

A303 Sparkford to Ilchester Dualling Scheme TR010036

8.4 Draft Statement of Common Ground with Somerset County Council and South Somerset District Council

APFP Regulation 5(2)(q)
Planning Act 2008
Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009
January 2019



Infrastructure Planning

Planning Act 2008

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

A303 Sparkford to Ilchester Dualling Scheme

Development Consent Order 201[X]

STATEMENT OF COMMON GROUND

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme	TR010036
Reference	
Application Document Reference	8.4
Author:	A303 Sparkford to Ilchester Dualling Scheme Project Team, Highways England

Version	Date	Status of Version
Rev 0	October 2018	First draft
Rev A	January 2019	Submission for Deadline 2

STATEMENT OF COMMON GROUND

This Statement of Common Ground has been prepared and agreed by (1) Highways England Company Limited and (2) Somerset County Council and South Somerset District Council.

Signed [NAME] [ROLE] on behalf of Highways England Date: [DATE]	
Signed [NAME] [ROLE] on behalf of Somerset County Councide: [DATE]	il
Signed [NAME] [ROLE] on behalf of Somerset County Councides: [DATE	il

CONTENTS

1.	Introduction	3
1.1	Purpose of this document	3
1.2	Parties to this Statement of Common Ground	3
1.3	Terminology	3
1.4	Record of Engagement	4
2.	Issues	5
Some	erset County Council	5
South	h Somerset District Council	30

1. Introduction

1.1 Purpose of this document

- 1.1.1 This Statement of Common Ground ("SoCG") has been prepared in respect of the proposed A303 Sparkford to Ilchester Dualling ("the Application") made by Highways England Company Limited ("Highways England") to the Secretary of State for Transport ("Secretary of State") for a Development Consent Order ("the Order") under section 37 of the Planning Act 2008 ("PA 2008").
- 1.1.2 This SoCG does not seek to replicate information which is available elsewhere within the Application documents. All documents are available in the deposit locations and / or on the Planning Inspectorate website.
- 1.1.3 The SoCG has been produced to confirm to the Examining Authority where agreement has been reached between the parties to it, and where agreement has not (yet) been reached. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.
- 1.1.4 At this stage this document relates solely to technical topic based matters and does not include a separate detailed commentary on the provisions within the draft Development Consent Order in its entirety.

1.2 Parties to this Statement of Common Ground

- 1.2.1 This SoCG has been prepared by (1) Highways England as the Applicant and (2) Somerset County Council and South Somerset District Council.
- 1.2.2 Highways England became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State. The legislation establishing Highways England made provision for all legal rights and obligations of the Highways Agency, including in respect of the Application, to be conferred upon or assumed by Highways England.
- 1.2.3 Somerset County Council and South Somerset District Council (the Joint Councils) are "interested parties" under the Planning Act 2008 in relation to the project and are planning authorities and SCC is the local highway authority in relation to the proposed works. Additionally, the Joint Councils have a number of other statutory responsibilities in relation to housing, public rights of way, flood management and environmental health, and discretionary powers in relation to well-being and enforcement.

1.3 Terminology

1.3.1 In the tables in the Issues chapter of this SoCG, "Not Agreed" indicates a final position, and "Under discussion" where these points will be the subject of ongoing discussion wherever possible to resolve, or refine, the extent of disagreement between the parties. "Agreed" indicates where the issue has been resolved.

1.4 Record of Engagement

- 1.4.1 To date, engagement between Highways England and Somerset County Council and South Somerset District Council has been good. In addition to formally consulting Somerset County Council and South Somerset District Council on the scheme design through the consultation process, a number of technical and strategic working groups were formed prior to the submission of the DCO application. These working groups have continued to meet post submission of the application and have helped shape this Statement of Common Ground.
- 1.4.2 A record of engagement is available upon request.

2. Issues

Somerset County Council

Topic	Somerset County Council comment	Status			
Traffic and E	Traffic and Economics				
	The development of the base traffic model was examined and the following was agreed:	-	-		
Base model	The use of the South West Regional Traffic Model (SWRTM) is sufficient to ascertain the rerouting of strategic and local traffic for the proposed scheme	The South West Regional Traffic Model (SWRTM) with local enhancements has been used as the basis for modelling. Therefore, the model gives a good representation of strategic and local traffic for the scheme assessment.	AGREED		
	The three time periods in the weekday model and the average hour that represents the summer Friday to Sunday flows are suitable for assessing the proposed scheme.	The base model represents an average weekday in March 2015, whilst a separate summer model has also been developed to represent peak traffic flows during the year for the economic appraisal.	AGREED		
	The SWRTM includes the appropriate strategic and local roads near the scheme	The enhanced SWRTM has used a more detailed local network and zoning system as well as local traffic data to provide a good representation of local traffic.	AGREED		
	The base year model (March 2015) has been calibrated and validated to an acceptable level against WebTAG criteria. For all three time periods,	The base SATURN model convergence meets WebTAG criteria in all time	AGREED		

Topic	Somerset County Council comment	Highways England response	Status
	models meet WebTAG convergence statistics. Modelled versus observed flows comparison of screenlines shows that the AM and PM models meet WebTAG criteria. The inter peak model is slightly short of meeting the WebTAG 85 percent of the screenlines, instead it meets 83 percent of the screenlines. The model calibration process and resulting model validation is appropriate for assessing the proposed scheme.	periods. The model achieves a good level of flow and screenline calibration with required WebTAG criteria is being met in all time periods. The model also achieves link flow validation in line with the WebTAG criteria and screenline validation close to WebTAG criteria. Both journey time routes and segments meet or nearly meets the WebTAG criteria across all time periods.	
		Therefore, the base model calibrates and validates to within acceptable margins of WebTAG criteria and therefore demonstrates a good representation of traffic behaviour in the study area and a robust basis from which forecasts can be developed to assess proposed scheme.	
	The weekday model also has a variable demand component and the VDM was subjected to Realism test in accordance with WebTAG guidance. The results show that, whilst the elasticities for individual trip purposes by car are either weaker or stronger than the WebTAG recommended values, for the trips by car as whole is very close to the recommended value. The variable demand model (VDM) developed for this study is a reasonable tool for assessing the proposed scheme.	The March weekday model is subject to variable demand modelling in accordance with WebTAG. The demand model was subjected to fuel cost, public transport fare and journey time realism testing. The realism test results show that corresponding elasticities are close to WebTAG recommended values. Therefore, the demand model with standard WebTAG parameters provide a sound basis for forecasting.	AGREED

Topic	Somerset County Council comment	Highways England response	Status
	Based on SCC's analysis the base year model considered to be a reasonable basis on which develop traffic forecasts and test the impacts of the scheme.	The base model calibrates and validates to within acceptable margins of WebTAG criteria and therefore demonstrates a good representation of traffic behaviour in the study area and a robust basis from which forecasts can be developed to assess proposed scheme.	AGREED
	Local information regarding the type and levels of new developments and committed infrastructure changes have been collated and incorporated into the development of the forecast models.	The traffic forecasts account for future proposals for residential and employment developments in the local area as well as corresponding transport network changes. These were identified by undertaking an assessment of the likelihood of each of these proposals coming forward. This was last updated with information from local authorities in December 2017 / January 2018 prior to the traffic modelling and assessment work undertaken for the Development Consent Order application.	AGREED
	The traffic assessment shows network impacts of the proposed scheme in 2023, 2031,2038 and 2051; these are based on the forecast year of opening of the scheme (2023) and fifteen years after the year of opening. The final forecast year of 2051 model has been used in the economic assessment only, as such the impact of the 2051 growth assumptions on the network are not directly	Forecast models have been prepared for two forecasting scenarios (Do Minimum – without the proposed scheme and Do Something – with the proposed scheme) and four forecast years (2023 scheme opening year, 2031 intermediate year, 2038 design year and 2051 final forecast year). Intermediate year of 2031 and final forecast year of	AGREED

Topic	Somerset County Council comment	Highways England response	Status
	assessed. These are appropriate years for testing the scheme.	2051 were mainly derived for economic appraisal purposes only. Each of the years also included corresponding summer forecasts. The years selected provide data/information for scheme design and appraisal purposes.	
	The forecast matrices have been developed in line with WebTAG guidance. The demand assignments in the forecast models have been tested and the forecast models for all four modelled years (2023, 2031, 2038 and 2051) meet WebTAG criteria. The models are therefore appropriate for testing the scheme and understanding the strategic impacts.	Forecast matrix development involved spatially allocating developments in the core area and then controlling overall demand to National Trip End Model (NTEM) and Road Traffic Forecasts (RTF) as required by WebTAG. Both demand and assignment models meet WebTAG convergence criteria for each forecast year and time period. Forecast model outputs show that traffic flow, routing and journey time impacts at strategic and local levels are sensible.	AGREED
	The results of the checks on the matrix estimation process have shown that the matrix for HGVs (user class 5) does not meet WebTAG criteria.	It is accepted in the documentation that HGV demand does not meet WebTAG thresholds on the matrix estimation changes. This is due to the fact that demand matrices for HGVs in the SWRTM were based on adjustments to the DfT's 2006 Base Year Freight Model matrices and that HGV trip patterns would have changed over the last 10 years. HGVs are only one element of the total vehicles. Since the base model calibrates and validates well for total	AGREED

Topic	Somerset County Council comment	Highways England response	Status
		vehicles and cars it is considered that HGV levels are represented reasonably well though there are changes higher than WebTAG recommended thresholds during matrix estimation. In addition, the recent (2018) lower forecasts issued by the DfT for growth of HGVs mean that this would also be less of a concern.	
Operational assessment	Operational assessments have been carried out for a number of the junctions in the area of the scheme and it is agreed that the operational assessment of individual junctions has been carried out using appropriate tools.	Operational assessments were carried out at the key junctions on the A303 and in the local area using appropriate tools for opening and design years. None of the junctions exceed their capacity in the scheme scenario. The junctions for testing were selected where congestion problems may occur with or without the scheme or where there will be increases in traffic with the scheme.	AGREED
Areas of further discussion	A number of large zones have been disaggregated into smaller zones however the communities of West Camel and Queen Camel have not been defined as individual zones. A select link analysis has been provided to SCC and this gives a better picture of the trips through these zones and resolves this issue.	One of the main activities carried out when adopting SWRTM was to disaggregate large zones near the scheme. Communities in West Camel and Queen Camel have been allocated individual zones. Therefore, traffic movements from these zones are separately identified. Select link analyses were provided to demonstrate the changes for locally-based and longer distance movements in the study area.	AGREED

Topic	Somerset County Council comment	Highways England response	Status
		It is acknowledged in the reports that West Camel and Sparkford villages experience increased traffic flows compared to Do Minimum.	
	Impact on West Camel and Sparkford villages – the modelling shows that the scheme is likely to increase traffic through these communities.	West Camel - Higher forecast traffic flows on the A303 make it difficult for local traffic joining the A303 in the Do Minimum. Therefore, some traffic reroutes through Podimore accessing A303 at Podimore roundabout in forecast Do Minimum forecast years whereas in the Do Something traffic can access A303 using the proposed grade separated junction near West Camel.	AGREED
		Sparkford – the increase in southbound traffic in the Do Something case is due to a re-routing of some traffic from the A37 to A359 and the scheme. The increase in northbound direction is due to traffic travelling from south and continuing on the A359 to the north rather than using the A303 for the short stretch from Hazlegrove to the Camelot link to A359 on A303 Sparkford Bypass.	
	The County Councils believes that there is a gap in the assessment methodology to determine the impact of the increases in traffic through local villages.	Highways England does not consider the measures suggested to be necessary to make the scheme acceptable and they therefore do not	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
	Due to the increase in traffic through the villages of West Camel and Sparkford and because the County Council believes there is a gap in the assessment methodology to determine the impact of these increases, consideration should be given by the ExA to whether mitigation is required and a mechanism is agreed to secure it.	form part of the proposed mitigation measures.	
An Operational assessment of junctions has been carried out for the summer traffic. It is accepted that on Sparkford High Street / The Avenue junction that the summer traffic will be less than the neutral period and will therefore remain under capacity.		Traffic levels at Sparkford High Street / The Avenue junction in the summer are less than in March.	AGREED
	At Podimore Roundabout the traffic increases due to the scheme will cause significant queuing on both the local road network (A37 and A372) and the strategic road network (A303 eastbound). SCC considers that interim mitigation measures would be appropriate until such times as an upgrade as part of a wider scheme could be delivered and that a commitment to do this is secured through the DCO. Such measures should be sufficient to mitigate the impact.	Summer traffic flows are higher at Podimore roundabout in the summer on the A303. An operational assessment of Podimore roundabout using summer traffic flows was carried out. The results indicate that the queues and delays at Podimore Roundabout would increase due to more traffic being attracted to the A303 corridor with the scheme. However, it should be noted that in the longer term it is an aspiration to upgrade the whole corridor, including Podimore Roundabout. In the shorter term, the signal timings would be optimised as far as is practicable for the summer peak	UNDER DISCUSSION

Topic	Somerset County Council comment			Highways England response	Status
				traffic to minimise the traffic queues and delays.	
Engineering	1				
Layout	SCC have accepted in principle the proposed layout of local roads and junctions, as per the published scheme. Detailed design matters have not yet been agreed.		-	AGREED	
	SCC have accepted the d		follows:	No response needed.	
	Link	Design speed			
	B3151 Link	85kph			
	Camel Cross Junction Link	30kph			
	Downhead Junction Link	30kph			
	Downhead Lane	50kph			
Layout	Steart Hill Link	50kph			AGREED
	Steart Hill Link to Old A303	85kph			7.01
	Howell Hill Link (West)	50kph			
	Howell Hill Link (east)	50kph			
	Traits Lane	50kph			
	Gason Lane	50kph			
	Vale Farm Link	30kph			
	Camel Hill Link	60kph			
	Ridge Copse Link	85kph			

Topic	Somerset Co	ounty Council comment	Highways England response	Status
	Steart Hill (north) Steart Hill (south)	30kph 30kph		
	SCC have accepted as follows:	the carriageway cross sections Design speed	No response needed.	
	B3151 Link	7.3m carriageway. No hardstrips		
	Camel Cross Junction Link	6.5m carriageway. No hardstrips 6.6M + Widening (TD40/94)		
Layout	Downhead Junction Link	6.5m carriageway. No hardstrips 6.6M + Widening (TD40/94)		AGREED
	Downhead Lane	6.5m carriageway. No hardstrips		
	Steart Hill Link	6.5m carriageway. No hard-strips		
	Steart Hill Link to Old A303	7.3m carriageway. No hard-strips		
	Howell Hill Link (West)	6.5m carriageway. No hardstrips		
	Howell Hill Link (east)	6.5m carriageway. No hardstrips		

Topic	Somerset Co	unty Council comment	Highways England response	Status
	Traits Lane	Existing carriageway		
	Gason Lane	Existing carriageway		
	Vale Farm Link	6.5m carriageway. No hardstrips		
	Camel Hill Link	7.3m carriageway. No hard strips		
	Ridge Copse Link	6.5m carriageway. No hardstrips		
	Steart Hill (north)	6.5m carriageway. No hardstrips		
	Steart Hill (south)	6.5m carriageway. No hardstrips		
Layout	departures from standagreement to this via Working Group and standard Highways England	at, where proposals comprise dards on local roads, the Engineering Technical subsequent technical approval d's WebDAS system would cal approval by SCC.	No response needed.	AGREED
Layout	Downhead Lane with diverge.	egarding proximity of the Downhead Junction	Particular attention is required to the visibility splay at the Downhead Lane entry to the junction. This is yet to be resolved to the satisfaction of SCC.	UNDER DISCUSSION
		will require amending to the ability to review and	This issue will be specifically raised in the audit brief for subsequent road	

Topic	Somerset County Council comment	Highways England response	Status
	approve the detailed design of this junction configuration.	safety audits, with a request for recommendations.	
		SCC will be involved in further Road Safety Audits regarding proposed local roads.	
		The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Layout	SCC believe the retained section of Steart Hill should be widened to 6.5m in order to carry traffic to Camel Hill Quarry. NEXT STEP: Req12(1) will require amending to	This issue will be specifically raised in the audit brief for subsequent road safety audits, with a request for recommendations.	UNDER DISCUSSION
	ensure that SCC has the ability to review and approve this point of detail.	SCC will be involved in further Road Safety Audits regarding proposed local roads.	

Topic	Somerset County Council comment	Highways England response	Status
		The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Layout	Further optimisation of some access arrangements, including geometry and visibility, is required. If any amendments affect the existing public highway they will require the approval of the LHA who will be responsible for that infrastructure. NEXT STEP: Req12(1) will require amending to enable SCC to review and approve the detail where it impacts upon the LRN.	Highways England will incorporate the layout changes identified in drawings HE551507-MMSJV-HGN-000-DR-CH-0430 to 0456 and drawings HE551507-MMSJV-HGN-000-DR-CH-0460 to 0462 into the scheme following consent. These changes, being within the lateral and vertical limits of deviation, are non-material and therefore require no further approval or consultation. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Layout	Instances of close proximity between the new dual carriageway and proposed local infrastructure occur at the following locations: Ch2100 – Ch2300: Close proximity to "Former A303 (Camel Hill to Steart Hill) Ch3000 – Ch3300. Close proximity to 'Howell Hill Link (east) Ch3250 – Ch3400. Close proximity to 'Steart Hill (south)' Ch4350 – Ch4550. Close proximity to Vale Farm Link Ch4550 – Ch4800. Close proximity to 'Camel Hill Services Turning Head' NEXT STEP: Req12(1) will require amending to ensure that SCC has the ability to review and approve the detail design.	Highways England will consult Somerset County Council during further development of proposals at these locations, regardless of proposed ownership. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
Non- motorised	NMU survey results cannot be relied upon as a true representation of usage levels of public rights of way due to the methodology used.	Councils before him when making any decision on the detailed design. The survey methodology and results are summarised in Appendix 12.1 of the Environmental Statement (APP-093). This document explains that two sets of surveys were conducted in 2016. One survey was undertaken during the summer holiday period (albeit on weekdays) and one survey was undertaken during term time in September (again, during weekdays). The objective of the surveys was to capture a snap-shot of the overall level	Status NOT AGREED
Non-	There is currently no mitigation in place for	of usage of rights of way, and in this respect the results have proved useful. The surveys highlighted a selection of relatively well used rights of way within an area that is otherwise lightly used. It is not considered that results during daylight evenings or weekends on this relatively lightly trafficked network would have provided a significantly different conclusion, given that the surveys were undertaken in good weather and during school holidays. At the time of the submission of the draft	
motorised user	unrecorded rights that could be impacted by the development if they are later found to exist. There	Development Consent Order, the project team were aware of one such	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
provision	are currently 2 applications to modify the Definitive Map, which will be affected by the development.	application for a Definitive Map Modification Order (DMMO) that was relevant to this scheme. This was Modification No 859. This proposes to upgrade footpath WN23/12 to bridleway status.	
		WN23/12 is severed by the proposed scheme. Draft Development Consent Order Schedule 4 Part 3 proposes to replace WN23/12 with a new right of way along the route BJ-BI-BH-BG-BF-BM-BN-BO-BP. A schedule of limitations has been produced (document ref HE551507-MMSJV-LSI-000-SH-UU-0001, issued to SCC and South Somerset Bridleways Association on 31 August 2018). This clarifies that, although some of this route will be legally dedicated as a footpath to be consistent with the current right of way, the physical provision will be consistent with the potential future use as a bridleway. The Schedule of Limitations clarifies that 1.8 metre-wide bridleway	
		gaps in accordance with Section 6.1 of BS5709 are provided at each point along the diversion route. One bridle gate (at point BO) is required due to the potential for grazing cattle in the adjacent plot. The same document	

Topic	Somerset County Council comment	Highways England response	Status
Non- motorised user	The proposals for rights of way are in broad terms generally acceptable, to SCC.	clarifies that the width of this route is generally 4.0 metres wide which is suitable for future bridleway use. There is one exception to this width between points BM and BN where the proposed width is 2.5 metres. This is in the verge of the Hazlegrove School Access. No response needed.	UNDER DISCUSSION
provision			
Non- motorised user provision	SCC do not agree with the decision to omit the upgrade of right of way Y30/UN (Higher Farm Lane) from the proposed DCO.	Highways England considered Higher Farm Lane to be located outside of the scheme extents and therefore are not proposing to upgrade the bridge as part of these works.	NOT AGREED
Non- motorised user provision	There is the possibility that the 1996 Sparkford to llchester Side Roads Order has some validity even though the scheme was not constructed. Recommended that the order is revoked to avoid any ambiguities prior to conclusion of the DCO examination. If it is not, then a mechanism will need to be established within the DCO to give effect to such.	Highways England will review the status of the Side Road Order prior to the conclusion of the DCO Examination.	UNDER DISCUSSION
Non- motorised user provision	Traffic Management Plan and Construction Environment Management Plan do not fully incorporate off-road traffic	Accepted. The current Traffic Management Plan which was issued to SCC in December 2018 clarifies that Highways England's main contractor will be in the best position to develop these	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		aspects as they will depend upon the exact sequencing of the works.	
Non- motorised user provision	Two routes between Traits Lane and Gason Lane is considered excessive. One would suffice.	Agreed. Discussions with land-owners are ongoing in order to determine which of these two routes is most appropriate.	UNDER DISCUSSION
Non- motorised user provision	33% gradient between BE-BY considered excessive for equestrians.	Accepted. This is a short section of bridleway that is positioned on an engineered slope. The gradient will need to be softened during detail design	UNDER DISCUSSION
Non- motorised user provision	A schedule of widths and limitations is required as part of the DCO to enable the Definitive Map & Statement to be accurately updated.	This has been provided as a separate submission to SCC. Agreement to the detail in this document will be required prior to inclusion in the Development Consent Order.	UNDER DISCUSSION
Non- motorised user provision	Schedules 3 and 4 have a number of minor errors (as previously referenced) that require correction/clarification.	These will be addressed.	UNDER DISCUSSION
Non- motorised user provision	A schedule of privately maintained rights of way is required, otherwise they will default to Highway Authority responsibility.	This will be prepared.	UNDER DISCUSSION
Signage	SCC have accepted the proposed signing strategy as shown on the following drawings: No Title Rev	No response needed.	AGREED

Topic	Somerset Cour	nty Council comme	nt	Highways England response	Status
	HE551507-MMSJV- HGN-000-DR-CH- 0206	Tourist Signage Strategy	P09		
	HE551507-MMSJV- HGN-000-DR-CH- 0212	Primary Route Signage Strategy	P09		
	HE551507-MMSJV- HGN-000-DR-CH- 0213	Non-Primary Route Signage Strategy	P09		
	HE551507-MMSJV- HGN-000-DR-CH- 0214	Local Route Signage Strategy	P08		
	HE551507-MMSJV- HGN-000-DR-CH- 0207	Cycle Signage Strategy	P05		
Signage	SCC have requested difaces. NEXT STEP: Req12(1) ensure that SCC has the approve the detail desi) will require amendir ne ability to review ar	ng to	Highways England will consult Somerset County Council regarding detail design proposals for all advance direction sign and advance direction sign faces, regardless of proposed ownership. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
	No through road signs will be required at the southern limits of Traits Lane and Gason Lane. These are currently not included in the published scheme proposals.	Highways England will consider the use of a Section 278 agreement.	
Signage	Next steps: Mechanism for securing this needs to be agreed. It could be possible via S.171 (instead of S.278) either way the commitment to enter into an agreement needs securing.		UNDER DISCUSSION
	In addition, the detail of signage locations will need to be agreed and therefore an appropriate mechanism for securing this will be required.		
Structures	In principle, SCC do not object to any of the proposals for structures associated with the Strategic Road Network (however note comment below).	No response needed.	AGREED
Structures	The LHA have advised that footpath Y30/31 is upgraded to bridleway status and this would require changes to the parapets on the accommodation bridge that carries Y30/3.	Highways England considered Higher Farm Lane to be located outside of the scheme extents and therefore are not	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
	NEXT STEP Agreement in relation to the accommodation bridge is still required.	proposing to upgrade the bridge as part of these works.	
Regulatory measures	SCC have accepted proposals in principle for speed limits as set out in the Permanent Speed Limit Order Plans and Schedule 3 of the draft Development Consent Order.	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	UNDER DISCUSSION
Regulatory measures	SCC have accepted proposals in principle for roads classification as set out in the Classification of Roads Plans and Schedule 3 of the draft Development Consent Order. Consideration is being given to whether the Schedule can be amended to ensure that SCC have the ability to review and approve the detail relating to the extents of speed restriction.	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Regulatory measures	SCC require the section of existing B3151 carriageway that is subject to the national speed limit, between the limit of Highways England's scheme and the commencement of the existing 40mph speed limit just north of the cross-roads at Bridgehampton, to be subject to a 50mph speed limit. NEXT STEPS: Noted that HE intend to implement the speed limit via a S.278. Mechanism for securing this and the funding for the Traffic Regulation Order legalising the speed limit alteration will need to be agreed.	This is not included in the Permanent Speed Limit Order Plans or in Schedule 3 of the dDCO. However, Highways England intend to implement the requested speed limit through a Section 278 agreement.	UNDER DISCUSSION
Limits of maintenance responsibility	SCC have accepted in principle that they will become responsible for all classified A, B and unclassified roads identified in the Classification of Roads Plans and Schedule 3 of the draft Development Consent Order. The timing provisions as set out within the DCO are however not yet agreed. NEXT STEP- Req12(1) will require amending to enable SCC to review and approve the detail relating to the boundary/interface between SRN and the LRN.	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		Councils before him when making any decision on the detailed design.	
Limits of maintenance responsibility	SCC require that limits of responsibility for the finished works are clearly defined.	Provisional limits of maintenance responsibility have been established. These have been issued to SCC and comments are awaited.	UNDER DISCUSSION
De-trunking	SCC have accepted in principle the proposal to de-trunk the elements of existing A303 carriageway identified in the de-trunking plans (HE5515507-MMSJV-LSI-000-DR-UU-2162 to 2164, and for them to be incorporated into the local road network. The timing provisions as set out within the DCO are however not yet agreed and Article 14 will need amending accordingly. NEXT STEP: Req12(1) will require amending to ensure that SCC has the ability to review and approve the detail relating to the extent of the detrunking.	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	UNDER DISCUSSION
De-trunking	SCC have accepted the proposal to reduce the width of the former A303 (between Camel Cross and Steart Hill) to 7.3m (with no hard-strips).	No response needed.	AGREED
De-trunking	SCC have accepted the proposal to reduce the width of the former A303 (west of Howell Hill) to 6.5m (with no hard-strips).	No response needed.	AGREED

Topic	Somerset County Council comment	Highways England response	Status
De-trunking	SCC have accepted the proposal to reduce the width of the former A303 (east of Steart Hill) to 6.5m (no hard-strips).	No response needed.	AGREED
De-trunking	SCC have accepted the proposal to reduce the width of the former A303 (west of Hazlegrove Roundabout) to 6.5m (with no hard-strips).	No response needed.	AGREED
De-trunking	SCC require that the assets to be de-trunked are clearly recorded, inspected, rehabilitated and commissioned prior to hand-over. A 12 month maintenance period between completion of the works and hand-over is also expected and Article 14 will need amending accordingly. NEXT STEP: The ability to review the suitability of the assets to be de-trunked in addition to the ability to require improvements, should they be necessary. SCC and Highways England need to agree a legal mechanism to agree the matters associated with the de-trunking – e.g condition surveys, condition on handover, maintenance periods and associated remedial works etc	A provisional programme of de-trunking works has been established. This has been issued to Somerset County Council and comments are awaited.	UNDER DISCUSSION
Private means of access	SCC are concerned regarding the transmission of mud and loose material from proposed private accesses onto the local road network. NEXT STEP: Req12(1) will require amending to ensure that SCC has the ability to review and	All accesses will be of a bound construction for a distance of 5 metres back from the edge of the local road carriageway, or until the point at which the access drains away from the local road, whichever is greatest.	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
	approve the detailed design of the access where they adjoin the LRN.	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Lighting	Lighting proposals are not yet agreed	-	UNDER DISCUSSION
Lighting	SCC require DNO supply to their lighting installations to be from a live un-metred supply. This will be a factor in the determination of maintenance responsibility.	-	UNDER DISCUSSION
Lighting	Responsibility for proposed system of lighting at Hazlegrove Roundabout is yet to be resolved, although SCC's view at this time is that Highways England would retain maintenance responsibility.	-	UNDER DISCUSSION
Drainage	Detailed drainage proposals confirming that only surface water runoff from the local highway network discharges to Pond 4 will need to be submitted before SCC are able to accept maintenance responsibility for this pond. Further consideration of	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
	alternative drainage features that reduce the maintenance burden on the adopting authority is required. NEXT STEP: Req12(1) will require amending to ensure that SCC has the ability to review and approve the detailed aspects of the proposed drainage where it impacts upon the LRN.	authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Traffic Management	Details for the management of traffic during construction are not yet clear through the proposed formation of a Traffic Management Working Group in 2019 is noted. SCC will comment on detail on potential traffic management impacts in its Local Impact Report. NEXT STEP: The DCO needs to include provision for construction traffic management proposals to be submitted to SCC for review and approve.	Highways England have developed an outline traffic management plan and have begun consulting Somerset County Council on these proposals. The main contractor will continue to develop these proposals throughout 2019 and leading up to commencement on site. This will include the formation of a Traffic Management Working Group in 2019 comprising membership from Highways England, the main contractor and Somerset County Council. The objective of this group will be to: • Ensure ongoing co-ordination and co-operation between HE and SCC. • Ensure adequate information is prepared for review by SCC as	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		the consenting authority for TTROs.	
		 Ensure any significant TM operations (for example full closure of the A303) are planned well in advance. 	
		The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Traffic Management	Where the site boundary incorporates the local highway network, confirmation of roles and responsibilities relating to winter maintenance, hedge cutting, visibility splay maintenance and gully cleansing will need to be submitted and approved by SCC. Pre-construction condition surveys / dilapidation surveys will also be required, as will agreement on response times to rectify damage /	Highways England's main contractor will develop a Detailed Local Operating Agreement in consultation with SCC throughout 2019. The Outline Environmental Management Plan is secured as a certified document under Article 43. Anything required in that is therefore required by the DCO.	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
	intervention level. NEXT STEP: The DCO needs to include provision for a Detailed Local Operating Agreement to be submitted to SCC for review and approve.		
Drainage	SCC believe that there are further opportunities to include sustainable drainage systems within the scheme. NEXT STEP – noted that HE intend to hold a working group meeting, however this needs to be secured as part of the DCO. Matters could be agreed by virtue of a planning Requirement.	Highways England and Somerset County Council will hold a working group meeting at the commencement of the detail design stage, aimed at identifying possible additional sustainable drainage features that could be considered for incorporation into the consented scheme. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Drainage	Surveys and connectivity reports of all existing drainage systems affected by the works are required. NEXT STEP: Provision within the DCO is required (Article 13) to enable SCC to determine the extent of the scope of the connectivity surveys, review the findings and request improvements, where necessary.	The scope of drainage surveys for any drainage that is due to be severed, diverted or stopped up as part of the works will include a Connectivity Report. Requirement 13 concerns drainage design and sets out specific surveys which are to be carried out. This includes surveys of drainage assets at proposed connections. These surveys are accordingly already secured within the DCO.	UNDER DISCUSSION
Drainage	Surveys and connectivity reports of all existing drainage systems affected by the works are required. NEXT STEP: Req12(1) will require amending to enable SCC to review and approve the detail design of the private access drainage arrangements where they adjoin the LRN.	In addition to the requirements of Requirement 13 (2) (a) (i) and (ii) of the Development Consent Order, a CCTV survey will be undertaken (including connectivity reports) for locations of all drainage assets that are due to be severed or become redundant. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details	UNDER DISCUSSION

Topic	Somerset County Council comment	Highways England response	Status
		of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Drainage	Surveys and connectivity reports of all existing drainage systems affected by the works are required. NEXT STEP: Req12(1) will require amending to enable SCC to review and approve the detail design of the private access drainage arrangements where they adjoin the LRN.	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	UNDER DISCUSSION
Drainage	Confirmation is sought that the proposed design will control the overall volume, as well as the overall rate of runoff with sufficient attenuation provided.	Attenuation has been provided, with discharge limited to 1% annual exceedance probability (1 in 100-year event) plus 40% to account for the effects of climate change (Flood risk assessments: climate change	AGREED

Topic	Somerset County Council comment	Highways England response	Status
		allowances, Environment Agency), to no greater than the undeveloped rate of runoff, determined by the calculation of the mean annual peak runoff for a greenfield site (Qbar).	
	The drainage proposal is generally supported. It is recommended that opportunities are sought, where possible, during the design to enhance water management in the area, benefitting local flood resilience.	Accepted. The strategy to retrospectivity imposed Qbar discharge criterion provides a significant betterment to the baseline condition across the development.	
Drainage		A Flood Risk Assessment has been conducted and a drainage strategy has been developed to ensure the scheme does not increase the susceptibility of the local area to flooding.	AGREED
		Evidence in Flood Risk Assessment (APP-059) and Drainage Strategy Report (APP-060), included with Environmental Statement.	
Drainage	Confirmation is sought over the responsibility of the drainage assets.	Limits of Responsibility defined in Outline Drainage Works Plans (APP-106).	UNDER DISCUSSION
Effects on archaeolog-ical interests	The data does not currently include the full suite of field investigations required to assess the significance or impacts of heritage assets. The applicant has carried out a geophysical survey of the scheme and is currently engaged in trial trenching. The applicant's archaeological	As detailed within Chapter 6 Cultural Heritage of the Environmental Statement (APP-043), the results of the archaeological investigations will be submitted as other environmental information to support the Development	AGREED

Topic	Somerset County Council comment	Highways England response	Status
	consultants have been in contact with the South West Heritage Trust (SWHT) and Written Schemes of Investigation for the survey and trial trenching have been agreed. The geophysical survey has indicated archaeological potential across areas of the scheme. The SWHT is engaged in monitoring of the trial trenching (in conjunction with HE where appropriate) and this is progressing well. It is understood that the results of the fieldwork will be submitted during the application process and so it is envisaged that all required information will be available prior to any determination.	Consent Order (DCO) application during the examination period. The results will help to develop specific mitigation measures to be detailed within a Written Scheme of Investigation (WSI) which will be prepared during Detailed Design and is a requirement of the Outline Environmental Management Plan (OEMP) (APP-148)	
	The documents that have been submitted are accepted as meeting the requirements of the initial phase of the assessment. The later submission of the geophysical survey and trial trenching will enable a mitigation strategy to be designed. At present it is not possible to comment fully on the ES Chapter and issues associated with the impacts on archaeology.		
Effects on archaeological interests	Regarding the Archaeological Trenching Methodology, the idea for weekly monitoring meetings is supported and it is noted that the results will feed into the DCO process due to timescales.	This is noted. Agreement that the method of archaeological evaluation geophysics / trench evaluation is appropriate (including trial trench spec)	AGREED
Material Assets and Waste	Assessment methodology	No comments.	AGREED

Topic	Som	erset County Council comment	Highways England response	Status		
Material Assets and Waste	Study area		No comments	AGREED		
Material Assets and Waste	Baseline conditions	The Councils are satisfied with the approach, assessment methodology, identified likely effects and proposed mitigation measures presented by the developer in the documents reviewed. We do, however, have a number of observations on the baseline data presented in Chapter 10 of the Environmental Statement and the proposed Site Waste Management Plan which link to waste generation in Somerset; latest data for landfill capacity in Somerset, including inert landfill; and, the operational status of Somerset waste sites, but we do not consider these affect the overall outcome of the assessment. With regard to the baseline data, SCC previously advised that the quoted data was from the 2016 AMR, Table 1 "as published in WTP1/Waste Core Strategy" ie the baseline data. More recent data in the public domain can be found in Table 2 - Somerset waste site capacity data 2016 and this reports a significant decrease in inert landfill capacity, with further discussion on	Somerset County Council were contacted via email on 12 November 2018 to provide updated data in relation to landfill capacity in Somerset, including inert landfill, and the operational status of Somerset waste sites. We agree with the Council's conclusions that the updated baseline data is not likely to affect the overall outcome of the Materials assessment presented within Chapter 10 Materials of the Environmental Statement (APP-047), but this will be reviewed on receipt of the updated baseline data. The revised data issued is currently being reviewed.	UNDER DISCUSSION		

Topic	Some	rset County Council comment	Highways England response	Status
		page 12. Due to the limited remaining capacity of inert landfill in Somerset, the AMR process has introduced additional monitoring of inert recovery waste sites (the number of sites making an annual site return to the EA and annual tonnage receipts) and this can be found on pages 14/15. Further discussion of the management of inert wastes in Somerset can also be found in the Inert Waste Review published by the county council in 2015. The report can be accessed via the county council website: http://www.somerset.gov.uk/policies-and-plans/policies/somerset-waste-plan/		
Material Assets and Waste	Potential imp	acts	No comments	AGREED
Material Assets and Waste	Design and m	nitigation measures	No comments	AGREED
Material Assets and Waste	Assessment (construction)	of likely significant effects)	No comments	AGREED
Material Assets and Waste	Assessment of likely significant effects (operation)		No comments	AGREED
Material Assets and	Monitoring		No comments	AGREED

Topic	Somerset County Council comment	Highways England response	Status
Waste			

South Somerset District Council

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Air Quality	Baseline and Assessment Methodology	SSDC are confident that the baseline information and assessment methods used in respect of air quality modelling is satisfactory. There appears to be no significant changes to air quality from the proposed scheme itself and as such, no mitigation measures have been proposed.	Noted.	AGREED
Air Quality	Study Area	SSDC content with the receptors included within the assessment but raised the point that this designated site Whitesheet Hill Site of Special Scientific Importance (SSSI)] was outside the South Somerset District Council boundary and therefore advised consultation with surrounding local authorities about air quality as the Affected Road Network (ARN) is so large.	The Mott MacDonald Sweco Joint Venture Air Quality team also contacted Wiltshire Council informing them of the Affected Road Network (ARN) and assessment results. No response from Wiltshire Council was received.	AGREED
Air Quality	West Camel and Sparkford High Street	There are two areas of concern to the Council, West Camel and Sparkford High Street where it is predicted the scheme will result in significantly increased traffic movements which may have an adverse effect on air quality. Further investigation is needed to ensure these areas will not	Chapter 5 Air Quality of the Environmental Statement (APP-042) outlines the assessment undertaken for air quality impact of the scheme during operation at the worst affected receptors. The consideration of the impact at Hazel Grove Lodge on Sparkford High Street (1 of	AGREED

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		exceed air quality limits and to determine whether appropriate mitigation measures are necessary. The Council seeks the opportunity to engage with the developer at the detailed design stage to ensure the national air quality objectives continue to be met within South Somerset.	the worse affected receptors) concludes that concentrations of PM ₁₀ and NO ₂ at these human health receptors are expected to be well below the respective air quality objectives. The predicted effects from the operation of the scheme on local air quality in Sparkford is therefore concluded to be not significant so no mitigation measures are proposed.	
			The impact at receptors in West Camel is not significant as the predicted change in traffic flows through West Camel on Fore Street is below the criteria for assessment, as set out in the Design Manual for Roads and Bridges (DMRB) guidance. Nonetheless, "The Hollies" on Plowage Lane which is located adjacent to the existing A303 has been modelled and this receptor is predicted to experience an improvement in air quality as a result of the scheme due to the change in alignment of the A303 (the A303 moves further away from the receptor).	
Noise and Vibration	Baseline and Assessment Methodology	SSDC are confident that the baseline information and assessment methods used in respect of noise and vibration is satisfactory, the assessment methods used are appropriate and the presentation of the results clearly demonstrate the likely effects the	As detailed within Schedule 2 Part 1 of the draft Development Consent Order (dDCO) (APP-017), no part of the authorised development is to commence until a Construction Environmental Management Plan (CEMP) has been prepared in consultation with the relevant planning	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Hiç	ghways	England	d Respon	se	Status
		proposed scheme will have during construction and when in operation.	authority and the local highway authority, and submitted and approved in writing by the					
		Noise modelling has been conducted and where appropriate has included mitigation measures, this coupled with low noise road surfacing will help to reduce the level of noise.	Secretary of State. The CEMP must be substantially in accordance with the outline construction environmental management plan certified under article 43. Table 4.1 of the Outline Environmental					
		It is expected and understood that Best Practice Measures will be implemented during construction to mitigate the adverse effects of noise and vibration. Approval is to be obtained from the District Council through the Section 61 process which will ensure any mitigation identified will have no residual significant impacts.	Managem submitted Consent Ca Section The Section Environme Somerset for a Section within Tab	ent Plar as part Order (D 61 is red on 61 we ental He District ion 61 a ole 4.1 o	n (APP-1 of the De CO) app quired to ould be a alth Offic Council. greemen f the Cor	48) that we evelopment lication de deliver the greed with the requirements and the requirements are requirements.	ras nt etails that e CEMP. h the th irement r noted	
Noise and Vibration	Baseline and Assessment Methodology	Hawk House Bed-and-Breakfast could be regarded as a residential receptor due to the owners living on the site.	Agreements Position Statement (APP-019). Our assessment did not classify Hawk House Bed and Breakfast as residential. The OS property type code was "CH". See table below for the LA10 18hr façade levels at Hawk House. LA10 18hr façade			AGREED		
			Receiv er	DMO Y Day	DSO Y Day	DMDY Day	DSD Y Day	AGREED
			HAWK HOUSE	71.2 dB	64.0 dB	71.4 dB	65.0 dB	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Noise and Vibration	West Camel and Sparkford	There are two areas of concern to the Council, West Camel and Sparkford	The noise reduction in the opening year is 7.2dB which is classified as major beneficial On the particular issue of the Sparkford Community, the noise increase of up to 1.3dB	
	High Street	High Street where it is predicted the scheme will result in significantly increased traffic movements which may have an adverse effect on local residents in terms of increased noise levels.	(paragraph 11.10.61) is due to increased traffic on Sparkford High Street. This is because the scheme will reduce journey times between Sparkford and Ilchester making the route via the High Street more attractive to vehicles travelling from Frome to destinations south-west of Ilchester, and viceversa. It is expected that some traffic that currently uses the A361 and A37 for this route would divert to using the A361, A359 and A303 so increasing the traffic along Sparkford High Street.	UNDER DISCUSSION
			An early iteration of the noise model seen by the local authorities showed large noise increases in West Camel due to a modelling error associated with speed banding. Results from the model used in the assessment are given in Table 1 of Appendix A of this document and show that the largest increase is a 2.3dB increase in the short-term (classified as 'minor' by DMRB) to a noise level of 46.5dB LA10,18h which is below LOAEL, the lowest observable adverse effect level. No significant adverse effects are anticipated in West Camel and most	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			receptors are exposed to noise below LOAEL with a very few exposed above this level and then by less than 3dB.	
Noise and Vibration	West Camel and Sparkford High Street	If traffic calming is provided for West Camel or Sparkford as a result of the scheme and this gives rise to increased noise, we would welcome the opportunity to engage with the developer to ensure the national and local planning objectives continue to be met within South Somerset.	Highways England does not consider the measures suggested to be necessary to make the scheme acceptable and they therefore do not form part of the proposed mitigation measures	UNDER DISCUSSION
Noise and Vibration	Mitigation	There are 2 properties that will be significantly affected by operational noise once the scheme is open to traffic (as stated in Figure 11.5 in Chapter 11 Noise and Vibration of the ES), however, the mitigation embedded in the scheme design and secondary double glazing for the 2 properties will be sufficient to mitigate the effects of the operational noise.	As detailed within Schedule 2 Part 1 of the draft Development Consent Order (dDCO) (APP-017), no part of the authorised development is to commence until a CEMP has been prepared in consultation with the relevant planning authority and the local highway authority and submitted and approved in writing by the Secretary of State. The CEMP must be substantially in accordance with the outline construction environmental management plan certified under article 43. Table 4.1 of the Outline Environmental Management Plan (APP-148) that was submitted as part of the Development Consent Order (DCO) application details that a Section 61 is required to deliver the CEMP.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Noise and	Construction	The District Council ask that piling is	The Section 61 would be agreed with the Environmental Health Officer at South Somerset District Council. The requirement for a Section 61 agreement is further noted within Table 4.1 of the Consents and Agreements Position Statement (APP-019). As detailed within Schedule 2 Part 1 of the	
Vibration	Construction	avoided at night in locations where it may have a noise or vibration impact during construction.	As detailed within Schedule 2 Part 1 of the dDCO (APP-017), no part of the authorised development is to commence until a CEMP has been prepared in consultation with the relevant planning authority and the local highway authority and submitted and approved in writing by the Secretary of State. The CEMP must be substantially in accordance with the outline construction environmental management plan certified under article 43. Table 4.1 of the Outline Environmental Management Plan (APP-148) that was submitted as part of the DCO application details that a Section 61 is required to deliver the CEMP. The Section 61 would be agreed with the Environmental Health Officer at South Somerset District Council. The requirement for a Section 61 agreement is further noted within Table 4.1 of the Consents and Agreements Position Statement (APP-	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Noise and Vibration	Assessment Methodology during Construction	The District Council seek a number of clarifications associated with the monitoring to be undertaken during construction, including the locations where MMSJV would anticipate monitoring to take place, an outline of the methodology that would be applied, and what actions would be taken in the event of a breach.	As detailed within Schedule 2 Part 1 of the dDCO (APP-017), no part of the authorised development is to commence until a CEMP has been prepared in consultation with the relevant planning authority and the local highway authority and submitted and approved in writing by the Secretary of State. The CEMP must be substantially in accordance with the outline construction environmental management plan certified under article 43. Table 4.1 of the Outline Environmental Management Plan (APP-148) that was submitted as part of the DCO application details that a Section 61 is required to deliver the CEMP. The Section 61 would be agreed with the Environmental Health Officer at South Somerset District Council. The requirement for a Section 61 agreement is further noted within Table 4.1 of the Consents and Agreements Position Statement (APP-019).	UNDER DISCUSSION
Noise and Vibration	Construction	It will be necessary to inform both South Somerset District Council and residents of the dates of the works and likely level of disturbance but most important the end date of each activity.	As detailed within Schedule 2 Part 1 of the dDCO (APP-017), no part of the authorised development is to commence until a CEMP has been prepared in consultation with the relevant planning authority and the local highway authority and submitted and approved in writing by the Secretary of State.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			The CEMP must be substantially in accordance with the outline construction environmental management plan certified under article 43.	
			Table 4.1 of the Outline Environmental Management Plan (APP-148) that was submitted as part of the DCO application details that a Section 61 is required to deliver the CEMP. The Section 61 would be agreed with the Environmental Health Officer at South Somerset District Council. The requirement for a Section 61 agreement is further noted within Table 4.1 of the Consents and Agreements Position Statement (APP-019).	
Noise and Vibration		The District Council require a manned hotline for complaints during construction to be provided that will enable the Local Authority to direct any complaints made to them direct to the contractors.	As detailed within Schedule 2 Part 1 of the dDCO (APP-017), no part of the authorised development is to commence until a CEMP has been prepared in consultation with the relevant planning authority and the local highway authority and submitted and approved in writing by the Secretary of State. The CEMP must be substantially in accordance with the outline construction environmental management plan certified under article 43.	UNDER DISCUSSION
			Table 4.1 of the Outline Environmental Management Plan (APP-148) that was	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			submitted as part of the DCO application details that a Section 61 is required to deliver the CEMP. The Section 61 would be agreed with the Environmental Health Officer at South Somerset District Council. The requirement for a Section 61 agreement is further noted within Table 4.1 of the Consents and Agreements Position Statement (APP-019).	
Cultural Heritage	Baseline and Assessment Methodology	The scheme is within an area of high historic and cultural value and whilst the assessment has been undertaken in accordance with the Design Manual for Roads and Bridges (DMRB), which is the accepted methodology for infrastructure projects, and sets out a logical sequence for assessment and review, the assessment for some assets is queried by the District Council.	Noted.	AGREED
Cultural Heritage	Baseline and Assessment Methodology	A draft list of heritage assets to be scoped in for the cultural heritage detailed assessment (to be included within the Environmental Statement (ES)) was consulted upon and SSDC were broadly supportive of the list but asked that the list be restructured so it was easier to understand where assets had been grouped.	Prior to the DCO submission, the list of assets was agreed with the Conservation Officer.	AGREED

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		This officer has since left the District Council and the Council is securing external support for the project on cultural heritage and landscape matters.		
Cultural Heritage	Baseline and Assessment Methodology	Group Assessments Paragraph 2.1.1 of the Cultural Heritage DBA: Adjacent heritage assets are assessed within a common group and assigned a 'GR' reference. This works well for heritage assets of the same value/sensitivity, or where the Group value/sensitivity is equal to the highest individual asset in the group. It's potentially misleading in relation to individual buildings in a group where assets of 'High' value/sensitivity are part of a lower valued group. GR06 (Podimore), GR07 (Queen Camel Conservation Area) and GR08 (West Camel Conservation Area) are examples. These historic settlements are assigned 'Medium' value/sensitivity but include Grade I and II* listed buildings that would normally be considered to have a 'High' value/sensitivity.	The value of the group has been derived from the cumulative value of the heritage assets and the contribution the group makes to the historic resource as defined in Table 6.1 of Chapter 6, Cultural Heritage (APP-043) and Table 2.1 of Appendix 6.1 Cultural Heritage Desk Based Assessment (APP-067). It takes into account the range of assets within each group. Where initial work suggested that assets were likely to experience different levels of significant effect, these were removed from the groups and assessed as individual assets. It also ensured that assets outside the 1 kilometre study area, but still made a contribution to the heritage value of an important group, were included in the assessment. The reason to group assets in this way was to ensure a proportionate assessment as required by paragraph 5.127 of the National Policy Statement for National Networks (NPSNN).	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		The assessment of the significance of effects for these 'High' value/sensitivity is therefore downgraded, and the assessment could mask a significant effect on a heritage asset that is not taken forward for further consideration. The Council requires the applicant to assess assets of higher value/sensitivity in a Group individually, with any resulting increase in the significance of effects included in the Cultural Heritage ES with appropriate design, mitigation and enhancement measures to be agreed with the District Council.		
Cultural Heritage	Baseline and Assessment Methodology	Cultural assets in Sparkford require a detailed assessment because of increased traffic movements.	During the environmental assessment process, the increased traffic movements along Sparkford High Street were considered when reviewing assets brought forward for full assessment. Although an increase in traffic was identified, the type of level of increase was not considered to impact the setting of heritage assets along Sparkford High Street. Sparkford High Street is already part of the strategic road network and sees traffic levels which already impact the historic setting of the heritage assets along Sparkford High Street. These traffic movements have	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			changed the character of Sparkford High Street from a quiet rural settlement, to a modern traffic through route lined with a mix of modern and historic buildings. As such the additional traffic movements are not considered to change this current situation and will not adversely impact the setting any further.	
			Vibration effects in terms of peak particle velocity (which is the parameter used to assess the impact of vibration on vulnerable buildings) would remain the same with increased traffic during operation, and therefore, no impacts are anticipated. This is because the peak particle velocity (ppv), as measured in mm/s, is a function of each vehicle pass-by and not a cumulative measure. Increasing the number of vehicles would increase the number of measured events, but not the magnitude of any individual event. Seen graphically as a function of time, increasing the number of vehicles would increase the number of peaks in the particle velocity profile, but not increase the value of any particular peak.	
Cultural Heritage	Baseline and Assessment Methodology	The inclusion of Royal Naval Air Station (RNAS) Yeovilton for detailed assessment was discussed and SSDC thought that with the scale of	RNAS Yeovilton was included in the list of heritage assets to be brought forward for full assessment and it was agreed not to be assessed any further by the SSDC	AGREED

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		the asset, and the fact that it was inward looking with modern development dominating, that a detailed assessment was not required.	Conservation Officer. This list can be found in in Appendix B, Table B.1 of Appendix 6.1, Cultural Heritage Desk Based Assessment (APP-067), of the Environmental Statement.	
Cultural Heritage	Baseline and Assessment Methodology	It was agreed during the Environmental TWG that given its historic association with Naish's Farm in West Camel and the potential for designed views across the A303, Parsons Steeple monument should be included in the list of heritage assets.	Parsons Steeple was included in the list of heritage assets to be brought forward for full assessment and it was agreed to be assessed by the SSDC Conservation Officer. This list can be found in in Appendix B, Table B.1 of Appendix 6.1 Cultural Heritage Desk Based Assessment (APP-067), of the Environmental Statement.	AGREED
Cultural Heritage	Baseline and Assessment Methodology	Camel Hill Farm and Outlying Farmsteads The value/sensitivity of Camel Hill Farm and outlying farmsteads is identified as being 'Low', in line with being an undesignated local heritage asset, but could rise to 'Medium' if it were found to be historically associated with the neighbouring Hazlegrove House estate. This would escalate the significance of effects for the construction impacts. The Council requires the applicant to obtain further information on the association between the Hazlegrove	Further research is required to establish any relationship between Camel Hill Farm and outlying farmsteads and the Hazlegrove House estate. The value of these assets will be reassessed in light of the results of this research, and any amendments to the assessment necessary will be completed.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		House estate and Camel Hill Farm and outlying historical farmsteads to ensure an adequate understanding of the historical significance of the outlying historic buildings to the Hazlegrove House estate.		
		Any resulting increase in heritage value of these assets should be included in the Cultural Heritage DBA and those with significant effects taken through to the Cultural Heritage ES with appropriate design, mitigation and enhancement measures to be agreed with the District Council.		
Cultural Heritage	Baseline and Assessment Methodology – Omission	W Sparrow Road Gullies Two 'W SPARROW LTD MARTOCK' stamped cast iron gullies survive at Camel Cross.	This asset was not picked up in the initial research. They will be assessed as to whether they meet the criteria to be non-designated heritage assets. If they do, an impact assessment will be undertaken and	
		These undesignated heritage assets should be included in the Cultural Heritage DBA and an appropriate measure of mitigation included in the Cultural Heritage ES, such as the careful removal of the gully grates and frames and their accessioning to the museum collections of the South West Heritage Trust or other appropriate local museum, is sought in the DCO.	any mitigation included in the relevant document.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Cultural Heritage	Baseline and Assessment Methodology - Omission	Pre-Worboys 'Cross Roads' Warning Sign A pre-Worboys 'Cross Roads' highway warning sign survives outside of The Gables in Podimore. This is an undesignated highway heritage asset and should be included for assessment in the Cultural Heritage DBA. Its inclusion on the register of sensitive environmental features in the CEMP under Planning Requirement 3 of the DCO is sought to raise awareness of this vulnerable roadside heritage asset to construction site personnel and avoid accidental damage.	This asset was not picked up in the initial research. They will be assessed as to whether they meet the criteria to be non-designated heritage assets. If they do, an impact assessment will be undertaken and any mitigation included in the relevant document.	UNDER DISCUSSION
Cultural Heritage	Baseline and Assessment Methodology - Omission	Hazlegrove Lane The Hazlegrove House RPG Statement of Significance does not cover the remnants of the lost Hazlegrove Lane in the south-east field of the RPG (Peaked Close) and the proposed landscape scheme does not retain the route or extant features of the former Lane. The applicant is required to assess the former route of Hazlegrove Lane in the Hazlegrove House RPG	Highways England consider that the significance of Hazlegrove Lane has been explored in the Hazlegrove House Registered Park and Garden Statement of Significance (APP-068). It is discussed as part of the assessment of heritage value of the former driveways (see Section 6.4). Features related to this lane and the driveways have been considered within the assessment of Hazlegrove House RPG under GR11 in tables 7.2 and 7.3 in Appendix 6.1	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		Statement of Significance, DBA and ES.	Cultural Heritage Desk Based Assessment (APP-067).	
		Retention of the extant features and alignment of the former Hazlegrove Lane is sought in the detailed design scheme approved under Planning Requirement 12 of the DCO and the landscaping scheme approved under Planning Requirement 5 of the DCO. Retention of the PRoW on its historic alignment is accused where faceible.	Mitigation has been proposed within Table 3.1 Register of Environmental Actions and Commitments in the Outline Environmental Management Plan (OEMP) (APP-148) including protection measures to ensure retained driveway earthworks are protected during construction (CH6) and recording of the earthworks related to the historic driveways, including Hazlegrove Lane (CH10).	
		alignment is sought where feasible. There is a gate in the field to the north of the woods that appears to be on the route of the PROW and the location / retention of this should be covered in the design.	The field gate has been viewed on site, its interest is in its location, marking the route of Hazlegrove Lane. It is a common type of stock fencing found throughout the country and is therefore of negligible historic interest in its own right. The recording of this gate would be included within the WSI.	
			The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Cultural Heritage	Baseline and Assessment Methodology - Omission	Hazlegrove House RPG Coppiced-Banked Track The Hazlegrove House RPG Statement of Significance does not cover the coppiced bank and ditch feature on the eastern boundary of the RPG. The feature will be foreshortened by the realignment of the A303 and associated cutting and screen planting works. The Council requires the applicant to assess the bank and ditch feature in the Hazlegrove House RPG Statement of Significance and these features should be taken through to the DBA and ES with appropriate design, mitigation and enhancement measures, to be agreed with the District Council.	LiDAR analysis has been carried out for the Registered Park and Garden and is currently being reviewed.	UNDER DISCUSSION
Cultural Heritage	Baseline and Assessment Methodology	Turnpike Road (MM103) The heritage value, magnitude of impact and significance of effects for MM103 (the Martock to Sparkford	Highways England considers that the assessment for the Martock to Sparkford Turnpike Road is appropriate. The turnpike road is over 10 miles long. The extent of the	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		Turnpike Road) requires reassessment. The Council ask the applicant to reassess heritage asset MM103 with any resulting increase in the significance of effects included in the Cultural Heritage ES with appropriate	route affected by the scheme is around 3 miles. The character and heritage value of the tumpike has been significantly altered with the introduction of modern surfacing and traffic. Although the scheme deviates from the tumpike route in some locations, the route will remain as local roads. As such the overall impact on the full extent of the asset	
		mitigation measures to be agreed with the District Council. Mitigation might include markers, information points or public art at intervals along the historic alignment of the Turnpike road (where it would no longer form the A303) to retain evidence of its historic route.	has been assessed as negligible.	
Cultural Heritage	Baseline and Assessment Methodology	Canegore Corner Listed Milestone (MM30) The magnitude of impact for MM30 is judged to be 'Moderate' despite the listed milestone being permanently removed from its location and its setting and relationship with the A303 being fundamentally altered on its relocation; which has yet to be identified. A greater magnitude of impact is considered appropriate. The Council are seeking the inclusion	The impact reported is significant. A higher level of impact was considered but discounted for the following reasons. The milestone is likely to have been originally associated with the turnpike administered by the Ilchester Turnpike Trust. Its original setting would have been alongside a probably metalled road with limited traffic of carriages, horses, pedestrians and livestock. This historic setting has been replaced by a modern road with significant motorised traffic, especially during the summer months. It is no longer used as a road sign and is a remnant	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		of MM30 on the register of sensitive environmental features, and full details for its safe removal and storage in the CEMP under Planning Requirement 3 of the DCO.	indicating the historic development of the road. As such, other than its roadside setting the original function and setting has been substantially lost.	
		The applicant is required to identify a position for the relocation of MM30, approved by the Secretary of State in consultation with the local planning and highway authorities, in the detailed design scheme approved under Planning Requirement 12 of the DCO.	It has been assumed that the milestone is in its original location, its presence is marked on historic mapping in this approximate location and the distances are approximately correct. However, given the age and size of the milestone it potentially could have been moved within the immediate area over its lifetime as the road was widened and altered. It is not unusual for this to happen to milestones and other roadside markers over their lifetime.	
			The milestone is to be relocated not replaced, therefore all historic fabric will be retained. Prior to removal the milestone will be recorded both as part of the historic record, and to ensure that any damage can be repaired in an appropriate manner. The milestone will still sit road edge on the southern carriageway as close as possible to its existing location. The distances shown will still be approximately correct. The setting will still be a modern road with busy motorised traffic. Therefore, the setting and the ability to understand the heritage value of the	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			milestone will not be substantially changed. The exact position of the milestone will be decided during detailed design as there is the potential for the location of works to change within the limits of deviation, which may affect any agreed location of the milestone.	
			In section 3, Table 3.1, CH5 of the Outline Environmental Master Plan (OEMP) (APP-148) there is an undertaking that the milestone would be recorded, removed, safely stored, restored and reinstated. A methodology for the removal and relocation, including the new position of the milestone, would be prepared. It would then be agreed with the South West Heritage Trust and SSDC. Historic England would also be consulted as the work is considered demolition and reinstatement.	
			The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Cultural Heritage	Baseline and Assessment Methodology	B3151 Listed milestone (MM13) Whilst it is agreed that the magnitude of impact for MM13 is negligible, the milestone is on the edge of the scheme and could be accidently damaged if it is not identified and protected (the milestone is heavily covered in ivy and embedded in the hedge). The Council would like MM13 to be included on the register of sensitive environmental features and full details for its protection during the construction works in the CEMP under	The requirement for protection of the listed milestone on the B3151 will be added to the Outline Environmental Management Plan (OEMP) (APP-148).	UNDER DISCUSSION
Cultural Heritage	Baseline and Assessment Methodology	Planning Requirement 3 of the DCO. Bakery (MM273) The magnitude of impact for asset MM273 is judged to be 'Moderate', a greater magnitude of impact is considered appropriate given that the realignment of the A303 will remove the Bakery's location alongside a main through-route, thus fundamentally alter its relationship	The moderate effect reported for the bakery is significant. A higher effect was discounted during assessment as the asset itself will remain along with its evidential value. The asset will still have a roadside setting, however it will be a local road rather than a main route. It is acknowledged that this change of setting is significant and there are potential indirect impacts from loss of passing	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		with its setting and threaten its historic use.	trade. The low value of the asset results in a moderate effect.	
		The Council requires the applicant to reconsider the magnitude of impact, with any resulting increase in the significance of effects included in the Cultural Heritage ES with appropriate mitigation measures to be agreed with the District Council.	Mitigation measures were considered during the Environmental Statement process, however suitable mitigation, for example signage, cannot be delivered through the scheme.	
Cultural Heritage	Effects on Hazlegrove Registered Park and Garden	Pond 5 Rawlins's Close is a field which retains the majority of its historical boundaries and three veteran parkland trees. It will be affected by the scheme and so mitigation is offered which reinstates the parkland but this is compromised by the inclusion of Pond 5. The pond is a considerable size and is accompanied by fencing, a maintenance track and other works. Its location in Rawlins's Close would further diminish the area of the historic parkland and introduce an alien feature into the RPG.	As discussed during the environmental TWG, the design team confirmed that this would not be feasible.	NOT AGREED
Cultural Heritage	Effects on Hazlegrove Registered	Veteran Trees in Rawlins's Close The proposals for the three veteran trees is unclear as only one appears	Within Appendix 7.9 Arboricultural Impact Assessment (APP-071), Appendix A, drawing number HE551507-MMSJV-ELS-000-DR-LL-	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
	Park and Garden	on the Environmental Masterplan. Furthermore, this area is proposed as an auxiliary compound and topsoil and materials storage area, but there is no reference to retaining and protecting the veteran trees. The Council requires the retention and protection of the three veteran trees, therefore they should be included on the register of sensitive environmental features in the CEMP under Planning Requirement 3 of the DCO and retained in the landscaping scheme under Planning Requirement 5 of the DCO.	0126 shows the trees to be removed and retained within the redline boundary in Hazlegrove House RPG. This includes the removal of 2 veteran trees (numbers 12 and 15) and the retention and protection during works of 2 veteran trees (13 and 16). Tree protection measures can be found in Appendix B of the same report. The loss of the 2 veteran trees is unavoidable as they are within the footprint of the scheme. The other 2 trees are within the redline boundary, with 1 within the construction compound, and these will protected during construction work.	
Cultural Heritage	Effects on Hazlegrove Registered Park and Garden	Highway Lighting for Hazlegrove Junction The blue-white glare of LED highway lights on the Hazlegrove Junction is likely to be intrusive to the southern end of the RPG when the lamps are on. The Council requires the siting of highway lighting columns on the north side of the roads so far as feasible and the use of lantern shields/hoods to prevent light glare intrusion into the RPG.	A response is still to be confirmed.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Cultural Heritage	Effects on Hazlegrove Registered Park and Garden	Bunds 6 and 7 Bunds 6 and 7 are not sufficiently high to screen HGVs, signage and lighting columns and will likely affect the character of the RPG. An environmental barrier with planting is proposed to screen the far southeast corner of the RPG. This is an important point in the RPG boundary as it aligns with the outward approach on the Hazlegrove drive. An environmental barrier in this prominent position would diminish the character and appearance of the RPG. The applicant should increase the height of Bund 6 and extend Bund 7, as a substitute to the proposed environmental barrier, in the detailed design scheme approved under Planning Requirement 12 of the DCO and the landscaping scheme approved under Planning Requirement 5 of the DCO.	Landscape cross sections through the bunds are currently being prepared and will be reviewed as appropriate. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	UNDER
Cultural Heritage	Effects on Hazlegrove Registered Park and	Hazlegrove House RPG Driveway Realignment The realignment does not respond to the landform and proximity of parkland	Historically, the driveways through the park took the most direct route from the entrance to the house. They did not follow topography, and the parkland appears to have been	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
	Garden	features, such as the retained southern copse. It also passes close to the existing pond and a veteran tree and will require extensive groundworks. The applicant should redesign the new alignment for the Hazlegrove House drive in the detailed design scheme approved under Planning Requirement 12 of the DCO and the landscaping scheme approved under Planning Requirement 5 of the DCO.	designed around the drives and not the other way around. The route chosen is the most direct to link to the historic 19th century route of the driveway, in the same place as the current access. The first approximately 300 metres of the current access is not historic and was built as part of the construction of the Sparkford bypass. The landscaping is considered to present a sense of arrival which is sympathetic with the historic arrival to the house through the RPG. The proposed journey from the Hazlegrove off slip will initially take the viewer through woodland for approximately 125 metres, emerging into the RPG with woodland on the immediate right-hand side and parkland on the left-hand side for approximately 165 metres. The viewer will then travel through reinstated parkland for approximately 490 metres before joining the 19th route of the driveway. This reflects the pre-19th century arrival through woodland into the parkland proper. The dDCO provides at Requirement 12 that	
			the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
Cultural Heritage	Effects on Hazlegrove Registered Park and Garden	Hazlegrove House RPG Restoration And Conservation Management Plans The Cultural Heritage ES identifies the design and mitigation measures proposed in response to the adverse effects on the Hazlegrove House RPG. These measures respond to individual issues but do not address the overall harm to the RPG from the permanent loss of approximately 14% of the RPG and further encroachment of the A303. Part of the mitigation includes for the reinstatement of parkland grazed grass land and specimen tree planting in the area which is currently arable farmland. However, the DCO does not include a historic landscape conservation management plan for	If a Conservation Management Plan is prepared as part of the DCO it will only be able to address works which directly mitigate the scheme, rather than be a holistic document which allows for the long-term management of the complete RPG. Within the Outline Environmental Management Plan (OEMP) (APP-148) provisions have been put in place to ensure that direct mitigation for heritage impacts will be secured as part of the DCO, therefore a limited conservation management plan is not considered necessary. Highways England, as landowner, recognises the need to properly manage its assets and has committed to undertake a Conservation Management Plan for the RPG in its capacity as landowner. This will enable the whole of the RPG to be included within the	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		this area or the remainder of the RPG. A conservation management plan for the whole RPG would help mitigate the permanent harm to the RPG. The Council requires a planning requirement in the DCO for the preparation and implementation of a conservation management plan for the RPG approved by Secretary of State in consultation with the local planning authority.	Conservation Management Plan rather than only the work which will result in direct mitigation for the scheme. Highways England is preparing a memorandum of understanding to be shared with SSDC, demonstrating their commitment to undertaking a Conservation Management Plan.	
Cultural Heritage	Mitigation	Impact of Potential Traffic Calming on the Conservation Area The Council is concerned about increased traffic on local roads including Sparkford High Street and West Camel. There is no reference in the Cultural Heritage DBA operational impact schedule of the potential increase in traffic passing through these villages and local Conservation Areas or by roadside Listed Buildings. Whilst an increase in vehicle flow can generate its own potential impacts, any proposed mitigation by way of an introduction of traffic calming measures in response to increased vehicle flow can also bring about an adverse impact on the character and	No traffic calming measures are proposed in Sparkford or West Camel as part of the scheme.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		appearance of a Conservation Area and setting of a Listed Building/s, i.e. highway lighting, signage, lining, bollards and build-out.		
		The Council requires clarification as to where traffic modelling for the scheme indicates an increase in traffic flow and HGV traffic as a direct outcome of the scheme. The applicant should then identify the impacts of increased traffic, associated traffic calming measures and increased traffic-induced vibration on heritage assets and include an appropriate measure of mitigation in the Cultural Heritage ES.		
		Inclusion of any associated traffic calming measures should be secured in the detailed design scheme under Planning Requirement 12 of the DCO.		
Cultural Heritage	Mitigation	Howell Hill Stone Boundary Wall A Camel Stone boundary wall exists on the east side of Howell Hill. This is a locally distinctive feature of heritage and landscape value. The boundary wall should be retained through either its repair or retention	This asset was not picked up in the initial research. They will be assessed as to whether they meet the criteria to be non-designated heritage assets. If they do, an impact assessment will be undertaken and any mitigation included in the relevant document.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		on its current alignment or its rebuilding on the alignment of the revised boundary to the Howell Hill carriageway.		
Landscape	Baseline and Assessment Methodology	The methodology for establishing the landscape and visual baseline in the ES is comprehensive and clearly sets out the study area, designated sites, landscape character and its sensitivity to change, and the visual baseline and its sensitivity to change. The assessment has been undertaken in accordance with the DMRB, Interim Advice Note 135/10 Landscape and Visual Effects Assessments (replacing parts of the DMRB) and the Landscape Institute Guidelines for Landscape & Visual Impact Assessments. The DMRB is the accepted methodology for infrastructure projects and the Landscape Institute guidance is a long-established industry tool.	No response needed.	AGREED
Landscape	Baseline and Assessment Methodology	Key viewpoints being used to inform the LVIA were agreed in advance by the District Council.	The Mott MacDonald Sweco Joint Venture Landscape Architect agreed the key viewpoint locations with the SSDC Landscape Architect prior to producing the Landscape and Visual Impact Assessment	AGREED

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			(LVIA) chapter of the Environmental Statement.	
Landscape	Design and mitigation measures	The assessment for the likely effects is challenged for a number of visual receptors and requires reassessment. A number of measures and additional information are recommended to the landscape design to improve the impact on the scheme on the landscape its appreciation from visual receptors. These will be detailed in the Written Representations and Local Impact Report.	Noted – see comments below.	N/A
Landscape	Design and mitigation measures	Visual Receptors Nos. 14 and 17 (Green track of Slate Lane) The scheme will bring the Steart Hill Link and Downhead Junction Link roads in close proximity to Slate Lane and introduce an extensive belt of screen planting in the foreground. This linear belt of planting will not only screen the realigned A303 and its link roads but also remove all opportunities to appreciate the long distance views of the vast undulating landscape to the south. This permanent effect is not assessed in the impact schedules.	Heavily vegetated in most part with gaps in vegetation allowing more open view. Particularly more open at gate adjacent to Steart Hill (VR 17) but enclosed by hedgerow otherwise. Agreed to review landscape design opportunities to re-open the vista from gaps in existing vegetation that currently allow long distance views. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		For VR No. 14 there is no assessment on the effects on the vast, long distance view for the 15-year period once the extensive screen planting is established. For VR No. 17 there is no assessment of the long distance views during operation. The Council requires the reassessment of VR No. 14 and VR No. 17 with an assessment of the effects from the loss of the vast, long distance view for the 15-year period. The inclusion of measures for retaining long distance panoramic views from Slate Lane in the detailed design scheme approved under Planning Requirement 12 of the DCO	and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
		and the landscaping scheme approved under Planning Requirement 5 of the DCO are sought.		
Landscape	Design and mitigation measures	Visual Receptor No. 25 The assessment of the effect on VR No. 25 is challenged as the boundary hedge to the A303 is visible on the horizon, as are HGVs and vans above	A review of visual receptor no. 25 is currently being undertaken.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		the hedgerow. The applicant should reassess VR No. 25 and include measures for enhanced screening of the A303 from Wales in the detailed design scheme approved under Planning Requirement 12 of the DCO and the landscaping scheme approved under Planning Requirement 5 of the DCO.		
Landscape	Design and mitigation measures	Visual Receptor No. 27 and 28 The assessment of VR No.28 does not consider the harmful effect of an environmental barrier on the rural character of the farmstead setting. The applicant is asked to reassess VR No. 28 with consideration of the effects of an environmental barrier on the rural character and the inclusion of a bund instead of an environmental barrier in the detailed design scheme approved under Planning Requirement 12 of the DCO and the landscaping scheme approved under Planning Requirement 5 of the DCO.	Agreed to review both VP 27 and 28 for completeness. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Landscape	Design and mitigation measures	Visual Receptor No. 38 The assessment of the effects on VR No. 38 are challenged as it does not consider the adverse effect of an environmental barrier on the character of the RPG. The applicant is required to reassess VR No. 38 and extend Bund 7, as a substitute for the proposed environmental barrier, in the detailed design scheme approved under Planning Requirement 12 of the DCO and the landscaping scheme approved under Planning Requirement 5 of the DCO.	The presence of the proposed fencing is mentioned in the assessment (see the Visual Baseline and Impact Schedules, APP-072). Proposed planting will screen this over time, and as such the fencing is only anticipated to be visible in early years. The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	UNDER DISCUSSION
Landscape	Design and mitigation measures	Design of Highway and Landscape Elements There is no detail for the design and materials for the highway and landscape features are required, i.e. the acoustic barriers, fences, gates, access road and track surfaces.	A review of the materials required will be undertaken and details provided to SSDC as appropriate. Full details would not be available until the detailed design stage of the scheme commences.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		The Council requires the inclusion of details for hard landscaping works in the landscaping scheme approved under Planning Requirement 5 of the DCO.		
Landscape	Design and mitigation measures	Bridge Designs The proposed overbridge and underbridge for the scheme vary in form from the existing bridges on this section of the A303 by being supported on abutments rather than slender piers. This introduces a new form of bridge design with substantial elements of concrete facing panels. The Council would like the applicant to consider the redesign of the bridges with a response to the character of the local landscape or road corridor in the detailed design scheme approved under Planning Requirement 12 of the DCO.	This is noted and has been discussed with SSDC. A review is currently being undertaken and this aspect is therefore still under discussion.	UNDER DISCUSSION
Biodiversity		5 major concerns to the Council – 1. Habitat loss	-	
		2. Trees3. Bat survey in the woodlands4. Bat mitigation		-

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		Species mortality as a result of a faster, wider operational road		
Biodiversity	Habitat Loss	Evidence of sufficient biodiversity mitigation / enhancement being provided It is considered that the applicant has provided insufficient evidence to show that the scheme would not result in a net loss of habitat value. The Council would like the applicant to use Defra's Biodiversity offsetting metric or Somerset's Habitats Evaluation Procedure to calculate the equivalent amount of habitat needed to replace that lost during construction. This would give confidence that the landscaping associated with the proposed road scheme provides sufficient mitigation. Where mitigation is insufficient the appropriate amount and type should be added to the scheme either on or off site. Furthermore, the scheme should show a resultant enhancement for biodiversity including through	Calculations of habitat losses / gains Natural England agreed in February 2018 that the Defra Metric was not necessary for the scheme in planning terms. In addition, it is understood that the guidelines for completing the metric has been undergoing changes. For these reasons, it was not completed for the scheme. A table has been provided to the County Ecologist showing the losses / gains for all habitat types, which demonstrates a net gain of priority habitats. The table shows that habitats subject to net loss as part of the scheme comprise 'grassland' (largely improved grassland and poor semi-improved grassland); arable land and species poor / defunct hedgerow. Species density within these habitats would be lower than within the proposed priority habitats to be planted, which include wildflower and species rich grassland; wet grassland; woodland; species rich hedgerows; trees and shrubs. As such there will be an enhancement for biodiversity, in terms of a net gain in priority habitats, as a result of the scheme. As agreed with SSDC on 16 January 2019,	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		habitat creation. The Environmental Statement should be updated	the project team are not required to carry out the Somerset's Habitat Evaluation Procedure.	
		accordingly.	Replacement tree planting	
		The Council considers that insufficient tree replanting is proposed, at least three trees should be replanted for each tree lost to achieve net gain and to account for natural losses. This should be amended by the applicant	In terms of tree planting, we will be planting a greater number than we are losing, but exact figures for tree numbers will be confirmed during detailed design. The net gain in tree planting is demonstrated within the relevant sections of table provided, which shows:	
		and specified in an updated landscape strategy/plan approved	 2.2 hectares net gain in woodland habitat 	
		under Planning Requirement 5 of the DCO.	0.8 hectares loss of broadleaved parkland scattered trees	
			20.25 hectares linear belt of trees and shrubs to be planted	
			Planting of 51 individual trees	
Biodiversity	Habitat Loss - trees	The loss of trees, including veteran trees and hedges is particularly concerning. The replanting and replacement of mature trees on a 1 for 1 basis is insufficient and new planting should be on a 3 for 1 basis which would allow for natural losses. An appropriate ecological management plan will need to be in place to ensure that all the re-created	The largest block of woodland to be lost (1.33 hectares) is south of Hazlegrove House. This woodland is poorly structured with limited understorey and a species composition not indicative of ancient woodland. Other small areas of broadleaved semi-natural woodland and plantation woodland will be lost but the structure / species composition did not indicate ancient woodland. There will be a	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		habitats are managed to the intended habitat and for the duration of the	substantial net gain of woodland habitat as a result of the scheme (2.2 hectares).	
		scheme.	There is a net loss of hedgerow length of 91.91 metres. However, hedgerow to be lost includes some defunct and species poor hedgerows. Habitat planting will comprise species rich hedgerows and therefore it is considered that the hedgerow planting more than compensates for what is being lost.	
			An ecological management plan will be produced for the scheme.	
			We will explore the feasibility of the following measures in compensating for the loss of the veteran tree to some extent: 'intact hulk of the veteran tree should be felled and relocated in close proximity to a nearby veteran tree, woodland or parkland area. This will give opportunity for those invertebrates and fungi resident within the tree to relocate, provided there is suitable habitat nearby'.	
Biodiversity	Bats	Effects on bats and their foraging habitats There is insufficient survey work and the analysis of the survey work that has been undertaken lacks detail. The proposed mitigation is insufficient and requires further consideration following additional surveying.	Bat survey effort Considerable bat survey effort has been completed at the site, which was agreed with Natural England, and includes the following: • Bat roost assessments and further nocturnal emergence / return surveys (where necessary) of buildings within 250 metres of the scheme.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		The applicant is required to clarify the results of the survey work in the Environmental Statement to provide a clearer picture of where and what each species is doing along the route of the proposed dualling. The impacts on each species' local population should then be considered and analysed and mitigation measures provided accordingly. Further bat activity surveys of woodland affected by the proposed scheme need to be carried out, reported and analysed in an updated Environmental Statement and mitigation proposed accordingly.	 Bat roosts assessments followed by climb and inspect surveys and nocturnal emergence / return surveys (where necessary) of trees within 250 metres of the scheme. Bat activity surveys along the scheme extent. Deployment of static bat detectors at 18 locations along the extent of the scheme. Crossing point surveys of linear features to be bisected by the proposals (12 locations in total). Hibernation surveys of potentially suitable sites within 250 metres of the scheme. 	
		The value of the habitat area lost should be calculated using either Somerset's Habitat Evaluation Procedure or Defra's Biodiversity offsetting metric and mitigation provided accordingly. Why did bat transect routes not incorporate woodland areas?	Analysis of bat survey data Heat maps have been produced to reflect bat activity at the site. A detailed account of the bat activity recorded on each survey has been provided within the bat survey report, detailing movements of different species during surveys, with recordings of key species highlighted. A summary of this information has also been provided. A different way to present this could have been as suggested (descriptions / analysis per species), however, this would not have	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			affected the mitigation proposed as this is based on the recorded bat activity at the site.	
			The bat surveys that took place in summer 2018 were part of the landscape-scale bat transect surveys that were not related to the Phase 2 protected species surveys, and were been requested by Natural England. The results were not needed to inform the ecological assessment and subsequent environmental mitigation strategy, for the Development Consent Order application.	
			Bechstein's bats	
			It was decided that these were not required as no historic records of Bechstein's were returned, no evidence of Bechstein's roosts across any of the surveys was identified, and the only Special Area of Conservation (SAC) designated for Bechstein's was over 17 kilometres away from the scheme and would not be affected. Any Bechstein's associated with the SAC are highly unlikely to be present in proximity to the scheme. In addition to this, the only woodland undergoing habitat clearance is that at Hazlegrove school, with no trees within this woodland block assessed as requiring further bat surveys due to their age and lack of potential roosting features.	
			Woodland surveys	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			The transect route did run through Annis Hill Wood (north-west of Downhead Manor Farm) as there were distinct footpaths and open areas, which meant that surveyors would be able to get better recordings of bat calls (as dense vegetation causes calls to become distorted) and could also observe the behaviour of the bats, even in the darker periods of the transect. There were no other woodland areas within the survey areas where this was feasible. The transects were instead designed to follow the woodland edges, such as at Pepper Hill Copse and at Hazlegrove school. A transect also ran south of Rewber Brake which was at the edge of the survey area. Access was not permitted to Steart Wood or Pen Hill Copse to complete surveys; however, the transects ran along the edge of these woodland areas.	
Biodiversity	Bats	Loss and fragmentation of habitat connectivity for bats Ten bat species were recorded during the crossing point surveys undertaken by the applicant between July and October 2017. Numerous important commuting corridors were also identified, mainly to the north of the existing A303, with more limited numbers south of the existing road, including a potential important	Crossing point survey methodology The relevant guidelines (Berthinussen A & Altringham J 2015) only require the use of thermal or night vision equipment for surveys of underpasses due to the dark conditions in these locations; although the benefits of their use is highlighted within the guidelines, it is not a standard requirement. The crossing point surveys were completed in accordance with the guidelines and as such are	UNDER DISCUSSION

Topic Sub-section	South Somerset District Council Comment	Highways England Response	Status
	crossing point south of Steart Wood, approximately 220 metres west of Conegore Corner. Mitigation is proposed by the applicant but the proposals are not considered to be effective mitigation for bats crossing the operational A303 and will lead to increased bat mortality rates. The surveying undertaken to inform the Environmental Statement and the proposed mitigation for the scheme is considered insufficient to determine bats crossing the existing A303 – surveys do not take account of the seasonal variation in prey availability and habitat use by some species of bats and no thermal imaging cameras of potential crossing points were deployed in the surveys as included in the Berthinussen and Altringham (2015) methodology. The applicant is required to undertake further surveys for a full season and	considered sufficiently robust to inform the impact assessment. The guidelines require surveys to be completed between June and August. Crossing point surveys were completed between July and September 2017 so that surveys would correspond with the preferred route announcement that happened in July 2017. The timings for the surveys were considered appropriate based on the southerly location of the scheme, as well as the potential for hibernation, transition, and swarming sites within the surrounding landscape. Bat activity transects were completed across the full survey season, as per Bat Conservation Trust (BCT) guidelines and therefore any changes in bat activity reflecting seasonal variation in prey availability would be recorded during these surveys. Bat mitigation A bat hop-over has been proposed at this location. Chapter 8 Biodiversity of the Environmental Statement (APP-045) states that this hop over will be formed of more permanent planting, designed into the soft landscaping strategy, ensuring that the height of the hop over builds gradually to encourage bats to fly up and over the A303. In addition	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		with thermal imaging cameras is required to determine how the existing A303 is being crossed by bats. This should then be included in an updated Environmental Statement. A 'green bridge' should be considered at Canegore Corner (see Berthinussen and Altringham, 2015) alongside the underpasses (which should be of appropriate dimensions) which are being provided as part of the proposed scheme. These mitigation measures need to be identified, designed and included in construction drawings.	to this, a dense shrub layer should be planted along the verge to discourage bats from crossing the road low down, forcing them up and over the road, away from traffic. The presence of bat species known to fly through vegetation such as brown long-eared bat, greater horseshoe bat, lesser horseshoe bat, means that wooden screen / mesh is also recommended to be installed alongside the dense shrub. This mitigation is considered appropriate considering the hedgerow is already bisected by the existing A303 (17 metre gap) and there are no trees acting as 'hop-overs' currently in place.	
Biodiversity	Bats	Bat roost provision As a result of the proposed scheme there will be a loss of roosts for bats including one house that would be demolished by the construction of the proposed road. The applicant recommends a replacement bat house and a minimum of 220 bat boxes are installed within suitable habitats adjacent to the scheme. It is not certain where the figure for	The proposed 220 bat boxes are an enhancement and will offset a number of trees with bat roosting potential that will be lost as a result of the scheme (although no trees with confirmed bat roosts will be removed). The scheme is over 90 hectares in area, and so bat boxes will be spread out throughout this area. A range of bat boxes will be used, to provide roosting opportunities for a range of species, including barbastelles; Myotis bats; noctules; long eared bats and pipistrelles, ensuring that no particular	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		bat boxes comes from or which bat populations would benefit from this seemingly a 'scatter gun' approach to provision. The applicant is required to carry out further analysis as to roosting requirements of bats and consideration of provision for horseshoe species. Bat houses should be considered in place of boxes and the pole mounted house, which is likely to be a better long-term investment.	species will be favoured through these enhancements. The locations of bat boxes will be confirmed during detailed design. Their locations will take consideration of public access and land ownership in order to minimise the potential for them to be disturbed in the future. There are currently no plans to monitor these boxes; there are 8 intended as an enhancement measure. A bat house is also proposed as part of the scheme, potentially to be located within the wildlife area close to the Sparkford Junction. The exact location will be confirmed during detailed design.	
Biodiversity	Bats	Disturbance to bat species whilst occupying a place of rest A number of trees and buildings have been identified in the Environmental Statement as being of varying potential to support roosting bats. The report recommends that to reduce any impact from increased levels of disturbance from light, noise and vibration throughout construction and during operation of the scheme, a 10-metre buffer zone is observed around hedgerows and woodland,	10 metres is a standard distance beyond which it is considered there should be no significant disturbance impacts for most construction works. Evidence for the use of the 10 metre buffer will be investigated as discussed with SSDC on 16 January 2018.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		and where bat roosts have been		
		identified. No evidence is given for		
		these buffered distances and it is		
		considered that the effects of		
		disturbance from road construction on		
		roosting bats can occur up to 200m		
		away.		
		The applicant is required to undertake		
		a revised assessment of the potential		
		disturbance to bat roosts which based		
		on evidence and how this would be		
		mitigated for in the construction		
		programme should be included in an		
		updated Environmental Statement.		
		A condition should be included in the		
		Construction Environmental		
		Management Plan (CEMP) which		
		would implement working methods to		
		prevent disturbance to roosting bats		
		during the construction process.		
Biodiversity	Species	The assumptions regarding otters	Otters	
	mortality - Otters	made in the Environmental Statement	Surveys completed during 2017 of all potentially suitable waterbodies within the 2	UNDER
	Ollers	states are queried. The ES assumes	kilometre survey area, found evidence of	DISCUSSION
		that otters do not cross the A303,	otters only within Area A (Dyke Brook and a	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		however there are records of otter causalities and Somerset Otter Group were not consulted by the applicant's consultants. As well as being an issue currently, increased traffic speeds as a result of the proposed dualling is likely to increase the risk of future otter deaths unless adequately mitigated for. An underpass for otters should be provided near the Sparkford Roundabout supplemented by underpasses elsewhere. These can be designed into the scheme whilst there is opportunity to do so and included in the appropriate construction drawings and specifications.	tributary). These waterbodies are over 1.2 kilometres north of the proposed carriageway. Area A is connected to Area C, a ditch which then connects to a point approximately 180 metres north-west of the proposed Sparkford Junction. However, no otter signs were identified along Area C during the surveys. Therefore, the surveys concluded that there was a low risk of otters being present within close proximity of the scheme, as all otter signs were some distance away. The Somerset Otter Group returned 6 records of dead otter since 2002. Of these: One record was from the B3151 rather than the A303. Two records were along the A303 but outside the scheme extent. Two records did not have associated grid references and therefore it is not known where they were from (of these, 1 is unconfirmed). One record is at the Sparkford Junction within the extent of the scheme. This record is from 2008. There is only 1 record of an otter death along the A303 within the scheme extent from the previous 17 years (in 2008). Our surveys did not confirm this species to be present within	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			waterbodies closer than 1.2 kilometres from the scheme. Therefore, the risk of otter crossing the carriageway is considered to be low. Underpasses for otter along the scheme extent are not considered to be appropriate mitigation.	
Biodiversity	Species mortality - Badgers	Field surveys have identified a total of 68 badger setts within 500 metres of the scheme, of which 5 have been classified as main setts. However, no surveys/monitoring of badger road casualties along the A303 have been carried out. It is considered a single unspecified underpass for badgers is not sufficient mitigation. Further monitoring of the existing A303 for badger mortality should be carried out and included in the Environmental Statement.	Badger bait marking surveys were completed for 4 out of the 5 main setts identified during the course of protected species surveys for the scheme. Access to the 5th sett was not granted and therefore bait marking surveys could not be undertaken. Surveys found that badgers were crossing the carriageway at 1 location, to the west of Trait's Lane. A badger underpass and associated fencing is proposed at this location. Specifications of the tunnel would be in line with the referenced literature and will be decided during detailed design.	UNDER DISCUSSION
Biodiversity	Species mortality - Deer	Deer casualties are not reported, and no survey of deer crossing has been included. Whilst deer are not considered of conservation concern they should be considered on health and safety grounds. No consultation appears to have been made with The	Records are being obtained in order to determine if there are any hot spots for deer on the scheme.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		Deer Initiative or Langbein Wildlife Consultation with The Deer Initiative and / or Langbein Wildlife concerning deer mortality and any related accident data for collisions and the results, along with any mitigation required, should be included in the Environmental Statement.		
Biodiversity		Effects on Barn Owls and their habitats The Environmental Statement states that temporary habitat loss for Barn Owls will have a Minor Adverse Effect whereas permanent loss of habitat through the realignment of the road and land take of the scheme will be Moderate Adverse Effect due the proximity of the works to the territory of one of the known breeding pairs. This would mean potential decrease in their foraging success without moving their territory. It appears that no mitigation is given for permanent loss of habitat affecting the viability of one breeding pair of barn owls.	There will be an overall net gain in priority habitats associated with the scheme, with a substantial net gain in woodland and tree and shrub provision. These is a loss of grassland habitat as a result of the scheme, although improved and poor semi-improved grassland will be replaced with species rich grassland, which will be well structured to provide optimal foraging habitat for barn owls. Given the space restrictions within the scheme, further grassland habitat cannot be provided. However, further mitigation / enhancements are provided for barn owls including: • To reduce mortality, a barrier of a minimum of 3 metres high along the majority of the scheme. This would be through a combination of screening	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		The scheme should provide replacement habitat to offset the permanent loss of habitat to ensure the viability of the breeding pair of barn owls possibly through off site enhancement. Defra's Biodiversity offsetting metric or Somerset's Habitats Evaluation Procedure should be used to calculate the equivalent amount of habitat needed to replace that lost during construction. Both methods include temporal and risk factors and are compatible with each other. This would then give confidence that the landscaping associated with the proposed road scheme provides sufficient mitigation and indeed provide enhancement. Where mitigation is insufficient the appropriate amount and type should be added to the scheme either on or off site. Furthermore, the scheme should show a resultant enhancement for biodiversity including through habitat creation.	planting, landscaping bunds and the alignment of the road. • Measures to deter barn owls from the highways verge. • Installation of barn owl boxes and hunting posts.	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Biodiversity		The mitigation, enhancement and monitoring set out in the report must be secured through condition. Breeding birds	The CEMP will reflect the recommendations	
Biodiversity		Environmental Statement, Volume 6.3 Appendix 8.6 Breeding Bird Technical Report states that a total of 47 species were recorded during the surveys within the study area and a total of 45 species were recorded within the works boundary. Nine species are listed on Section 41 of the NERC Act 2006 and one, the Hobby, is listed on Schedule 1 of The Wildlife and Countryside Act 1981. A pair of Hobby was confirmed to be breeding within the study area but outside the scheme boundary as was the Song Thrush. Meadow Pipit, Mistle Thrush and Skylark, listed on Section 41 of the NERC Act 2006, were all also recorded immediately adjacent to the scheme boundary. The upgrade of the A303 along this section from a single carriageway to dual would change the ability of some species to move through the	The CEMP will reflect the recommendations in the report regarding timings of vegetation clearance and screening. Noise The breeding bird report states: "The current noise levels for the existing road will likely not be significantly less than the noise levels after the upgrade, and noise impacts on birds are likely to be reduced where the scheme is in cutting and / or is immediately adjacent to woodlands or noise barriers." Increased risk of mortality In order to deter low flying birds from the road to minimise collisions with traffic, a barrier of a minimum of 3 metres high would be provided along the majority of the scheme. This would be through a combination of screening planting, landscaping bunds and the alignment of the road. Higher flying bird surveys would not be at increased risk.	UNDER DISCUSSION

Sub-section	South Somerset District Council Comment	Highways England Response	Status
	landscape due to the increased width of the road and associated landscaping and traffic speeds. The loss and fragmentation of breeding bird habitat would have a wideranging impact with about a third of all the species recorded utilising this habitats within the study area. The importance of hedgerows is especially pertinent considering the wider arable landscape. Mitigation is put forward but no		
	assessment of impacts or mitigation for noise is given. Defra's Biodiversity offsetting metric		
	or Somerset's Habitats Evaluation Procedure should be used to		
	habitat needed to replace that lost during construction and subsequently		
	include temporal and risk factors and		
	would then give confidence that the landscaping associated with the		
	Sub-section Sub-section	landscape due to the increased width of the road and associated landscaping and traffic speeds. The loss and fragmentation of breeding bird habitat would have a wideranging impact with about a third of all the species recorded utilising this habitats within the study area. The importance of hedgerows is especially pertinent considering the wider arable landscape. Mitigation is put forward but no assessment of impacts or mitigation for noise is given. Defra's Biodiversity offsetting metric or Somerset's Habitats Evaluation Procedure should be used to calculate the equivalent amount of habitat needed to replace that lost during construction and subsequently due to traffic noise. Both methods include temporal and risk factors and are compatible with each other. This would then give confidence that the	landscape due to the increased width of the road and associated landscaping and traffic speeds. The loss and fragmentation of breeding bird habitat would have a wideranging impact with about a third of all the species recorded utilising this habitats within the study area. The importance of hedgerows is especially pertinent considering the wider arable landscape. Mitigation is put forward but no assessment of impacts or mitigation for noise is given. Defra's Biodiversity offsetting metric or Somerset's Habitats Evaluation Procedure should be used to calculate the equivalent amount of habitat needed to replace that lost during construction and subsequently due to traffic noise. Both methods include temporal and risk factors and are compatible with each other. This would then give confidence that the landscaping associated with the

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		sufficient mitigation and indeed provide enhancement. Where mitigation is insufficient the appropriate amount and type should be added to the scheme either on or off site. Furthermore, the scheme should show a resultant enhancement for biodiversity including through habitat creation. This needs to be included in an updated Environmental Statement. A CEMP should include detailed measures for avoiding impacts nesting birds. This would also include details of the screening to protect the nesting hobbies form disturbance.		
Biodiversity		Consideration of Great Crested Newts Three distinct meta-populations of Great Crested Newts are identified, though only two would be subject to effects as a result of the scheme. Meta-population A, located at Downhead, has a medium population and meta-population C, located at Hazlegrove, has a medium population. Meta-population B located	The great crested newt (GCN) Mitigation Guidelines state: "The potential for newts to cross roads successfully depends largely on traffic volume and the presence of any barriers, such as kerbs. Small roads and tracks with low vehicle numbers appear to present no major problems for newts, whilst larger, busier ones can limit dispersal and result in high mortality." The A303 is the main trunk road connecting	UNDER DISCUSSION

Topic Sub-sectio	South Somerset District Council Comment	Highways England Response	Status
	at Yarcombe was excluded from further assessment as all ponds associated with this meta-population are over 500 metres from the construction footprint of the scheme. The survey methods used are generally in accordance with best practice and fit for purpose. Pond 32 to the south of the A303 is possibly linked to ponds north of the A303 through dispersal of juveniles. The A303 is unlit and not heavily trafficked at night. Dualling will reduce the likelihood of successful dispersal occurring and increase the chances of mortality. What evidence is there that GCN's will cross / not cross roads? Are there other ponds to the south of the road that would support this apparently isolated population? No mitigation is given against potential hazards to great crested newts in the carriageway. Any gullies and kerbs can trap and cause mortality to the species.	the south-west with the rest of the UK. Therefore, it is considered a 'main road' and would not come under the description of 'small roads and tracks'. No other ponds surveyed to the south of the road were found to support GCN, although it is likely that these are present outside the survey area. Natural England have provided a letter of no impediment for the GCN ghost licence – they are satisfied that the Favourable Conservation Status of GCN will be maintained.	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		The applicant is required to provide further evidence on the ability of GCNs to cross roads or not and whether the population south of the road is likely to become increasingly isolated following construction of a dual carriageway. Each of these local populations would still need to be assessed for Favourable Conservation Status and included in an updated Environmental Statement. In areas where dispersal is likely to occur, and if no underpasses are provided / possible, the carriageways need to be designed to be GCN friendly, e.g. with appropriate drainage such as using offset gullies and traversable kerbing. These need		
		to be shown in the relevant construction plans.		
Biodiversity		Invertebrate survey and assessment As well as brown hairstreak (see below), a single white letter hairstreak, a BAP, s41 priority species was recorded on the southern perimeter of Site 5 (?). Six species of nationally scarce flies were recorded and nationally scarce mining bee on Sites	Impacts of widening the A303 The current A303 is a considerable barrier for dispersal of invertebrate species. The existing carriageway is approximately 17 metres wide and subject to significant air disturbance as a result of traffic which would impede movement of invertebrates.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		2 and 10 (?). It would be helpful if the site locations were stated.	Therefore, dualling of the scheme will not further inhibit the dispersal of invertebrates.	
		No assessment of the effects of increased carriageway widths due to dualling the A303 is given with regard to invertebrate dispersal and possible increased mortality.	 Mitigation for invertebrate species Nationally scarce species on Site 2: Site 2 is 590 metres north of the red line boundary. Ttherefore, impacts are not anticipated. 	
		No mention is made of establishing areas of scrub in the landscape proposals which is also important for invertebrates and their prey.	 Nationally Scarce thick-headed fly Leopoldius signatus (Site 4): Site 4 is located approximately 10 metres to the north of the red line boundary. Ivy is not specified on indicative species list (although it is just indicative at this stage). Ivy will be added to the list. 	
			White Letter Hairstreak (Site 5): • Site 5 is 760 metres north of red line boundary. Therefore, no impacts anticipated	
			Nationally Scarce soldierfly Chorisops nagatomii (Site 8):	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			 Not sufficient knowledge of mitigation requirements. However, the woodland where this species was recorded will be retained and enhanced with additional woodland planting adjacent. 	
			 The mining bee Lasioglossum pauxillum (Site 10): Site 10 is 180 metres north of red line boundary. Therefore, no direct / indirect impacts to habitat supporting this species. Also, due to a considerable recent increase in both range and frequency, the species no longer fulfils the criteria to qualify for its current Nationally Scarce status. Therefore, no specific mitigation and enhancement recommendations are considered necessary. 	
			Nationally Scarce soldierfly <i>Chorisops</i> nagatomii (Site 15): The hedgerow where the species was found will be retained. 	

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			 Semi-improved grassland adjacent and to the south is outside the site boundary. Therefore, impacts are not anticipated. Planting of priority habitats will benefit this species. 	
			Dead wood Dead wood will be retained on site where possible to provide habitat for saproxylic species. In particular, the feasibility of retaining the veteran tree will be investigated. This will be detailed within the CEMP.	
Biodiversity		Environmental Masterplan There are extensive areas of amenity grassland that should not be top soiled and seeded. This would favour nitrogen loving species and reduce the diversity of flora species and hence invertebrates including pollinators. Similarly, the use of top soil for other habitat areas is likely to not fully exploit the diversity of species possible. It is noted that amenity grassland is	It is agreed that areas of amenity grassland should be replaced with nutrient poor grassland, subject to cut and remove where possible. The Environmental Masterplan has already been updated to reflect this (following comments from Natural England on the ghost GCN licence). However, this would not possible for the 1 metre highways maintenance strip and for sightlines, as these areas must conform to a Highways standard. This method can be employed for other areas of grassland creation.	UNDER DISCUSSION
		specified for the routes of Public Rights of Way. Generally, the		

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		indicative species planting mixes are questionable for this part of Somerset and for the number of species.		
		The specification for soils in the Soils Handling and Management Plan should state that amenity grassland areas be made with sub soil, chalk or planings and allowed to be colonised or seeded with a wild flower mix. These areas would then favour non-nitrogen loving species, provide a richer species diversity and reduce rank grassland, which in turn require less cutting and hence maintenance costs. Other areas of habitat enhancement should not be created using top soil but with sub soil, or sub soil with inverted top soil. This will promote flora species and an associated abundance of pollinators.		
		Natural England requested that in the Landscape and Ecological Management Plan (LEMP), 'cut and remove' was employed for grassland		
		management (including amenity grassland) to reduce nutrient levels		

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		and increase diversity ¹ . However, it is considered that this should be part of the Soils Handling and Management Plan.		
		PROW can be maintained through being mown 1 metre wide through these areas when required. They do not especially need to be an amenity grass mix where a wild flower meadow mix would be of higher benefit to biodiversity. The Landscape Masterplan needs to be amended.		
		The DCO requires amending and appropriate management given to habitats in a Landscape and Ecological Management Plan. Consultation with local ecologists and /or botanists is recommended prior to finalising planting mixes for landscaping.		
People and Communities (and Non- Motorised Users)		Only light touch proposals regarding construction methodology and traffic management have been submitted to date. The Councils will therefore look to ensure that a mechanism is included within the wording of the	The dDCO provides at Requirement 12 that the detailed design will be submitted to the Secretary of State for approval following consultation with the relevant planning authority and local highway authority. Under Requirement 4, details of	UNDER DISCUSSION

¹ https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010036/TR010036-000243-A303 8.2 SoCG NE.pdf

Planning Inspectorate Scheme Ref: TR010036 Application Document Ref: TR010036/APP/8.4

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		DCO to secure an approved construction traffic management plan. SCC and SSDC want a mechanism included in a Regulation to enable active involvement in the design of traffic management during construction.	that consultation (including changes sought and whether they have been made, and where changes have not been made why not), must be submitted along with the application for approval of the detailed design. The Secretary of State will therefore have the views of the Councils before him when making any decision on the detailed design.	
People and Communities (and Non- Motorised Users)		Road closures are included within outline proposals. However, only outline details have been received to date. Whilst it is suggested that the majority of closures be overnight, the potential impacts on residents and the business community will need to be considered. This further re-enforces the need to ensure that there is appropriate provision within the DCO drafting to include a commitment for detailed measures to be agreed with the Local Highway Authority and Local Planning Authority, especially given that Yeovil Refresh includes highways improvements that may come forward during the construction period.	A full Traffic Management Plan will be produced by the appointed contractor prior to construction. Chapter 12 People and Communities includes an assessment on driver stress, community facilities and the local economy, which were completed in accordance with the Design Manual for Roads and Bridges (DMRB) Volume 11 Section 3 Parts 6, 8 and 9. The assessments consider both direct and indirect effects arising as a result of the construction of the scheme. The assessment for community facilities and the local economy identifies social and community resources in the study area, as well as receptors relevant to the topic, and identifies the activities relating to the scheme that could have an effect on those receptors and resources. The driver stress assessment considers the effect of the scheme on driver	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
			frustration, fear of potential accidents and route uncertainty during construction.	
People and Communities (and Non- Motorised Users)		Local Impact Area The defined Local Impact Area for businesses is restrictive and does not allow impacts on various route-reliant businesses and visitor attractions to be taken into account. A number of small businesses and tourist attractions such as Haynes International Motor Museum, Hadspen House (Emily Estate to open spring 2019), Hauser and Wirth and Fleet Air Arm Museum are outside this tightly drawn area. The applicant should consider widening the Local Impact Area and consideration should be given to the impact on the wider business community and RNAS Yeovilton who are a major employer in the area. Any identified adverse impacts should be suitably mitigated or compensated.	Chapter 12 People and Communities of the Environmental Statement includes an assessment on community facilities and the local economy. For these aspects, the assessment has been undertaken in accordance with DMRB Volume 11 Section 3 Parts 6 and 9, and considers both direct and indirect effects arising as a result of the construction and operation of the scheme. The assessment identifies social and community resources in the study area, as well as receptors relevant to the topic, and identifies the activities relating to the scheme that could have an effect on those receptors and resources.	NOT AGREED
People and Communities (and Non- Motorised		Signage and Traffic Management The effective management of traffic and good signage, especially during the construction phase of the	The Principal Contractor will consult with tourist attractions and other business prior to the development of the Traffic Management Plan.	UNDER DISCUSSION

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
Users)		proposed route will be essential, to ensure that businesses and communities are not negatively impacted. Funding to promote these businesses during the construction phase where it may be more difficult to access the facilities is necessary. The message should be clear that "South Somerset is still open for business".		
		Highways England should engage with tourist attractions, other businesses and employers within and outside the defined impact area to agree a signage strategy during and after construction and agree to make an appropriate financial contribution to fund promotion of these visitor attractions and businesses to advertise that they are still open for business particularly during the construction disruption period.		
People and Communities (and Non- Motorised Users)		Increased Vehicle Movements through West Camel and Sparkford Vehicle movements increase as a result of the proposed scheme by 600 vehicles a day through West Camel (a 42% increase from 1,400 to 2,000	Significant adverse effects on driver stress have not been predicted for vehicle travellers within the study area for the scheme, when taking into account average traffic flows and speeds at peak hours as required by the DMRB Volume 11 Section 3 Part 9.	NOT AGREED

Topic	Sub-section	South Somerset District Council Comment	Highways England Response	Status
		vehicles per day) and 1,800 vehicles a day through Sparkford High Street (a 37% increase from 4,900 to 6,700 vehicles a day). This increase of vehicles would result in a significant adverse effect and should be mitigated through the DCO. Mitigation should be sought in consultation with the affected parishes and Somerset County Council.	Highways England does not consider the measures suggested to be necessary to make the scheme acceptable and they therefore do not form part of the proposed mitigation measures.	

Appendix A

Table 1: Early results from the noise model discussed with the EHOs

Receptor	LA10 18Hr freefield [c			[dB]
	DM OY	DS OY	DM DY	DS DY
BOWERS, HOWELL HILL, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QX	47.1	48.5	47.6	49.4
WINDHOVER, HOWELL HILL, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QX	44.2	46.5	44.7	47.4
KARMA, FORE STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QW	45.2	46.2	45.8	47.2
CARYS COTTAGE, FORE STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QW	46.5	47.6	47.1	48.6
ROWAN, FORE STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QW	47.0	47.5	47.6	48.4
BARLEY CROFT, FORE STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QW	44.5	45.6	45.1	46.6
LEA-ANDER, FORE STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QW	47.2	47.2	47.8	48.1
THE OLD BARN, KEEP STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QP	46.8	46.7	47.5	47.6
WOODSIDE, KEEP STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QP	47.5	46.8	48.1	47.8
APPLETREE COTTAGE, PLOWAGE LANE, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QS	56.4	51.3	57.1	52.2
16 PLOWAGE LANE, ORCHARD PARK, WEST CAMEL, YEOVIL, SOMERSET, BA22 7QR	52.7	49.5	53.4	50.4
MOBILE HOME AT SUNNYDENE FARM, KEEP STREET, WEST CAMEL, YEOVIL, SOMERSET, BA22 8HG	49.7	50.5	50.3	51.5