEMP</i> has been prepared for the scheme (document reference TR010036/APP/6.7), to manage any environmental effects of the scheme and to demonstrate compliance with environmental legislation. The <i>OEMP</i> captures and collates all available information on scheme specific environmental objectives, risks, mitigation and commitments, and transposes these requirements into a series of clear environmental actions.  A more detailed CEMP will be produced upon the appointment of a contractor. The CEMP will outline the mitigation measures to be adhered to during the construction phase. The measures included in the CEMP will draw upon the findings within the ES and be based on the <i>OEMP</i> .  The majority of potential impacts would arise during the construction phase. Where possible, potential impacts and risks to habitats have been considered at design stage and avoided or minimised. Impacts would be managed through standard mitigation measures, such as adherence to best practice and published guidance. These measures have been detailed in the <i>OEMP</i> and include provisions for any European or UK Protected Species and associated specific mitigation strategies regarding habitats.	

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5	GENERIC IMPACTS		
5.42 (Waste management)	The applicant should set out the arrangements that are proposed for managing any waste produced. The arrangements described should include information on the proposed waste recovery and disposal system for all waste generated by the development. The applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal unless it can be demonstrated that the alternative is the best overall environmental outcome.	An Outline Site Waste Management Plan (OSWMP) has been produced (document reference TR010036/APP/6.8).  Table 2.2 of the OSWMP details the proposed and recommended measures for minimising waste. These include:  Constructing as much of the scheme using pre- fabricated units or bridge deck slabs off site, producing less on site waste.  Storing excavated materials and re-using them as fill or landscaping materials, reducing the amount of waste disposal.	
		A more detailed Site Waste Management Plan (SWMP) will be prepared upon the appointment of a contractor. This detailed SWMP will be based on the OSWMP.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.55 - 5.58 (Civil and military aviation and defence interests)	Where the proposed development may have an effect on civil or military aviation and/or other defence assets, an assessment of potential effects should be carried out.  The applicant should consult the MoD, CAA, National Air Traffic Services (NATS) and any aerodrome – licensed or otherwise – likely to be affected by the proposed development in preparing an assessment of the proposal on aviation or other defence interests.  Any assessment on aviation or other defence interests should include potential impacts during construction and operation of the project upon the operation of CNS infrastructure, flight patterns (both civil and military), other defence assets and aerodrome operational procedures.  If any relevant changes are made to proposals for an NSIP during the pre-application period or before the end of the examination of an application, it is the responsibility of the applicant to ensure that the relevant aviation and defence consultees are informed as soon as reasonably possible.	The Statement of Common Ground with Ministry of Defence (MoD) (document reference TR010036/APP/8.8) provides details of the agreement with the MoD.  MoD land will be required for a proposed footpath which the MoD have agreed to (Appendix A of the Statement of Common Ground includes email correspondence with MoD).  The MoD have also confirmed that the scheme presents no national security issues.	

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5	GENERIC IMPACTS		
5.62	Where, after reasonable mitigation, operational changes and planning obligations and requirements have been proposed, development consent should not be granted if the Secretary of State considers that:  • a development would prevent a licensed aerodrome from maintaining its licence;  • the benefits of the proposed development are outweighed by the harm to aerodromes serving business, training or emergency service needs; or  • the development would significantly impede or compromise the safe and effective use of defence assets or significantly limit military training.	As 5.55-5.58 above	

5.71- 5.74	Applications for development in a Coastal Change	Not applicable. The scheme is not located in a CCMA.	
(Coastal	Management Area (CCMA) should make it clear		
change)	why there is a need for it to be located in a CCMA.		
	For developments in a CCMA, applicants should		
	undertake an assessment of the vulnerability of		
	the proposed development to coastal change,		
	taking account of climate change, during the		
	project's operational life.		
	For any projects involving dredging or disposal into		
	the sea, the applicant should consult the Marine		
	Management Organisation (MMO), and where		
	appropriate, for cross-boundary impacts, Natural		
	Resource Wales and Scottish Natural Heritage, at		
	an early stage. The applicant should also consult		
	the MMO on projects which could impact on		
	coastal change, since the MMO may also be		
	involved in considering other projects which may		
	have related coastal impacts.		
	The applicant should examine the broader context		
	of coastal protection around the proposed project,		
	and the influence in both directions, that is, coast		
	on project, and project on coast. The applicant		
	should be particularly careful to identify any effects		
	of physical changes on the integrity and special		

features of Marine Conservation Zones, candidate marine Special Areas of Conservation (SACs), coastal SACs and candidate coastal SACs, coastal Special Protection Areas (SPAs) and potential coastal SPAs, Ramsar sites, Sites of Community Importance (SCIs) and potential SCIs and sites of Special Scientific Interest. For any projects affecting the above marine protected areas, the applicant should consult Natural England and where appropriate, for cross-boundary impacts, Natural Resource Wales and Scottish Natural

Heritage, at an early stage.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.75	When assessing applications in a CCMA, the Secretary of State should not grant development consent unless it is demonstrated that the development:  • will be safe over its planned lifetime and will not have an unacceptable impact on coastal change;  • will not compromise the character of the coast covered by designations;  • provides wider sustainability benefits; and  • does not hinder the creation and maintenance of a continuous signed and managed route around the coast.	Not applicable. The scheme is not located in a CCMA.	
5.79	Applicants should propose appropriate mitigation measures to address adverse physical changes to the coast in consultation with the MMO, the Environment Agency, Natural England, Natural Resource Wales, Scottish Natural Heritage, Local Planning Authorities, other statutory consultees, Coastal Partnerships and other coastal groups, as it considers appropriate. The Secretary of State should consider whether the mitigation requirements put forward by an applicant are acceptable and will be delivered and whether requirements should be attached to any grant of development consent in order to secure their delivery.	Not applicable. The scheme is approximately 30 miles from the nearest coast and will not have any impact on the coast or coastal environments.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.84 - 5.86 (Dust, odour, artificial light, smoke, steam)	Where the development is subject to an Environmental Impact Assessment, the applicant should assess any likely significant effects on amenity from emissions of odour, dust, steam, smoke and artificial light and describe these in the Environmental Statement.	The construction phase of the scheme has the potential to result in temporary air quality impacts from the emission of dust. Chapter 5 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) provides details of the Air Quality assessment undertaken.	
	In particular, the assessment provided by the applicant should describe:  • the type and quantity of emissions;  • aspects of the development which may give rise to emissions during construction,	Potential air quality effects have been assessed in accordance with the DMRB Volume 11 Section 3, Part 1 have been assessed in accordance <sup>17</sup> , IAN 170/12 <sup>18</sup> , IAN 174/13 <sup>19</sup> , IAN 175/13 <sup>20</sup> and IAN 185/15 <sup>21</sup> .	
	<ul> <li>operation and decommissioning;</li> <li>premises or locations that may be affected by the emissions;</li> <li>effects of the emission on identified premises or locations; and</li> </ul>	Any potential to cause annoyance (for example, discolouration of surfaces) at nearby properties due to dust will be mitigated through the implementation of best practicable means.	
	measures to be employed in preventing or mitigating the emissions.  The applicant is advised to consult the relevant local planning authority and, where appropriate, the Environment Agency about the scope and methodology of the assessment.	Mitigation measures have been included in the <i>OEMP</i> (document reference TR010036/APP/6.7) (that is, including dust suppression). Impacts of artificial lighting, and dust is considered in the chapter 8 Biodiversity of the <i>ES</i> (document reference TR010036/APP/6.1), in terms of impacts on habitats.	

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<sup>&</sup>lt;sup>17</sup> Highways England (2007) Design Manual for Roads and Bridges Volume 11 Section 3 Part 1 Air Quality (HA 207/07) [online] available at: <a href="http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf">http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf</a> (last accessed March 2018).

<sup>&</sup>lt;sup>18</sup> Highways England (2012) Interim Advice Note 170/12 v3: Updated air quality advice on the assessment of future NO<sub>x</sub> and NO<sub>2</sub> projections for users of DMRB Volume 11, Section 3 Part 1 'Air Quality' (HA207/07) [online] available at: <a href="http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian170.pdf">http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian170.pdf</a> (last accessed March 2018).

<sup>&</sup>lt;sup>19</sup> Highways England (2013) Interim Advice Note 174/13: Update advice for evaluating significant local air quality effects for users of DMRB Volume 11, Section 3, Part 1 'Air Quality' (HA207/07) [online] available at: <a href="http://www.standardsforhighways.co.uk/ians/pdfs/ian174.pdf">http://www.standardsforhighways.co.uk/ians/pdfs/ian174.pdf</a> (last accessed March 2018).

<sup>&</sup>lt;sup>20</sup> Highways England (2013) Interim Advice Note 175/13. Updated advice on risk assessment related to compliance with the EU Directive on ambient air quality and on the projection of Scheme Air Quality Action Plans for user of DMRB Volume 11, Section 3, Part 1 'Air Quality' (HA207/07) [online] available at <a href="http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian175.pdf">http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian175.pdf</a> (last accessed March 2018).

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.89	The Secretary of State should ensure the applicant has provided sufficient information to show that any necessary mitigation will be put into place. In particular, the Secretary of State should consider whether to require the applicant to abide by a scheme of management and mitigation concerning emissions of odour, dust, steam, smoke, artificial light from the development to reduce any loss to amenity which might arise during the construction and operation of the development. A construction management plan may help codify mitigation.	As above in answer to NPSNN paragraphs 5.84 – 5.86	
5.91 (Flood risk)	The National Planning Policy Framework (paragraphs 100 to 104) makes clear that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk. But where development is necessary, it should be made safe without increasing flood risk elsewhere. The guidance supporting the National Planning Policy Framework explains that essential transport infrastructure (including mass evacuation routes), which has to cross the area at risk, is permissible in areas of high flood risk, subject to the requirements of the Exception Test.	The existing and proposed A303 alignment are wholly located outside flood zones 2 and 3. The <i>Flood Risk Assessment</i> (Appendix 13.4 (of the ES <i>(document reference TR010036/APP/6.3))</i> concludes that the scheme passes the sequential test.	

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<sup>&</sup>lt;sup>21</sup> Highways England (2015) Interim Advice Note 185/15: Updated traffic, air quality and noise advice on the assessment of link speeds and generation of vehicle data into 'speed-bands' for users of DMRB Volume 11, Section 3, Part 1, 'Air Quality' (HA207/07) [online] available at: <a href="http://www.standardsforhighways.co.uk/ha/standards/jans/pdfs/jans

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.92 - 5.93	<ul> <li>Applications for projects in the following locations should be accompanied by a flood risk assessment (FRA):         <ul> <li>Flood Zones 2 and 3, medium and high probability of river and sea flooding;</li> <li>Flood Zone 1 (low probability of river and sea flooding) for projects of 1 hectare or greater, projects which may be subject to other sources of flooding (local watercourses, surface water, groundwater or reservoirs), or where the Environment Agency has notified the local planning authority that there are critical drainage problems.</li> </ul> </li> <li>This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.</li> </ul>	The existing and the proposed A303 route are wholly located outside flood zones 2 and 3. An <i>FRA</i> (Appendix 13.4 of the ES (document reference TR010036/APP/6.3)) has been produced and submitted as part of the DCO application.  Statements of common ground have been agreed with the Environment Agency (document reference TR010036/APP/8.1), Somerset County Council and South Somerset District Council (document reference TR010036/APP/8.4) and the Internal drainage board (document reference TR010036/APP/8.6). These reports provide details of the agreements made with the parties involved.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.94	In preparing an FRA the applicant should:      consider the risk of all forms of flooding arising from the project (including in adjacent parts of the United Kingdom), in addition to the risk of flooding to the project, and demonstrate how these risks      will be managed and, where relevant, mitigated, so that the development remains safe throughout its lifetime;      take the impacts of climate change into account, clearly stating the development lifetime over which the assessment has been made;      consider the vulnerability of those using the infrastructure including arrangements for safe access and exit;      include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and demonstrate that this is acceptable for the particular project;      consider if there is a need to remain operational during a worst case flood event over the development's lifetime;      provide the evidence for the Secretary of State to apply the Sequential Test and Exception Test, as appropriate.	The FRA (Appendix 13.4 of the ES (document reference TR010036/APP/6.3)) provides an assessment of the flooding risk arising from the scheme.  The FRA considers all forms of potential flooding arising from the scheme, both during construction and operation.  The assessment identified surface water runoff as the most significant risk and through implementation of the proposed drainage strategy the scheme will not increase flood risk elsewhere.  The route is elevated above the fluvial floodplains and it is not expected that climate change would result in a fluvial flood risk to the scheme.  The FRA also concludes that the scheme passes the sequential test.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.96	Applicants for projects which may be affected by, or may add to, flood risk are advised to seek sufficiently early pre-application discussions with the Environment Agency, and, where relevant, other flood risk management bodies such as lead local flood authorities, Internal Drainage Boards, sewerage undertakers, highways authorities and reservoir owners and operators. Such discussions can be used to identify the likelihood and possible extent and nature of the flood risk, to help scope the FRA, and identify the information that will be required by the Secretary of State to reach a decision on the application once it has been submitted and examined. If the Environment Agency has concerns about the proposal on flood risk grounds, the applicant is encouraged to discuss these concerns with the Environment Agency and look to agree ways in which the proposal might be amended, or additional information provided, which would satisfy the Environment Agency's concerns, preferably before the application for development consent is submitted.	A meeting was held with the Environment Agency (EA) in July 2017 to discuss surveys, drainage and flood risk. The EA provided input as to what surveys would be required and the assessment to be undertaken.  A Statement of Common Ground with the Environment Agency (document reference TR010036/APP/8.1) provides details of the agreements made with the EA.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.97	For local flood risk (surface water, groundwater and ordinary watercourse flooding), local flood risk management strategies and surface water management plans provide useful sources of information for consideration in Flood Risk Assessments. Surface water flood issues need to be understood and then account of these issues can be taken, for example flow routes should be clearly identified and managed.	All new highway drainage would be designed and constructed to meet the requirements of DMRB Volume 4, Section 2, Part 3, HD 33/16 Surface and Sub-Surface Drainage Systems for Highways.  Ongoing maintenance of the existing and proposed drainage assets is critical to the management of surface water flood risk. The proposed drainage strategy incorporates surface features to aid visual inspection and subsequent maintenance.  Further details can be found in the <i>FRA</i> and <i>Drainage Strategy Report</i> , appendices 4.6 and 4.7 of the <i>ES (document reference TR010036/APP/6.3).</i>	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.100	For construction work which has drainage implications, approval for the project's drainage system will form part of any development consent issued by the Secretary of State. The Secretary of State will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010. In addition, the development consent order, or any associated planning obligations, will need to make provision for the adoption and maintenance of any Sustainable Drainage Systems (SuDS), including any necessary access rights to property. The Secretary of State, should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site. The responsible body could include, for example, the applicant, the landowner, the relevant local authority, or another body such as the Internal Drainage Board.	Under the Flood and Water Management Act 2010, Somerset County Council (SCC) is the Lead Local Flood Authority (LLFA) for the Somerset area. As the Lead Local Flood Authority, Somerset County Council are responsible for; flood risk from surface water, groundwater and small rivers, streams and ditches and coordinating flood risk management across Somerset.  Early consultation with SCC was undertaken in December 2017 at the same time as consultation with the EA. SCC considered the philosophy behind the drainage strategy acceptable.  Details of the drainage for the scheme is detailed in the Drainage Strategy Report, Appendix 4.7 of the ES (document reference TR010036/APP/6.3).  The proposed drainage philosophy is to replicate, as far as reasonably practicable, an un-developed site response to rainfall, limiting both the rate and volume of surface water run-off.  All new highway drainage would be designed and constructed to meet the requirements of DMRB Volume 4, Section 2, Part 3, HD 33/16 Surface and Sub-Surface Drainage Systems for Highways.  Highway surface water drainage would principally be collected and conveyed via surface water channels adjacent to the carriageway. Where possible, these are grass lined. Link roads would typically be drained via	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		kerb and gully. New sections of full depth carriageway would receive sub-surface drainage where applicable. The proposed discharge surface water from the scheme is to utilise existing outfalls where possible. In accordance with discharge hierarchy, opportunities to discharge via infiltration were explored, the main composition of the Lower Lias Clay however deterred this as a viable option.  Through incorporation of Sustainable Drainage Systems in sequence provides a management train to effectively reduce pollutants associated with first flush and routine runoff.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.112 - 5.115 (Flood risk - mitigation)	Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.  The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect. It may be necessary to provide surface water storage and infiltration to limit and reduce both the peak rate of discharge from the site and the total volume discharged from the site. There may be circumstances where it is appropriate for infiltration attenuation storage to be provided outside the project site, if necessary through the use of a planning obligation.  The sequential approach should be applied to the layout and design of the project. Vulnerable uses should be located on parts of the site at lower probability and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities can be taken to lower flood risk by improving flow routes, flood storage capacity and using SuDS.	Drainage proposals are illustrated in drawings (document reference TR010036/APP/2.11).  The proposed drainage philosophy is to replicate, as far as reasonably practicable, an un-developed site response to rainfall, limiting both the rate and volume of surface water run-off. In accordance with best practice guidance, offsite discharge is limited, up to and including the 1% Annual Exceedance Probability (AEP) (1- in -100 year event) to no greater than the undeveloped rate of runoff as determined by the calculation of the mean annual peak rate of runoff for a greenfield site.  Exterior catchment overland flow will be collected by a network of cut-off ditches, conveying to existing ordinary watercourses to replicate, as far as is reasonably practicable, the natural catchment response to rainfall. Where necessary, culverts will be provided to convey exterior catchment run-off.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.117 - 5.118 (Land instability)	Where necessary, land stability should be considered in respect of new development, as set out in the National Planning Policy Framework and supporting planning guidance. Specifically, proposals should be appropriate for the location, including preventing unacceptable risks from land instability. If land stability could be an issue, applicants should seek appropriate technical and environmental expert advice to assess the likely consequences of proposed developments on sites where subsidence, landslides and ground compression is known or suspected. Applicants should liaise with the Coal Authority if necessary. A preliminary assessment of ground instability should be carried out at the earliest possible stage before a detailed application for development consent is prepared. Applicants should ensure that any necessary investigations are undertaken to ascertain that their sites are and will remain stable or can be made so as part of the development. The site needs to be assessed in context of surrounding areas where subsidence, landslides and land compression could threaten the development during its anticipated life or damage neighbouring land or property. This could be in the form of a land stability or slope stability risk assessment report.	Not Applicable	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.126 - 5.127 (The historic environment)	Where the development is subject to EIA the applicant should undertake an assessment of any likely significant heritage impacts of the proposed project as part of the Environmental Impact Assessment and describe these in the environmental statement.  The applicant should describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant Historic Environment Record should have been consulted and the heritage assets assessed using appropriate expertise. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, the applicant should include an appropriate desk-based assessment and, where necessary, a field evaluation.	The ES (document reference TR010036/APP/6.1) includes a chapter on Cultural Heritage (Chapter 6). This chapter includes details of the assessment undertaken of potential heritage impacts arising from the scheme.  The chapter includes an assessment of significance of effect on each of the identified heritage assets.  The following resources were used to inform the heritage assessment, establish baseline conditions and the value of individual heritage assets:  An examination of local, regional and national planning policies in relation to the historic environment.  A search of the Somerset Historic Environment Record (HER) database was undertaken in 2017 for archaeological sites, archaeological find spots, listed buildings, registered parks and gardens, scheduled monuments, world heritage sites, archaeological priority areas, and event locations (archaeology) within the 1 kilometre study area.  A search of the online National Heritage List for England. An examination of local authority plans and documentation regarding conservation areas and archaeological priority areas.  An examination of relevant published and unpublished archaeological and historic sources, for example journals and historic records.  An examination of topographical and geological evidence.  An examination of the aerial survey transcription	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		A map regression exercise has been undertaken using historic maps to determine previous land use within the scheme area.  Site walkover surveys of the study area and surrounding archaeological and historic assets that may be impacted by the scheme. These were carried out on 6 December 2017, 12 and 13 February 2018, and 8 and 9 May 2018.	
5.131	When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be. Once lost, heritage assets cannot be replaced and their loss has a cultural, environmental, economic and social impact. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Given that heritage assets are irreplaceable, harm or loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional. Substantial harm to or loss of designated assets of the highest significance, including World Heritage Sites, Scheduled Monuments, grade I and II* Listed Buildings, Registered Battlefields, and grade I and II* Registered Parks and Gardens should be wholly exceptional.	It is acknowledged that the scheme will give rise to harm to the Hazlegrove House Grade II Registered Park and Garden (RPG). This is as a result of the permanent loss of approximately 14% of the RPG for the construction of Hazlegrove junction. This cannot be avoided due to the lack of space between the existing A303 alignment and the RPG and location of residential properties to the south of the existing alignment. However, land take within the RPG has been minimised as much as possible.  In addition, it is considered that the harm will be less than substantial. The area affected by the scheme is of comparatively lower heritage value than the remainder of the park, as it was a later addition to the park and much of it does not retain its parkland character. The majority of the park will remain unaltered, and key features including the formal gardens, remains of the Bastion, Grade II* Triumphal Arch, Grade II listed gates and wall, and the Grade II listed house will be physically unaltered and their setting will not be compromised as a result of imbedded mitigation such as the use of cuttings, false cuttings and planting.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		Furthermore, the impact to the RPG has been mitigated by design, in minimising the land take from the RPG.	
		It is considered that any residual affects to the RPG are outweighed by the public benefit that the scheme provides, in terms of increasing capacity, reducing congestion, improving journey time reliability and improved safety, and what this helps to achieve in terms of economic growth and tourism, will outweigh any harm associated with the less significant parts of RPG.	
		The benefits of the scheme are further set out in chapter 3 of the <i>Case for the Scheme (document reference TR010036/APP/7.1).</i> Further detail of the impact that the scheme will have on heritage assets can be found in chapter 6 of the <i>ES (document reference TR010036/APP/6.1).</i>	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.133	Where the proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm, or alternatively that all of the following apply:  • the nature of the heritage asset prevents all reasonable uses of the site; and • no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and • conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and • the harm or loss is outweighed by the benefit of bringing the site back into use.	As highlighted in 5.131 above, the scheme is likely to give rise to less than substantial harm to the RPG.	
5.144 - 5.146	Where the development is subject to EIA the	Chapter 7 Landscape of the <b>ES</b> ( <b>document reference</b>	
(Landscape	applicant should undertake an assessment of any	TR010036/APP/6.1) provides details of the assessment	
and visual	likely significant landscape and visual impacts in	of likely significant landscape and visual impacts of the	
impacts)	the environmental impact assessment and	scheme.	
	describe these in the environmental assessment.	The acceptant follows the warrance of deticate and the	
	A number of guides have been produced to assist in addressing landscape issues. The landscape	The assessment follows the recommendations set out in the following documents:	
	and visual assessment should include reference to	in the following documents.	
	any landscape character assessment and		
	associated studies, as a means of assessing		
	landscape impacts relevant to the proposed		

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
	project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England.  The applicant's assessment should include any significant effects during construction of the project and/or the significant effects of the completed development and its operation on landscape components and landscape character (including historic landscape characterisation).  The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include any noise and light pollution effects, including on local amenity, tranquility and nature conservation.	Highways England's DMRB Volume 11: Environmental Assessment and IAN 135/10 <sup>22</sup> ; Guidelines for Landscape and Visual Impact Assessment 3 produced by the Landscape Institute and Institute of Environmental Management and Assessment, third edition, 2013 <sup>23</sup> ; and, An Approach to Landscape Character Assessment prepared by Natural England, 2014 <sup>24</sup> .	

<sup>&</sup>lt;sup>22</sup> http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/ian135.pdf [online], accessed March 2018

<sup>&</sup>lt;sup>23</sup> Landscape Institute, 2012, Guidelines for Landscape and Visual Impact Assessment, 3rd edition, last accessed March 2018

<sup>&</sup>lt;sup>24</sup> An Approach to Landscape Character Assessment prepared by Natural England, October 2014

<a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/691184/landscape-character-assessment.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/syst

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.147- 5.148	Any statutory undertaker commissioning or undertaking works in relation to, or so as to affect land in a National Park or Areas of Outstanding Natural Beauty, would need to comply with the respective duties in section 11A of the National Parks and Access to Countryside Act 1949 and section 85 of the Countryside and Rights of Way Act 2000.  For significant road widening or the building of new roads in National Parks and the Broads applicants also need to fulfil the requirements set out in Defra's English national parks and the broads: UK government vision and circular 2010 or successor documents. These requirements should also be complied with for significant road widening or the building of new roads in Areas of Outstanding Natural Beauty.	Not applicable. There are no National Parks or Areas of Outstanding Natural Beauty located within 1km of the proposed scheme.	

5.150 - 5.151

Great weight should be given to conserving landscape and scenic beauty in nationally designated areas. National Parks, the Broads and Areas of Outstanding Natural Beauty have the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the Secretary of State has a statutory duty to have regard to in decisions.

The Secretary of State should refuse development consent in these areas except in exceptional circumstances and where it can be demonstrated that it is in the public interest. Consideration of such applications should include an assessment of:

- the need for the development, including in terms of any national considerations, and the impact of consenting, or not consenting it, upon the local economy;
- the cost of, and scope for, developing elsewhere, outside the designated area, or meeting the need for it in some other way; and
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

There is a strong presumption against any significant road widening or the building of new roads and strategic rail freight interchanges in a National Park, the Broads and Areas of Outstanding Natural Beauty, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Planning of the Strategic Road Network should encourage routes that avoid National Parks, the Broads and Areas of Outstanding Natural Beauty.

Not applicable. There are no National Parks or Areas of Outstanding Natural Beauty located within 1km of the proposed scheme.

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.153	Where consent is given in these areas, the Secretary of State should be satisfied that the applicant has ensured that the project will be carried out to high environmental standards and where possible includes measures to enhance other aspects of the environment. Where necessary, the Secretary of State should consider the imposition of appropriate requirements to ensure these standards are delivered.	Not applicable. There are no National Parks or Areas of Outstanding Natural Beauty located within 1km of the proposed scheme.	
5.154 - 5.155	The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints. This should include projects in England which may have impacts on designated areas in Wales or on National Scenic Areas in Scotland.  The fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.	Not applicable. There are no National Parks or Areas of Outstanding Natural Beauty located within 1km of the proposed scheme.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.165 - 5.167	The applicant should identify existing and	The principal land use throughout the area of interest is	
(Land use	proposed land uses near the project, any effects of	agriculture including arable farming and pasture for dairy	
including open	replacing an existing development or use of the	farming.	
space, green	site with the proposed project or preventing a		
infrastructure	development or use on a neighbouring site from	Chapter 12 of the <b>ES</b> (document reference	
and Green Belt)	continuing. Applicants should also assess any	TR010036/APP/6.1) includes details of the land take	
	effects of precluding a new development or use	required for the scheme.	
	proposed in the development plan. The		
	assessment should be proportionate.	Compensation will be sought for affected for affected	
	Eviating and analysis and represtigned	landowners as identified for the demolition of private	
	Existing open space, sports and recreational	property and associated land take and individual farm	
	buildings and land should not be developed unless the land is surplus to requirements or the loss	businesses assessments.	
	would be replaced by equivalent or better	No land take of public open space will be required for the	
	provision in terms of quantity and quality in a	scheme.	
	suitable location. Applicants considering proposals	Solicino.	
	which would involve developing such land should	A Statement of Common Ground with Somerset County	ļ
	have regard to any local authority's assessment of	Council and South Somerset District Council is	
	need for such types of land and buildings.	provided as part of the DCO application (document reference TR010036/APP/8.4) and sets out the	
	During any pre-application discussions with the	agreements made with the authorities.	
	applicant, the local planning authority should		
	identify any concerns it has about the impacts of		
	the application on land-use, having regard to the		
	development plan and relevant applications, and		
	including, where relevant, whether it agrees with		
	any independent assessment that the land is		
	surplus to requirements. These are also matters		
	that local authorities may wish to include in their		
	Local Impact Report which can be submitted after		
	an application for development consent has been		

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
	accepted.		

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.168	Applicants should take into account the economic and other benefits of the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification). Where significant development of agricultural land is demonstrated to be necessary, applicants should seek to use areas of poorer quality land in preference to that of a higher quality. Applicants should also identify any effects, and seek to minimise impacts, on soil quality, taking into account any mitigation measures proposed. Where possible, developments should be on previously developed (brownfield) sites provided that it is not of high environmental value. For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination and how it is proposed to address this.	As per 5.165 – 5.167 above.	
5.169	Applicants should safeguard any mineral resources on the proposed site as far as possible.	Chapter 9 of the <i>ES</i> (document reference TR010036/APP/6.1) considers the impact of the scheme on geology and soils, including any contaminated land and mineral resources present, contaminated waste (soils), and any potential associated effects on groundwater and surface water quality from a contaminated land perspective.  Mitigation of effects to directly underlying geological resources as a result of new or modified earthworks is relatively limited, as the geological material must be built over to facilitate the new carriageway alignment.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		The alignment of the scheme predominantly along the existing A303 minimises the additional footprint of the works and helps to limit effects on geology at these locations. In addition, the excavation and re-use of sitewon materials (both superficial deposits and bedrock) would act to minimise the sterilisation of geological resources.	
5.170 - 5.171	The general policies controlling development in the countryside apply with equal force in Green Belts but there is, in addition, a general presumption against inappropriate development within them. Such development should not be approved except in very special circumstances. Applicants should therefore determine whether their proposal, or any part of it, is within an established Green Belt and, if so, whether their proposal may be considered inappropriate development within the meaning of Green Belt policy. Metropolitan Open Land, and land designated as Local Green Space in a local or neighbourhood plan, are subject to the same policies of protection as Green Belt, and inappropriate development should not be approved except in very special circumstances.  Linear infrastructure linking an area near a Green Belt with other locations will often have to pass through Green Belt land. The identification of a policy need for linear infrastructure will take account of the fact that there will be an impact on the Green Belt and as far as possible, of the need to contribute to the achievement of the objectives for the use of land in Green Belts.	Not applicable. The scheme is not located within the green belt, Metropolitan Open land or land designated as Local Green Space.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.174	The Secretary of State should not grant consent for development on existing open space, sports and recreational buildings and land, including playing fields, unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements, or the Secretary of State determines that the benefits of the project (including need) outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.	Not applicable as the scheme does not include development of any open space land.	
5.177	In considering the impact on maintaining coastal recreation sites and features, the Secretary of State should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so the Secretary of State should consider the implications for development of the creation of a continuous signed and managed route around the coast, as proposed in the Marine and Coastal Access Act 2009.	Not applicable.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.180	Where green infrastructure is affected, applicants should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes, National Trails and other public rights of way.	There are several PRoW providing access to green space for NMUs. These are detailed in Table A.4 of Appendix 12.3 of the <i>ES</i> , <i>(document reference TR010036/APP/6.3)</i> . Such green space provides space for physical activity for people located both within the LIA and further afield.	
5.182	Where a proposed development has an impact on a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to safeguard mineral resources.	From approximate chainage 2,300 metres the scheme lies within an area designated for building stone safeguarding according to the Somerset Minerals Plan.  Mitigation is detailed within 5.169 of this appendix.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.184	Public rights of way (PRoW), National Trails, and other rights of access to land (for example open access land) are important recreational facilities for walkers, cyclists and equestrians. Applicants are expected to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other public rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve access. In considering revisions to an existing right of way consideration needs to be given to the use, character, attractiveness and convenience of the right of way. The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements in respect of these measures might be attached to any grant of development consent.	A total of 14 PRoW have been identified as being impacted by the scheme, due to land take or new roads built because of the scheme severing the PRoW.  12 of the PRoW have a Slight Adverse effect and are not significant. The remaining 2 PRoW have a Neutral effect.  Further details of the impacts that the scheme will have on rights of access to land can be found in chapter 12 of the <i>ES</i> (document reference TR010036/APP/6.1).  As per 5.174, the scheme does not include development of any open space land.	

# 5.189 (Noise and vibration)

Where a development is subject to EIA and significant noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment, which should form part of the environment statement:

- a description of the noise sources including likely usage in terms of number of movements, fleet mix and diurnal pattern. For any associated fixed structures, such as ventilation fans for tunnels, information about the noise sources including the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise.
- identification of noise sensitive premises and noise sensitive areas that may be affected.
- the characteristics of the existing noise environment.
- a prediction on how the noise environment will change with the proposed development:
  - in the shorter term such as during the construction period;
  - in the longer term during the operating life of the infrastructure;
  - at particular times of the day, evening and night as appropriate.
- an assessment of the effect of predicted changes in the noise environment on any noise sensitive premises and noise sensitive areas.
- measures to be employed in mitigating the effects of noise. Applicants should consider using best available techniques to reduce noise impacts.

the nature and extent of the noise assessment should be proportionate to the likely noise impact.

Chapter 11 of the *ES* (document reference *TR010036/APP/6.1*) includes an assessment of the potential noise impacts of the scheme.

The chapter lists the various noise sources, including those during construction and operational phases of the scheme, and also identifies sensitive receptors within the study area.

Whilst the scheme will produce significant adverse impacts during construction (due to piling, etc.) implementing mitigation measures such as: restricting working hours; fitting equipment with silencers or mufflers; management of deliveries to avoid queuing of site traffic; and ensuring that equipment is properly maintained will reduce the overall impact of noise during the construction phase. All mitigation measures are listed in the *OEMP* (document reference *TR010036/APP/6.7*) and with this mitigation in place, the scheme will meet the operational noise aims of the Noise Policy Statement for England (NPSE)<sup>25</sup> and NPPF.

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.190	The potential noise impact elsewhere that is directly associated with the development, such as changes in road and rail traffic movements elsewhere on the national networks, should be considered as appropriate.	Section 11.8 of Chapter 11 of the <i>ES (document reference TR010036/APP/6.1)</i> provides details of the potential noise impacts of the scheme.  Potential impacts to the wider network have been assessed in relation to temporary traffic diversions during construction.	
		For on-line construction work, single lane traffic will be maintained through much of the works. According to HD213/11, a restriction of road traffic speed is often implemented for reasons of safety allowing construction works to occur adjacent to flowing traffic, and such decreases in traffic speed can lead to temporary reductions in noise levels for nearby receptors.	
		The worst-case duration of road closures has been given in Chapter 2 of the ES, but the nature of the temporary diversions for the scheme (for example, the expected traffic flows distributed on surrounding roads) is not known and therefore potential impacts cannot be determined.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.191	Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance. The prediction of road traffic noise	The assessment of the operational road traffic noise impacts of the scheme follows the methodology set out in HD213/11.	
	should be based on the method described in Calculation of Road Traffic Noise For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.	Other guidance which has been considered in the noise assessment includes the World Health Organisations (WHO) Guidelines for Community Noise 1999, WHO Night Noise Guidelines for Europe 2009, BS5228-1, BS5228-2 and the IEMA Guidelines for Environmental Noise Impact Assessment.	
		Further details of the guidance and methodology used as part of the noise assessment undertaken can be found in chapter 11, section 11.3 of the <i>ES (document reference TR010036/APP/6.1)</i> .	
5.192	The applicant should consult Natural England with regard to assessment of noise on designated nature conservation sites, protected landscapes, protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may	Natural England were consulted in March 2018 in order to understand if any ecological receptors should be included within the noise and vibration assessment. The representative stated that they were not aware of any receptors of particular sensitivity and biodiversity value that are likely to be affected.	
	also need to be taken into account.	Further consultation meetings have been held with Natural England as part of the Environmental Technical Working Group (TWG). Discussions have included the following topics:  Protected species survey methodology	
		Phase 2 protected species survey results and mitigation measures An outline of habitat losses and the draft Environmental Masterplan	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		Habitat Regulations Assessment	
5.195	The Secretary of State should not grant development consent unless satisfied that the proposals will meet, the following aims, within the context of Government policy on sustainable development:  • avoid significant adverse impacts on health and quality of life from noise as a result of the new development;  • mitigate and minimise other adverse impacts on health and quality of life from noise from the new development; and  • contribute to improvements to health and quality of life through the effective management and control of noise, where possible.	Section 11.9 of Chapter 11 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) details the Noise and Vibration mitigation measures recommended for the scheme.  Mitigation measures are detailed in 5.189 of this appendix.  Further mitigation measures include mitigation by design. The mitigation within the design includes consideration of horizontal alignment, use off cuttings and embankments, noise barriers and low-noise running surfaces.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.199	For most national network projects, the relevant Noise Insulation Regulations will apply. These place a duty on and provide powers to the relevant authority to offer noise mitigation through improved sound insulation to dwellings, with associated ventilation to deal with both construction and operational noise. An indication of the likely eligibility for such compensation should be included in the assessment. In extreme cases, the applicant may consider it appropriate to provide noise mitigation through the compulsory acquisition of affected properties in order to gain consent for what might otherwise be unacceptable development.  Where mitigation is proposed to be dealt with through compulsory acquisition, such properties would have to be included within the development consent order land in relation to which compulsory acquisition powers are being sought.	The noise assessment detailed in Chapter 11 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ) has been undertaken in accordance with the Noise Insulation Regulations 1975 (amended 1988).  There are 11 receptors subject to moderate or major noise increases in the opening year. With the exception of two properties (The Spinney and Annis Hill Farm), the impact at all receptors is considered to be not significant with the mitigation measures (set out in the <i>OEMP</i> ( <i>document reference TR010036/APP/6.7</i> )) in place.  The noise assessment identifies a need for compensation for The Spinney and Annis Hill Farm to mitigate the impact to these receptors. Details of this compensation can be found in chapter 11 of the <i>ES</i> ( <i>document reference TR010036/APP/6.1</i> ).	
5.200	Applicants should consider opportunities to address the noise issues associated with the Important Areas as identified through the noise action planning process.	Over the long-term, even without the scheme in place, noise levels would be expected to increase within NIAs due to a gradual increase in traffic volumes over the 15-year assessment period. There are two NIAs within the study area (3518 and 3519).  As per tables 11.40 and 11.39 within chapter 11 of the <i>ES (document reference TR010036/APP/6.1)</i> , with the scheme operation, there would be a moderate decrease in noise for receptors in each NIA.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.203 - 5.205 (Impacts on transport networks)	Applicants should have regard to the policies set out in local plans, for example, policies on demand management being undertaken at the local level. Applicants should consult the relevant highway authority, and local planning authority, as appropriate, on the assessment of transport impacts.  Applicants should consider reasonable opportunities to support other transport modes in developing infrastructure. As part of this, consistent with paragraph 3.21 and 3.22 above, the applicant should provide evidence that as part of the project they have used reasonable endeavours to address any existing severance	One of the objectives of the scheme is to reduce community severance and promote opportunities for improving their quality of life.  Chapter 7 of the <i>Case for the Scheme (document reference TR010036/APP/7.1)</i> provides a detailed assessment of local planning policies. This assessment looks at the South Somerset District Council Local Plan, and the Somerset County Council Future Transport Plan.  Direct impacts are anticipated upon a number of NMU facilities and journeys, resulting in some journey length increases for NMUs.	
	issues that act as a barrier to non-motorised users.	However, a reduction in fear of potential accidents is anticipated with new safer facilities provided for NMUs. Furthermore, a new right of way is proposed between Bridleway Y 30/28 and Footpath Y 27/10 at Downhead, to allow for NMUs to safely travel between Podimore and Downhead.	
5.206	For road and rail developments, if a development is subject to EIA and is likely to have significant environmental impacts arising from impacts on transport networks, the applicant's environmental statement should describe those impacts and mitigating commitments. In all other cases the applicant's assessment should include a proportionate assessment of the transport impacts on other networks as part of the application.	Chapter 15 of the <i>ES (document reference TR010036/APP/6.1)</i> provides a summary of the ES. All mitigation measures are also listed within the <i>OEMP (document reference TR010036/APP/6.7)</i> .	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.208	Where appropriate, the applicant should prepare a travel plan including management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport and sustainable modes where relevant, to reduce the need for any parking associated with the proposal and to mitigate transport impacts.	The Transport Report (document reference TR010036/APP/7.3) provides details of the transport assessment undertaken for the scheme.  As the scheme is in a rural location, there are limited buses available serving the local communities, and walking and cycling is restricted by distances between major urban settlements. Therefore, rail provides the main mode alternative for strategic traffic.  A Traffic Management Plan (TMP) (Annex B.5 of the OEMP) (document reference TR010036/APP/6.7) will be implemented during the construction phase of the scheme to ensure there is a safe environment for those travelling along the route, and for those delivering the construction works. The TMP outlines how traffic management will minimise effects for vehicle travellers during construction.	
5.209	For schemes impacting on the Strategic Road Network, applicants should have regard to DfT Circular 02/2013 The Strategic Road Network and the delivery of sustainable development (or prevailing policy) which sets out the way in which the highway authority for the Strategic Road Network, will engage with communities and the development industry to deliver sustainable development and, therefore, economic growth, whilst safeguarding the primary function and purpose of the Strategic Road Network.	The Consultation Report (document reference TR010036/APP/5.1) provides details of the consultation undertaken for the scheme. Chapter 2 of the report details the non-statutory public consultation undertaken, which included consulting at the option selection stage. Amongst other stakeholders, local communities were consulted, including all residents, businesses and organisations located within a 1,500m buffer zone of each route option.  Chapter 4 of the Consultation Report provides details of the statutory consultation period, which ran from Friday 26 January to Friday 9 March 2018.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.210	If new transport infrastructure is proposed, applicants should discuss with network providers the possibility of co-funding by Government for any third-party benefits. Guidance has been issued in England which explains the circumstances where this may be possible. The Government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time, and cannot provide financial support to a scheme that solely mitigates the impacts of a specific development. Any decisions on co-funded transport infrastructure will need to be taken in the context of the Government's wider policy of transport improvements.	The Funding Statement ( <i>document reference HE551507-MMSJV-LSI-000-RP-UU-4201</i> ) demonstrates that the scheme is adequately funded and therefore that funding is no impediment to the delivery of the scheme.  The RIS provides certainty of Government funding with over £15 billion to be invested in major roads between 2015/16 and 2020/21, including the scheme.	
5.216	Where development would worsen accessibility, such impacts should be mitigated so far as reasonably possible. There is a very strong expectation that impacts on accessibility for non-motorised users should be mitigated.	As per 5.203 – 5.206, although the scheme will cause an increase in some journey times for NMUs, the safety or NMU routes will be increased through the removal of at-grade crossings. There are also new rights of way proposed as part of the scheme to improve accessibility.	
5.220 (Water quality and resources)	Where applicable, an application for a development consent order has to contain a plan with accompanying information identifying water bodies in a River Basin Management Plan.	A Plan has been produced for the WFD Assessment (Appendix 13.2 of the ES (document reference TR010036/APP/6.3), identifying the relevant water bodies.	
		Stage 1 and Stage 2 of the WFD assessment concluded that the potential impact pathways present are very low risk, and the scheme is very unlikely to affect the WFD status or cause any deterioration of the waterbodies identified. As such, all waterbodies	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		identified have been scoped out from further assessment.	
5.221	Applicants should make early contact with the relevant regulators, including the Environment Agency, for abstraction licensing and with water supply companies likely to supply the water. Where a development is subject to EIA and the development is likely to have significant adverse effects on the water environment, the applicant should ascertain the existing status of, and carry out an assessment of the impacts of the proposed project on water quality, water resources and physical characteristics as part of the environmental statement.	A meeting was held with the Environment Agency (EA) in July 2017 to discuss surveys, drainage and flood risk requirements. The EA provided input as to what surveys would be required and the assessment to be undertaken.  Statements of common ground have been agreed with the Environment Agency (document reference TR010036/APP/8.1), Somerset County Council and South Somerset District Council (document reference TR010036/APP/8.4) and the Internal drainage board (document reference TR010036/APP/8.6). These reports provide details of the agreements made with the parties involved.  Further details of the consultation undertaken to date, can be found in Chapter 4 of the ES (document reference TR010036/APP/6.1).	
5.222	For those projects that are improvements to the existing infrastructure, such as road widening, opportunities should be taken, where feasible, to improve upon the quality of existing discharges where these are identified and shown to contribute towards Water Framework Directive commitments.	Appendix 13.2 of the ES ( <i>document reference TR010036/APP/6.3</i> ) provides details of the Water Framework Directive (WFD) assessments undertaken for the scheme.  Following WFD Stages 1 and 2, which determined the scheme presents a very low risk to WFD status / objectives and to associated water dependent protected areas, all waterbodies were scoped out from further assessment. As such, a detailed impact assessment (Stage 3 WFD impact assessment) is not considered to be required.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.223	<ul> <li>Any environmental statement should describe:</li> <li>the existing quality of waters affected by the proposed project;</li> <li>existing water resources affected by the proposed project and the impacts of the proposed project on water resources;</li> <li>existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project, and any impact of physical modifications to these characteristics;</li> <li>any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions; and</li> <li>any cumulative effects.</li> </ul>	A Road Drainage and Water Environment chapter has been scoped out of the ES. However, a summary of the assessment has been included in Appendix 4.3 of the <i>ES (document reference TR010036/APP/6.3)</i> .  This assessment includes a summary of the baseline conditions in the road drainage and water environment, identifying potential impacts from construction / operation and proposed mitigation required as part of the scheme.  It is considered unlikely that there would be any significant effects on road drainage and the water environment as a result of the scheme. There would be no direct impacts on waterbodies due to the location of the scheme. There is also likely to be a very low risk of indirect effects from contamination within runoff and from accidental spillages on downstream receptors due to the SuDs included as part of the scheme design. Flood risk would be improved over baseline conditions with the scheme in place.	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
5.226	The Secretary of State should be satisfied that a proposal has had regard to the River Basin Management Plans and the requirements of the Water Framework Directive (including Article 4.7) and its daughter directives, including those on priority substances and groundwater. The specific objectives for particular river basins are set out in River Basin Management Plans. In terms of Water Framework Directive compliance, the overall aim of projects should be no deterioration of ecological status in watercourses, ensuring that Article 4.7 of the Water Framework Directive Regulations does not need to be applied.	As above in 5.223	
5.227	The Examining Authority and the Secretary of State should consider proposals put forward by the applicant to mitigate adverse effects on the water environment and whether appropriate requirements should be attached to any development consent and/or planning obligations. If the Environment Agency continues to have concerns and objects to the grant of development consent on the grounds of impacts on water quality/resources, the Secretary of State can grant consent, but will need to be satisfied before deciding whether or not to do so that all reasonable steps have been taken by the applicant and the Environment Agency to try to resolve the concerns, and that the Environment Agency is satisfied with the outcome.	As above in 5.223  A meeting was held with the Environment Agency (EA) in July 2017 to discuss surveys, drainage and flood risk requirements. The EA provided input as to what surveys would be required and the assessment to be undertaken.  Statements of common ground have been agreed with the Environment Agency (document reference TR010036/APP/8.1), Somerset County Council and South Somerset District Council (document reference TR010036/APP/8.4) and the Internal drainage board (document reference TR010036/APP/8.6). These reports provide details of the agreements made with the parties involved.  Further details of the consultation undertaken to date, can	

NPSNN Paragraph Number	Requirement of the National Networks National Policy Statement (NPSNN)	Compliance with the NPSNN	Updates post-application, as required
5	GENERIC IMPACTS		
		be found in Chapter 4 of the ES (document reference TR010036/APP/6.1).	
5.229	The Secretary of State should consider whether the mitigation measures put forward by the applicant which are needed for operation and construction (and which are over and above any which may form part of the project application) are acceptable. A construction management plan may help codify mitigation.	The OEMP (document reference TR010036/APP/6.7) provides details of all mitigation measures for the scheme. These mitigation measures will feed into a CEMP which will be produced upon the appointment of a contractor.	

## **APPENDIX 2: Economic Case**

## 1 Economic Case

#### 1.1 Introduction

- 1.1.1 This section discusses the economic, environmental, and social and distributional impacts relating to the proposed DCO application for dualling the A303 between Sparkford and Ilchester. It provides an assessment as to whether the scheme offers value for money.
- 1.1.2 The overall Economic Case has been prepared in line with WebTAG (the Department for Transport's online appraisal guidance) and the impacts are summarised in the standard Appraisal Summary Table (AST).
- 1.1.3 The value for money assessment and option comparison has taken into account the full range of costs and benefits of the scheme. Costs and benefits have been quantified, or 'monetised' as part of a cost benefit analysis, wherever possible.
- 1.1.4 In accordance with Department for Transport value for money guidance, Initial and Adjusted Benefit to Cost Ratios (BCRs) have been estimated. These indicate that the scheme is likely to offer Medium Value for Money.

## 1.2 Economic Appraisal

### Introduction

- 1.2.1 The economic appraisal, which allows BCRs to be estimated, is based primarily on calculations of user benefits in terms of savings in time and in fuel and vehicle operating costs (VOCs). Forecast trip and cost matrices have been extracted from the SATURN transport model for the expected opening year (2023) and design year (2038). Two additional forecast years are also used. These include intermediate year of 2031 and final forecast year of 2051. The Department for Transport's TUBA (Transport User Benefits Appraisal) software (version 1.9.9) has been used to monetise the user benefits.
- 1.2.2 Accident benefits have been estimated using the Department for Transport's COBALT (Cost and Benefit of Accidents Light Touch) software, version 13\_02. For calculating the impacts caused by queues and delays as a result of scheme construction, Highways England's QUADRO (Queues and Delays at Roadworks) version 2017 program has been used. Journey time reliability has been assessed using a methodology that uses standard deviation of journey times calculated from Trafficmaster data.
- 1.2.3 The overall appraisal is based on a comparison between the with and without scheme scenarios, with benefits extrapolated for the full 60-year appraisal period. Benefits as a direct result of the scheme are assumed not to grow after 2037. This is WebTag compliant based on requirement for forecasting 15 years beyond the opening year of 2022 and gives a conservative assessment.
- 1.2.4 Key assumptions for the economic appraisal are:

- The economic benefits of the scheme are accrued over all hours and days of the year, including weekends, bank holidays and overnight (for further information please see the A303 Sparkford to Ilchester Combined Modelling and Appraisal Report, May 2018)
- The standard economic parameters in TUBA, COBALT and QUADRO apply to this scheme (currently based on TUBA 1.9.9 and compatible with the July 2017 release of economic parameters)
- The final appraisal has been carried out on scenarios that have been grown by the NTEM 7.2 growth rates and RTF 2015
- Scheme costs have been assessed by Highway England's cost consultants based on design information provided
- In line with WebTAG, all economic appraisal costs and benefits are reported in 2010 prices, discounted to 2010.

## Summary of economic appraisal outputs

- 1.2.5 The Initial BCR for the scheme is 1.45 as shown in Table 1.1 below.
- 1.2.6 The Present Value of Benefits (PVB) for the scheme is £156.4 million. The present value of costs (PVC) for the scheme is £108.1 million, which has been calculated based on the costs adjusted to 2010 prices and discounted to 2010. By subtracting the PVC from the PVB, the Net Present Value (NPV) has been calculated at £48.4 million.
- 1.2.7 The adjusted BCR, which includes monetised reliability and wider economic benefits as part of the PVB is 1.71. Since the adjusted BCR for the scheme is between 1.5 and 2.0, the scheme is likely to offer Medium Value for Money.
- 1.2.8 The economic appraisal outputs are summarised in the Analysis of Monetised Costs and Benefits table (Table 1.1). A breakdown of the economic efficiency (user) benefits is provided in the Transport Economic Efficiency (TEE) table (Table 1.2).
- 1.2.9 The TEE table shows that the scheme achieves total transport economic efficiency benefits of £148.5 million over the full 60-year appraisal period.

Table 1.1: Analysis of Monetised Costs and Benefits (AMCB, £000s)

Item	Option 1	
Accidents (not assessed by TUBA)*	10,957	
Roadworks (not assessed by TUBA)**	-24,324	
Greenhouse Gases (not assessed by TUBA)***	-27.927	
Noise (not assessed by TUBA)****	-66	
Air Quality (not assessed by TUBA)****	-360	
Economic Efficiency: Consumer Users (Commuting)	9,910	
Economic Efficiency: Consumer Users (Other)	17,084	
Economic Efficiency: Business Users and Providers	121,544	
Wider Public Finances (Indirect Taxation Revenues)	49,613	
Present Value of Benefits (PVB)	156,431	

Item	Option 1	
Broad Transport Budget Present Value of Costs (PVC)	108,079	
OVERALL IMPACTS		
Net Present Value (NPV)	48,352	
Initial Benefit to Cost Ratio (BCR)	1.45	
Reliability Benefits	16,446	
Wider Impact – Imperfect Competition	12,154	
Adjusted BCR	1.71	

Notes: \*from COBALT, \*\* from QUADRO,\*\*\*TAG Unit A3 Chapter 2,\*\*\*\* TAG Unit A3 Chapter 3,\*\*\*\*\* TAG Unit A3 Chapter 4, All monetary values are expressed in 2010 prices discounted to 2010

Table 1.2: Transport Economic Efficiency (TEE) - Benefits (£000s)

Item	Option 1
Consumer – Commuting User benefits	All Modes
Travel Time	17,837
Vehicle operating costs	-7,927
User charges	0
During Construction & Maintenance	0
NET CONSUMER - COMMUTING BENEFITS	9,910
Consumer - Other user benefits	All Modes
Travel Time	56,711
Vehicle operating costs	-39,628
User charges	2
During Construction & Maintenance	0
NET CONSUMER - OTHER BENEFITS	17,085
Business Impacts	All Modes
Travel Time	122,221
Vehicle operating costs	-676
User charges	0
During Construction & Maintenance	0
Sub Total	121,545
Private Sector Provider Impacts	
Revenue	0
Operating costs	0
Investment costs	0
Grant / subsidy	0
Sub Total	0
Other business Impacts	
Developer contributions	0
NET BUSINESS IMPACT	121,545
TOTAL	
Present Value of Transport Economic Efficiency Benefits (TEE)	148,540
resent value of Hansport Economic Enciency Benefits (TEE)	140,340

Notes: All monetary values are expressed in 2010 prices discounted to 2010  $\,$ 

## 1.3 Scheme benefits and impacts

#### **Economic**

## **Business user benefits**

1.3.1 Journey time benefits are expected to arise as a direct result of capacity improvements achieved by converting the single carriageway section to modern dual carriageway with associated junction improvements. These benefits have been calculated separately for all business users. Table 1.3 shows the different journey time benefits for business users for the scheme. Net journey time

change is the net of positives and negatives in a given time band. The monetary value (NPV) includes both journey times and vehicle operating cost impacts.

Table 1.3: Journey time benefits for business users – (£ millions)

		Value of journey time	Monetary £m	
0 to 2min	2 to 5min	> 5min	changes(£m) (NPV)	(NPV)
32.3	89.4	0.5	122.2	121.5

Notes: All monetary values are expressed in 2010 prices discounted to 2010

## **Business user reliability benefits**

- 1.3.2 Reliability benefits represent the improved certainty of journey time that customers are expected to have when using the section of improved road. For business users, improved journey time reliability can translate into an improved ability to plan business journeys. The monetised reliability benefits for business users has been calculated at £10.2million (NPV) (expressed in 2010 prices discounted to 2010).
- 1.3.3 Full results from this analysis can be found in the Combined Modelling and Appraisal Report, May 2018.

#### Wider economic benefits

1.3.4 Due to memory limitation (32 bit) of Wider Impact in Transport Appraisal (WITA) software which cannot accommodate the size of the OD based demand / cost matrices generated from the highway traffic models, a simplified approach recommended by WebTAG to estimate the wider economic benefits is adopted at this stage. It is calculated as a 10% uplift to business user benefits and the output of this step is the estimated welfare change for each year of the scheme. The wider economic benefits on business users is calculated at £12.2million (NPV) (expressed in 2010 prices discounted to 2010).

#### **Environmental**

- 1.3.5 A quantitative assessment has been undertaken for noise, air quality and greenhouse gases informed by the traffic data extracted from the transport model. The quantitative assessment for noise impacts has predicted an overall benefit owing to realignment away from residences, resulting in traffic noise decreases, within the majority of the Affected Road Network (ARN). Although an overall benefit is observed, there are 2 properties that are calculated to experience significant adverse effects due to noise. These effects will be mitigated in the form of compensation, details of which can be found in chapter 11 of the *Environmental Statement* (document reference TR010036/APP/6.1).
- 1.3.6 The quantitative assessment for air quality has concluded that there would be an overall net worsening in local air quality within the study area. However, the scheme would not result in a new exceedance of the NO<sub>2</sub> or PM<sub>10</sub> annual mean air quality objectives. The regional assessment predicts an increase in emissions of NOx and PM10 primarily as a result of an increase in the number of vehicles travelling on the A303. Overall, the total change in NPV is negative indicating a net worsening in air quality when considering both local and regional effects.
- 1.3.7 In terms of greenhouse gases, the scheme is estimated to cause an increase of 361,167t CO<sub>2</sub>e in non-traded emissions and increase by 5,972t CO<sub>2</sub>e in traded emissions over 60 years.
- 1.3.8 Qualitative assessments have been undertaken for landscape, historic environment, biodiversity, and water environment impact. A summary of the environmental assessment, in line with WebTAG requirements, is provided in Table 1.4.

Table 1.4: Summary of anticipated environmental effects

Environmental appraisal topic	Result of assessment
Noise	£NPV -66,000, indicating a net dis-benefit in noise quality
Air Quality	£NPV -360,000, indicating a net deterioration in air quality
Greenhouse Gases	£-27,927,000
Landscape	Slight Adverse
Historic Environment	Moderate Adverse
Biodiversity	Slight Adverse
Water Environment	Neutral

Notes: All monetary values are expressed in 2010 prices discounted to 2010

1.3.9 The appraisal has identified that the scheme would result in a Slight Adverse effect for the surrounding landscape after Year 15 once the screening vegetation has matured. This is due to the largely online nature of this option reducing the impact on landscape character and visual receptors by keeping the impacts of major road corridors limited to an isolated area already characterised by a major highway. There would be a direct impact upon the designated Hazlegrove House Registered Park and Garden and the scheme would also be in proximity to other designated assets, including Conservation Areas at West Camel and Queen Camel, however they would not be directly affected by the scheme. The scheme would be visible from local visual receptors including residential properties and

- Public Rights of Way, however views would be limited in some areas where the route would pass in cutting, aiding its visual integration. However, the route would still not quite fit the landform and scale of the landscape and would still have an adverse impact upon certain views. The overall effect on landscape would be Slight Adverse with mitigation in place.
- 1.3.10 The scheme would result in a Moderate Adverse effect on the historic environment, as the scheme would require large areas of medium value unknown buried archaeological remains to be excavated during construction, resulting in potential damage. The scheme would also cut through the southern section of Hazlegrove House Registered Park and Garden, which would result in the removal of elements of the historic parkland. Agricultural earthwork remains within the proposed scheme boundary would be fully removed by the scheme, however these are considered of low value. Overall, with mitigation measures in place including trial trenching, and any evaluation and recording of findings prior to construction, an overall Moderate Adverse effect is anticipated.
- 1.3.11 The scheme would have a Slight Adverse effect on Biodiversity with mitigation measures in place. The Slight Adverse effect is due to anticipated effects to designated Local Wildlife Sites (LWSs), the permanent loss of habitats which would subsequently reduce the extent of habitat available and fragment dispersal routes leading to species isolations, as well as potentially affecting several protected species. However, as part of the environmental design, new planting would be connected to existing habitat within the landscape to compensate for the loss of wildlife corridors and reduce the fragmentation impact of the scheme, resulting in no substantial harm.
- 1.3.12 For the water environment, a Neutral effect would be anticipated as the scheme would be unlikely to affect existing waterbodies. In addition, standard mitigation measures would be included in the CEMP, while SuDS and pollution control measures would be incorporated in the drainage design.

#### Social

#### Commuting and other user benefits

1.3.13 Just as with business users, journey time benefits are also expected to arise for commuting and other users as a direct result of capacity improvements achieved by converting the single carriageway section to modern dual carriageway with associated junction improvements. Table 1.5 shows the journey time benefits for commuting and other users. Net journey time change is the net of positive and negatives in a given time band. Monetary (NPV) includes both journey times and vehicle operating cost impacts.

Table 1.5: Journey time benefits for commuting and other users – (millions)

Net journey time	changes (£m)		Value of journey	Monetary £m
0 to 2min	2 to 5min	> 5min	time changes(£m)	(NPV)
9.7	65.2	-0.3	74.5	27.0

1.3.14 The expected journey time reliability benefits for commuting and other users has

been calculated at £16.4million (NPV).

#### Accidents

1.3.15 Further benefits have been calculated from carrying out an accident analysis for the scheme. For calculating accident benefits COBALT (Cost and Benefit of Accidents – Light Touch) version 13\_02 was used. Accidents for the 5-year period between 01 January 2010 and 31 December 2014 have been entered into the COBALT network along with the existing and future annual average daily traffic flows from the traffic model. The results of the COBALT assessment are shown below in Table 1.6 with positive impacts for the scheme.

Table 1.6: Accident benefit (£000s)

COBALT Accident Analysis		
60 Year Appraisal Period		
Number of Developed	Fatal	5
Number of Personal Injury Accidents savings	Serious	26
injury Accidents Savings	Slight	230
Accident Savings (£000s in 2010 prices discounted to 2010)		10,957

## Journey quality, physical activity and severance impacts

- 1.3.16 WebTAG requires scheme promoters to consider a wide range of potential social impacts that result from a scheme. This includes impacts on journey quality, physical activity, and severance, as summarised in Table 1.7.
- 1.3.17 The scheme is anticipated to result in a Moderate Beneficial effect on journey quality as there is the potential to improve traveller care through the provision of new signage, a reduction in traveller stress along the existing A303 through a reduction in congestion along the A303 and an improvement to journey time reliability, and is also anticipated to result in increases in journey time reliability. The provision of road lighting, clear road markings with cat eye's and studs, hard strips of varying widths for the mainline and slip roads would improve driver frustration. The provision of new NMU routes would ensure that pedestrians do not encroach onto the carriageways which would reduce travellers fear of potential accidents.
- 1.3.18 A Slight Beneficial effect is anticipated for physical activity. This weighs up Neutral effects resulting from changes to journey length for non-motorised users (NMUs), provision of new facilities for NMUs and a Moderate Beneficial effect due to changes in amenity.
- 1.3.19 Effects to severance are anticipated to be Slight Beneficial due to potential severance from community facilities as a result of the scheme. Effects on security as a result of the scheme would be Neutral as there are not anticipated to be any changes to security indicators.

Table 1.7: Summary of anticipated social effects

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Social appraisal topic	Result of assessment
Journey Quality	Moderate Beneficial

Social appraisal topic	Result of assessment
Physical Activity	Slight Beneficial
Severance	Slight Adverse
Security	Neutral

## 1.4 Health and safety impact assessment

- 1.4.1 The design and construction of the scheme will fully adhere to Construction (Design Management) Regulations 2015 and all relevant Health and Safety legislation. It is essential that the option being developed at this stage is safe for all road users and road workers, from the construction phase through to opening and maintenance. A proactive approach will be taken through the design process to identify, mitigate and / or eliminate all risks associated in the design.
- 1.4.2 During preliminary design, the following Health and Safety Products were produced; the Health and Safety File, Maintenance and Repair Strategy Statement and the Safety Plan. These documents are first produced during Stage 2.
- 1.4.3 During preliminary design, the following Health and Safety PCF Products were produced; Safety Plan, Pre-construction Information, Health and Safety File, Maintenance and Repair Strategy, and the Scheme Asbestos Management Plan.
- 1.4.4 A number of design decisions have been made to improve the safety of the scheme for all road users, including maintenance and operation after construction has concluded:
  - Bridges will have a monolithic construction which will have no bearings. This
    will reduce the amount of hazardous inspections and maintenance work that
    will be required.
  - New structures have been relocated to an offline section of the works to minimise the interaction between construction and live traffic.
  - Kerb and linear drains have only been provided when absolutely required to reduce the need for maintenance.

## 1.5 Equality impact assessment

- 1.5.1 An Equality Impact Assessment (EqIA) Screening, Analysis and Monitoring Report has been produced in option identification and has been refined during option selection. The EqIA will be refined at each stage and would remain live throughout the life of the scheme.
- 1.5.2 To assist and complement the EqIA, Highways England's Equality, Diversity and Inclusion Tool (EDIT) would be completed to identify areas of interest with respect to equality impacts due to the scheme.
- 1.5.3 Both the EqIA and EDIT have been refined and submitted as part of the package of products that are produced in preliminary design. For more information please see Equality Impact Assessment (Highways England, January 2018).

## 1.6 Environmental Impact Assessment

- 1.6.1 An Environmental Impact Assessment has been carried out to cover each stage of the project from inception through to construction. This has been refined at each stage to incorporate any additional information that has become available.
- 1.6.2 As part of preliminary design an EIA Screening Determination Form was completed, an EIA Scoping Report (submitted to the Planning Inspectorate to obtain a Scoping Opinion) and an Environmental Statement produced. The principal purpose of the ES is to assess the likely significant effects of the scheme on the environment, to provide the Planning Inspectorate with enough information to enable an informed recommendation to be made to the Secretary of State.

## 1.7 Summary

- 1.7.1 The Economic Case has been prepared in line with WebTAG (the Department for Transport's online appraisal guidance) and has taken into account the full range of economic, environmental, social and public accounts impacts of the scheme. The costs and benefits have been quantified, or 'monetised' as part of a cost benefit analysis, wherever possible.
- 1.7.2 Initial and Adjusted Benefit to Cost Ratios (BCRs) have been estimated for the scheme. The Initial BCR is 1.50 and the adjusted BCR, which includes monetised reliability benefits and wider economic benefits (imperfect competition benefits) is 1.77. With the BCRs in the range of 1.5 and 2.0, the scheme offers Medium Value for Money.
- 1.7.3 The following economic benefits, as identified in the A303 Appraisal Summary Tables, May 2018, are expected to arise from the scheme:
  - Journey time benefits of up to £122.2 million (2010 prices, discounted to 2010) for business users, as a direct result of capacity improvements, achieved by converting the single carriageway section to modern dual carriageway with associated junction improvements and
  - Business user reliability benefits of over £10.2 million (2010 prices, discounted to 2010)
- 1.7.4 Dualling the A303 between Sparkford and Ilchester is expected to lead to the following environmental impacts, which have been identified in the Appraisal Summary Tables:
  - A small overall dis-benefit due to a greater number of households experiencing daytime traffic noise increases than decreases, within the calculation area.
  - An overall net worsening in local air quality within the study area. However, the scheme would not result in a new exceedance of the NO<sub>2</sub> or PM<sub>10</sub> annual mean air quality objectives.
  - In terms of greenhouse gases, the scheme is estimated to cause an increase of 631,167tCO2e in non-traded emissions and increase by 5,972tCO2e in traded emissions over 60 years.

- Moderate adverse effects are anticipated for the historic environment, whilst slight adverse effects are anticipated for landscape and biodiversity, and no effects anticipated for the water environment.
- 1.7.5 The following social benefits identified in the Appraisal Summary Tables, are expected to arise from the scheme:
  - Journey time benefits of up to £74.5 million (2010 prices, discounted to 2010) for commuting and other users, as a direct result of capacity improvements (see Table 1.5)
  - Commuting and other user reliability benefits of over £16.4 million (2010 prices, discounted to 2010)
  - Accident reduction benefits valued at up to £11 million (2010 prices, discounted to 2010) over the appraisal period (see Table 1.6) and
  - Journey quality benefits as a result of reduced traveller stress (see Table 1.7).