M3 Junction 9 Improvement

Scheme Number: TR010055

8.16 Applicant Comments on Deadline 3 Submissions

APFP Regulations 5(2)(q)

Planning Act 2008

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

Volume 8

18 August 2023

Infrastructure Planning

Planning Act 2008

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

M3 Junction 9 Improvement
Development Consent Order 202[x]

8.16 Applicant Comments on Deadline 3 Submissions

Regulation Number:	5(2)(q)
Planning Inspectorate Scheme Reference:	TR010055
Application Document Reference:	8.16
BIM Document Reference:	HE551511 -VFK-HGN-XXXX_XX-RP-IM-40010
Author:	M3 Junction 9 Improvement Project Team, National Highways

Version	Date	Status of Version
Rev 0	18 August 2023	Deadline 4 Submission

Contents

Appendices

1 Introduction

1.1 Introduction

1.1.2 The Applicant has responded where necessary and relevant, to the following items submitted at Deadline 3:

- Healthshare Diagnostics Limited – Updated Navigation document Accepted at the discretion of the ExA **(REP3-026)**
- South Downs National Park Authority – Comments on responses to ExQ1 **(REP3-027)**
- South Downs National Park Authority – Comments on responses to ExQ1 1 **(REP3-028)**
- South Downs National Park Authority – Comments on responses to ExQ2 **(REP3-029)**
- South Downs National Park Authority – Comments on responses to ExQ3 **(REP3-030)**
- Twyford Parish Council – Comments on WRs **(REP3-031)**
- Winchester Action on the Climate Crisis – Notification of wish to attend Issue Specific Hearings 2 and 3 (ISH2 and ISH3) **(REP3-032)**

1.1.3 The following items were submitted late at Deadline 3:

- Hampshire County Council – Cart and Horses Junction **(AS-008)**
- Chris Gillham – Winchester Friends of the Earth – Submission re 7.10 Modelling and Appraisal Report **(AS-010 and AS-011)**
- Dr Andrew Boswell – Written Representation **(AS-012)**
- Dr Andrew Boswell – Written Representation Appendix A **(AS-013)**

2 Applicant's comments on information received at Deadline 3

2.1 Applicant's response to Healthshare Diagnostics Limited (Healthshare Clinic Winchester) Updated Navigation document Accepted at the discretion of the ExA

Healthshare Diagnostics Limited	Applicant Response
The proposed 'temporary' traffic planning for the 5 years of development is I believe to send traffic down the A31 to Junction 11 while the works are ongoing. Healthshare Clinic Winchester are a new hospital located directly off the A31 and we believe that mitigations are necessary. With increased levels of traffic coming down the A31 we believe it will be necessary to have turning / lights at Chilcomb Lane - as there will be lots of new traffic/ big and small coming in/out. At busy periods it is difficult for patients to enter and exit out of Chilcomb Lane safely now, and this diversion of traffic will make the road exceptionally busy and dangerous for patients, staff and consultants. A path that links the new winnall junction to us would also be v desirable and should be considered (or poss to morestead road as an alternative).	The referred to section of the A31 between Junction 10 and Spitfire Roundabout will be overnight and extended weekend diversions only. **Table 2.4** in **Chapter 2 (The Scheme and Surroundings)** of the **Environmental Statement (ES) (6.1, APP-043)** suggests a total of 66 times over the construction scheme period. The **Outline Traffic Management Plan (7.8, Rev 1)** details the process and procedure for allowing emergency/ blue-light travel through the construction works and haul roads. An incident management plan will also be produced in collaboration with all emergency responders to enable incidents on the network to be managed appropriately. Diversion routes are required for overnight closures and specific weekend closures. The Applicant expects minor-to-minimal disruption along this section. A new pedestrian link to Junction 9 from Chilcomb Lane is not necessary to mitigate the effects of the Scheme and no justification for one has been provided in the representation.

2.2 South Downs National Park Authority's comments on responses to ExQ1

South Downs National Park Authority	Applicant Response
Q12.1.5 It is the SDNPA's position that the DEFRA Circular does apply to the Applicant (and this scheme) as the proposal is for the significant widening of a road within a National Park. Our Local Impact Report (LIR), at paragraph 4.12 on page 7, (Document Reference: REP2-071) makes specific reference as to why this circular does apply. The LIR also sets out (together with the SDNPA's Written Representation (WR), document reference REP2-075) why the SDNPA does not agree that the scheme complies with that circular, the National Policy Statement for National Networks (NPSNN) and policy SD3 of the South Downs Local Plan.	The Applicant notes that the SDNPA's position remains as stated in the LIR. The Applicant has responded to the SDNPA's LIR at Deadline 3 and maintains its position as set out in the Applicant's response to **Written Question 12.1.5** in **Applicant Responses to Written Questions (8.5, REP2-051)** with respect to paragraph 5.148 of the *National Policy Statement for National Networks (NPS NN)* and the application of the DEFRA circular.
Q12.1.6 Our WR (Document Reference: REP2-075), and in particular paragraphs 3.1.15 – 3.1.25, sets out the reasons why the Secretary of State cannot, currently, be satisfied that the project will be carried out to high environmental standards and sets out measures to enhance the environment. It is the SDNPA's position that the current proposal does not moderate the significant adverse impacts as required by NPSNN.	The Applicant has responded to these points in the **Applicant Comments on Local Impact Reports (8.9, REP3-023)** submitted at Deadline 3 and maintains its position.

South Downs National Park Authority	Applicant Response
Q12.1.13 The SDNPA agrees that there would be long-term permanent effects arising from illumination of the PRoW underpasses and gantry mounted signage. We note that the lighting assessment seems to be focused mainly on the permanently lit features within the scheme (the gantries and the lit underpasses) rather than on lightly from traffic on the newly created slip roads. From Viewpoints 1, 3 and 14, for example, it is the traffic on the newly created slip roads that are most likely to be visible. We await the revised visualisations from Viewpoint 3 to see if the lighting on the gantry on the M3 will also be visible at year 1 and during the winter at year 15. With regard to the reasons set out in the Applicant's answer as to why they consider the long-term effects to be very small scale, we consider that views from the west, such as Viewpoint 3, are not currently affected by lighting within Winchester and that the permanent change from St Swithun's Way would be greater than 'very small scale'.	**Appendix 7.7 (Technical Note Lighting Assessment of Gantry Signage)** of the **ES (6.3, APP-103)**, considers the gantries only and it has been used to inform judgements included within **Chapter 7 (Landscape and Visual)** of the **Environmental Statement (ES) (6.1, Rev 1)**. The Applicant has provided the updated visualisations as part of its Deadline 4 submission. View Location 1 is Easton Lane / National Cycle Network Route 23. The new link and southbound off slip would benefit from embankments and planting such that there is likely to be very limited visibility of vehicle lights from this viewpoint looking from west to east. View Location 3 is located on St Swithun's Way, within the Itchen Valley and being an unlit route is assessed as a daytime view only. Existing views south and east include the Winnall Industrial estate and lighting from this is at a significantly more elevated position. The proposed M3 northbound on-slip carriageway curves north-east and proposed vegetation to the west would result in very limited visibility of vehicle lights in the long term. View Location 14 is the Itchen Way between the M3 and A34 and the footpath is relatively vegetated with a view of Easton Down. Broadleaf planting to the west side of the M3 northbound on-slip on Easton Down is proposed. The proposed carriageway curves in a north-easterly direction and would have very limited visibility of vehicle lights.

South Downs National Park Authority	Applicant Response
Q12.1.20 and Q12.1.21 Our WR (Document Reference: REP2-075), and in particular paragraphs 3.1.5 – 3.1.25, sets out the SDNPA's position as to why the scheme does not, currently, comply with NPSNN. In summary, some of the significant adverse impacts caused are entirely avoidable or impacts could be lessened (examples include relocating the construction compound outside of the National Park and giving greater consideration to the landform proposals to ensure that there is a seamless and appropriate join up with the existing positive characteristics of the Open Downland), there is insufficient mitigation to moderate the harm caused and insufficient enhancements. Our LIR and WR (Document References: REP2-071 and REP2-075) sets out steps and amendments which could be taken to address some of our concerns and demonstrate compliance with NPSNN (examples include strengthening the DCO requirements to ensure tree planting along the eastern edge of the motorway is no less than 25m in width and that at least half of this planting occurs on top of the cut batter and providing a commitment to 'low noise road surfacing' to existing sections of the M3 (and other roads) within the Order limits).	The Applicant has responded to these points in the **Applicant Comments on Local Impact Reports (8.9, REP3-023)** submitted at Deadline 3. The Applicant has continued to discuss these matters with the South Downs National Park Authority, including at a meeting convened by the Applicant's project team on 24 July 2023.
Q12.1.23	The Applicant's position remains as set out in it's response to **Q12.1.23** of the **Applicant Responses to Written Questions (8.5, REP2-051)**.

South Downs National Park Authority	Applicant Response
It is the SDNPA's position that the effects at Easton Lane (Viewpoint 1) would remain significant even after 15 years as there would be a complete change in landscape character from this viewpoint. We consider that the effect at winter year 15 would be moderate / major adverse. This is due to the need to accommodate two new slip roads and an attenuation basin in this area which will require substantial changes to the landform. As discussed during ISH1, the proximity of White Hill Cottage creates a 'pinch point' and limits the potential for landscape mitigation.	
Q12.1.24 DMRB (which is produced by National Highways and other Highway Agencies) does not override the requirements of the NPSNN. In summary, the policy context provided by the NPSNN is the 'exceptionality' standard. It is the SDNPA's position that in order to prove an exceptional case, the Applicant has to demonstrate an exceptional job with the evidence base. As heard during ISH1 (and as set out in our LIR and WR, document references: REP2- 071 and REP2-075), the SDNPA disagrees with the conclusions of the LVIA, the accuracy of the visualisations and the reason given for the lack of an assessment of the scheme for the winter season at Year 15.	The Applicant has acknowledged the errors to the visualisations as discussed at ISH1, and updates to visualisations for view locations 3 and 7 were provided at Deadline 3. See **Chapter 7 (Landscape and Visual – Figures (Part 3 of 3))** of the **ES (6.2, Rev 1)**. **Appendix 7.3 (Schedule of Landscape Effects)** of the **Environmental Statement (6.3, Rev 1)** provides an assessment on both the South Downs National Park as a designation, and on the character of the local landscape character areas and features (including vegetation and topography) within the South Downs National Park. The assessment acknowledges the introduction of permanent features into the landscape and their effect. However, in the context of the existing highway network already being an intrusive feature in the landscape and following implementation and establishment of mitigation measures, the significance of these changes is considered to be slight and not significant for both the South Downs National Park as a

South Downs National Park Authority	Applicant Response
There is no explanation as to how the incursion and expansion of the motorway landscape into the South Downs National Park, which will result in the erosion of intrinsic characteristics such as the downland topography and the loss of trees that cannot be replaced, could be reduced to negligible. We consider there would be a significant residual and permanent adverse effect on the National Park. The failure to assess the landscape and visual effects for the winter season at Year 15 has also resulted in an underestimation of the effects. Winter effects are as important as summer effects as they last for about half the year and there is no justification for excluding them. We therefore support the ExA's suggestion, made during ISH1, that visualisations for winter at Year 15 are provided.	designation, and for its respective landscape character areas and features. The assessment is in accordance with the Design Manual for Roads and Bridges (DMRB) LA 107 Landscape and visual (Highways England, 2020) methodology. However, the Applicant has agreed to provide additional visualisations as supporting material. Paragraph 5.151 of the *National Policy Statement for National Networks* states that the Secretary of State should refuse development consent in these areas (nationally designated areas) except in exceptional circumstances and where it can be demonstrated that it is in the public interest. It then goes on to outline what considerations in the three bullet points should be included within the assessment. The policy does not require all elements of the Scheme to be exceptional in isolation, nor as a whole, though it must be in the public interest and only in exceptional circumstances can consent be given. The exceptional circumstances are in respect of whether the development is required to be located where it is. In this case the existing M3 and Junction 9 is located both within and in the setting of the National Park. In order to provide the necessary improvements at junction 9 it is unavoidable that there will be impacts on the National Park. The need to carry out the development in this specific location is what enables the scheme to meet the exceptional circumstances required. **Section 7.3** of

South Downs National Park Authority	Applicant Response
	the **Case for the Scheme (7.1, Rev 1)** provides a full assessment in relation to paragraph 5.151. Winter Year 15 visualisations are provided in **Appendix B** of **Applicant Written Summaries of Oral Case for Issue Specific Hearing 1 (ISH1) (Document Reference 8.13)** submitted at Deadline 4.
During ISH1, the SDNPA and Applicant referred to an updated 'landscape report' (Landscape Review of the M3 Junction 9 Improvement produced by Michelle Bolger on behalf of the SDNPA) that had been shared with the Applicant in early July (the original version was shared with the Applicant back in April). This landscape report was used to form the basis of the SDNPA's submitted Local Impact Report and Written Representation. As requested during ISH1, the SDNPA is submitting two versions of that landscape report a 'clean' version and a 'track changed' version (highlighting the changes for ease of reference). This updated landscape report also includes two new figures (Figures 8A and 9A) which have been produced to assist the ExA with regards to the tree removal plan, environmental masterplan and LVIA viewpoints, which were referred to during ISH1. For ease of reference these two new figures (Figures 8A and 9A) have also been submitted as a separate PDF document.	The Applicant acknowledges that the landscape report (Landscape Review of the M3 Junction 9 Improvement produced by Michelle Bolger on behalf of the SDNPA) was used by the South Downs National Park Authority to support the submitted Local Impact Report and Written Representation. The Applicant considers this report does not introduce new material, and that the positions adopted by South Downs National Park Authority have previously been responded to within the **Applicant Comments on Local Impact Reports (8.9, REP3-023)** submitted at Deadline 3.

2.3 South Downs National Park Authority's comments on responses to ExQ1 1 (Michelle Bolger)

South Downs National Park Authority	Applicant Response
1. Executive Summary **2. Introduction** **3. South Downs National Park** **4. Landscape Character Context** **5. Landscape and Visual Issues** **6. Landscape Setting (Issues 1-5)** **7. Water (Issue 6)** **8. Chalk Grassland (Issues 7 & 8)** **9. Access to the South Downs National Park Issues 9 & 10** **10. Comments on Submitted LVIA**	The Applicant notes the Landscape Report titled 'Landscape Review of the M3 Junction 9 Improvement' produced by Michelle Bolger on behalf of South Downs National Park Authority. The Applicant notes that this report was used by the South Downs National Park Authority to support the submitted Local Impact Report and Written Representation. The Applicant considers this report does not introduce new material and the positions have previously been responded to within the **Applicant Comments on Local Impact Reports (8.9, REP3-023)** submitted at Deadline 3. No further response is provided.

2.4 South Downs National Park Authority's comments on responses to ExQ1 3

Twyford Parish Council	Applicant Response
Figure 8A – Tree Removal Plan and LVIA Viewpoints	The Applicant notes that this is a figure produced by South Downs National Park Authority using information from

Twyford Parish Council	Applicant Response
	Appendix 7.5 (Preliminary Arboricultural Impact Assessment) of the **ES (6.3, APP-101)**. The Applicant has no further comments.
Figure 9A – Environmental Masterplan and LVIA Viewpoints	The Applicant notes that this is a figure produced by South Downs National Park Authority using information from **Figure 2.3** in **Chapter 2 (The Scheme and its Surroundings – Figures (Part 2 of 4))** of the **ES (6.2, APP-062)**. The Applicant has no further comments.

2.5 Twyford Parish Council comments on Written Representations

Twyford Parish Council	Applicant Response
The Parish Council supports comments made in Written Reps REP1-033 and REP2-062 relating to the impact of traffic on the Hockley Interchange. The Twyford Parish Council is very concerned about the diversion works proposed during phase 2 of the works. This relates to the increased use of the Hockley Cross Interchange (Junction 11) and its interface with the B3335 / A3090. National Highways have already acknowledged deficiencies in the operation of the traffic lights at this junction and the impact it has on pedestrians, cyclists and other users of the B3335.	The Applicant has provided a full response to this issue within **Section 1.5** of **Appendix A** of the **Applicant's Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)**.

Twyford Parish Council	Applicant Response
Since a re-timing of the operation of traffic lights is required during the operation of the diversion route, along with a significant increase in volume of vehicles, the Parish Council is concerned that this will lead to a worsening of the impacts as a result of the deficiencies already identified. In order to mitigate the effects of the J9 works, improvements to the operation of the traffic lights and road layout at the Hockley Cross Interchange (Junction 11) and its interface with the B3335 / A3090 must be carried out prior to the works commencing on the J9 improvements.	

2.6 Winchester Action on the Climate Crisis - Notification of wish to attend Issue Specific Hearings 2 and 3 (ISH2 and ISH3)

Winchester Action on the Climate Crisis	Applicant Response
I would like to speak at both ISH2 and ISH3: ISH1: The applicant does not appear to me to have followed the guidance on traffic modelling. There is no satisfactory material on the traffic modelling baseline as required by DRNB LA144 para 3.10. Without this baseline there is no clear analysis of how this application will have an impact on local traffic flows. Despite the preliminary analysis of PM2.5 provided in earlier papers, showing existing levels of PM2.5 along M3 and A34	Please see the Applicant's response to **Applicant Comments on Written Representations (8.8, REP3-022)** submitted at Deadline 3 which confirms that the assessment in **Chapter 14 (Climate) of Environmental Statement (ES) (6.1, Rev 2)** is based on a robust assessment approach as endorsed by the Design Manual for Roads and Bridges (DMRB) LA 114 (Highways England, 2021) methodology.

Winchester Action on the Climate Crisis	Applicant Response
above proposed national limits the applicant has failed to provide any analysis of how PM2.5 can be reduced. Neither has the applicant addressed the problem that in-cab emissions are higher than roadside emissions and will probably threaten the health of all users of the roads the applicant proposes to construct. ISH3 The climate case presented by the applicant is full of gaps and the applicant has failed to relate the climate data given to the traffic modelling, as required by DRNB LA144. The final conclusion is not supported by any credible calculations. The analysis of emissions reduction is misleading and inaccurate in its statements about emissions reductions since 1990. It fails to point out that emissions reduction in UK as a result of transfer of services and manufacturing abroad are still emissions contributing to global heating. Similarly, the most relevant category, transport emissions, have reduced only 11% since 1990 (DESNZ April 2023) and are desperately behind target. No clear analysis has been given of how the proposals relate to the government's published Road to Net Zero. The analysis on user emissions is confused: it cannot decide whether it is looking at the 'modelled area' the whole of south east England, or an undefined area somewhere in between. The proposals on construction emissions do not justify the level of emissions they cause. There is no explanation, for example,	The Applicant confirmed that the assessment of PM2.5 in **Section 5.4.7** in **Chapter 5 (Air Quality)** of the **Environmental Statement (ES) (6.1, Rev 2)** was in accordance with Design Manual for Roads and Bridges (DMRB) LA 105 Air quality (Highways England, 2019) and assessed against a 20mg/cu.m limit. The assessment confirms that the current limits are not exceeded. The 2040 target of PM2.5 introduced earlier this year by DEFRA is not for individual schemes to show compliance against, and instead is for DEFRA to review national compliance from monitoring data. The Applicant confirmed that the 2040 target of 10mg/cu.m for PM2.5 is indicated as achievable against the modelling undertaken by DEFRA, and the monitoring for 2022 in Winchester recorded concentration below 10mg/cu.m of PM2.5 Whilst the Applicant is aware that exposure to air pollution within vehicles (and indeed indoors) can be elevated, consideration of this is not required by the Air Quality Standards Regulations 2010 which only consider ambient (i.e. outdoor) exposure. The Applicant has justified the design and replacement of structures in **Chapter 3 (Assessment of Alternatives)** of the **Environmental Statement (ES) (6.1, Rev 1)**.

Winchester Action on the Climate Crisis	Applicant Response
why it is proposed to demolish one elevated roundabout with a very similar elevated roundabout	

2.7 Hampshire County Council late submission – Cart and Horses Proposals

Hampshire County Council	Applicant Response
1. Schemes – Overview **2. National Highways M3 Junction 9 Improvements** **3. Why are we undertaking this engagement?** **4. Scheme Objectives** **5. Work to Date** **6. Option 1 Double Roundabout – Concept Design** **7. Option 1 Double Roundabout, Concept Design** **8. Option 1 Double Roundabout, Concept Design** **9. Option 1 Double Roundabout, Concept Design** **10. Concept Design – Option 2 Traffic Signals** **11. Option 2 Traffic Signals, Concept Design** **12. Option 2 Traffic Signals, Concept Design** **13. Option 2 Traffic Signals, Concept Design** **14. Comparison of the Two Proposed Options** **15. Your Feedback Matters** **16. Next Steps** **17. Contacts**	The Applicant notes the consultation material published by Hampshire County Council was accepted as a late submission to Deadline 3 on 25 July 2023. The Applicant maintains the position on this matter as set out in **Appendix A (Cart and Horses Junction Position Statement)** in the **Applicant Responses to Written Questions (8.4, REP2-051)**.

3 Late Deadline 3 Submissions

3.1 Chris Gillham – Winchester Friends of the Earth – Submission re 7.10 Modelling and Appraisal Report [AS-010]

Winchester Friends of the Earth	Applicant Response
Submission re 7.10 Modelling and Appraisal Report	The late Deadline 3 submission regarding the modelling and appraisal report by Winchester Friends of the Earth **(AS-010)** appears to relate, in large parts, to the merits of government policy and the methodology of assessment for transport schemes. It is considered this information is not relevant to the Examination of this Scheme as it focuses on government policy. In particular, including but not limited to the sections summarised in green bold text as: ▪ Faux Science ▪ WebTAG economics is highly circular ▪ Willingness to pay ▪ An optimum level ▪ Efficiency - Transport Appraisal, not Road Appraisal: Matters that are relevant to the Scheme have been considered and are set out in the sections below.

Winchester Friends of the Earth	Applicant Response
	Appraisal Methodology and Transport Analysis Guidance (TAG) The Applicant notes the comments relating to the application of methods prescribed by the Department for Transport (DfT) and specifically the use of TAG. The *National Policy Statement for National Networks* (*NPS NN*) paragraph 4.5 states that the use of TAG for the Scheme is normal: *'Applications for road and rail projects… will normally be supported by a business case prepared in accordance with Treasury Green Book principles. This business case provides the basis for investment decisions on road and rail projects. The business case will normally be developed based on the Department's Transport Business Case guidance and WebTAG guidance.'* The Scheme appraisal and business case development, as set out in the **Combined Modelling and Appraisal Report (7.10, Rev 1)** and the **Case for the Scheme (7.1, Rev 1)**, has been undertaken in line with TAG which the Applicant considers is appropriate and proportionate. The Applicant disagrees that the methodology is a '*black-box'* and notes that extensive TAG documentation and related software manuals are available including detailed description of the methods, data sources, and calculations. In relation to the Scheme traffic forecasting and economic appraisal this includes but is not limited to the following documents published by the DfT: ▪ TAG Unit M4 Forecasting and Uncertainty ▪ TAG Unit A1.3 User and Provider Impacts and supporting TUBA software

Winchester Friends of the Earth	Applicant Response
	▪ TAG Unit A2.4 Appraisal of Productivity Impacts and supporting WITA software ▪ TAG Unit A3 Environmental Impact Appraisal ▪ TAG Unit A4.1 Social Impact Appraisal and supporting COBALT software
	Traffic Forecasting The *National Policy Statement for National Networks* (*NPS NN*) paragraph 4.6 states that: *'Applications for road and rail projects should usually be supported by a local transport model to provide sufficiently accurate detail of the impacts of a project. The modelling will usually include national level factors around the key drivers of transport demand such as economic growth, demographic change, travel costs and labour market participation, as well as local factors. The Examining Authority and the Secretary of State do not need to be concerned with the national methodology and national assumptions around the key drivers of transport demand.'* The Applicant's use of a DfT national-level travel and freight demand growth datasets as described in **Chapter 4** of the **Combined Modelling and Appraisal Report (7.10, Rev 1)** is appropriate. **Paragraph 4.3.2 of** the **Combined Modelling and Appraisal Report (7.10, Rev 1)** describes how alternative growth scenarios were incorporated in the Scheme appraisal: *'Three further sensitivity tests, referred to as the Low, High, and Optimistic growth scenarios were also run as part of this study. The High and Low growth scenarios were*

Winchester Friends of the Earth	Applicant Response
	prepared in accordance with TAG Unit M4 to reflect uncertainties in travel demand forecasts.'
	Wider Economic Benefits The **Case for the Scheme (7.1, Rev 1)** and **the Combined Modelling and Appraisal Report (7.10, Rev 1)** outline the economic narrative that supports the quantification of wider economic benefits, which have been calculated in accordance with TAG.
	Construction Costs The Scheme construction costs are described in the **Combined Modelling and Appraisal Report (7.10, Rev 1)** in **paragraph 5.4.1** where the 5th bullet states that '*costs accounted for project risk and uncertainty and the effects of construction related price inflation and, therefore, optimism bias was not applicable*.' As noted in the **Applicant Comments on Written Representations (Document Reference 8.8)**: '*The updated cost estimate was agreed late 2022 and included current and future inflationary increases. The inflation provision has been included in the scheme budget and the economic assessment.'*
	Road Safety The *National Policy Statement for National Networks* (*NPS NN*) paragraph 4.61 states that:

Winchester Friends of the Earth	Applicant Response
	'The applicant should undertake an objective assessment of the impact of the proposed development on safety including the impact of any mitigation measures. This should use the methodology outlined in the guidance from DfT (WebTAG) and from the Highways Agency.' The Applicant has used the appropriate methodology and therefore, has no comments on the application of the DfT's COBALT software and related methods to undertake the Scheme safety assessment as described in **paragraphs 5.5.20** to **5.5.27** of the **Combined Modelling and Appraisal Report (7.10, Rev 1)**.
	Traffic Modelling As noted in the **Applicant Comments on Written Representation (8.8, REP2-082c)**: '*The Applicant considers that the Scheme transport assessment is valid where this is based on transport models developed in accordance with Department for Transport guidance. As summarised in **Section 3.5** of the **Combined Modelling and Appraisal Report (7.10, Rev 1)** the M3 Junction 9 Model met the Department for Transport's (DfT) Transport Analysis Guidance criteria for the calibration and validation of transport models.'*
	User Benefits and Economic Analysis of this Scheme **Section 5.9** of the **Combined Modelling and Appraisal Report (7.10, Rev 1)** describes the sensitivity testing of alternative growth scenarios in the Scheme appraisal including the economic impact of Low and High traffic growth scenarios in terms of user benefits:

Winchester Friends of the Earth	Applicant Response
	'The Initial BCR was 0.98 and 1.77 for the Low and High scenarios, respectively, compared with 1.35 for the core growth scenario. The associated Adjusted BCRs were 1.34 (low) and 2.15 (high) compared with 1.72 for the core growth scenario.' **Paragraph 5.4.11** of the **Case for the Scheme (7.1, Rev 1)** describes how the traffic growth sensitivity testing was considered in the value for money assessment: *'Section 5.9 of the Combined Modelling and Appraisal Report (Document Reference 7.10) presents detail regarding the economic sensitivity tests that were undertaken. These tests considered the impacts of alternative traffic growth forecasts, and changes in economic parameters. As would be expected, the high growth scenario predicted a higher BCR and the low growth scenario predicted a lower BCR and these were symmetrical relative to the core scenario. The economic parameters test results indicated a relatively minor impact on the Scheme monetised benefits, which did not affect the overall assessment of the value for money.'* As per the Applicant Comments to Written Representation from Winchester Action on Climate Crisis (REP2-082c): '*The Applicant notes that the value for money (VfM) assessment, as reported, was undertaken in line with Department for Transport (DfT) guidance. Specifically the DfT Value for Money Framework states that 'the category should be derived from the adjusted value for money metric as it includes a reasonably broad range of impacts in which the Department has sufficient confidence'. Therefore, the inclusion of wider economic impacts is appropriate. Based on the adjusted Benefits Cost Ratio (BCR) of 1.72 and other impacts the VfM assessment indicates the scheme represents 'Medium' Value for Money.'*

3.2 Winchester Friends of the Earth – Supplementary Submission of Evidence to TSC on SRN 2023 [AS-011]

Winchester Friends of the Earth	Applicant Response
Submission re 7.10 Modelling and Appraisal Report *Supplementary Submission of Evidence to TSC on SRN 2023*	The late Deadline 3 supplementary submission by Winchester Friends of the Earth **(AS-011)** appears to be copies of their formal submissions to the Transport Select Committee 2013, 2023, the Major Road Network Consultation 2017, and a response to the policy paper '*Decarbonising Transport Setting the Challenge'* 2020. Their submissions relate to the merits of government policy and the methodology of assessment for transport Schemes. *National Policy Statement for National Networks (NPS NN*) paragraphs 4.5 – 4.7 under 'General Principles of Assessment in Section 4 'Assessment Principles' outline the appropriate methodology and guidance for transport modelling and economic appraisals, referring to WebTAG and the Treasury's Green Book principles. As this submission relates to the merits of policy set out in the paragraphs 4.5 – 4.7 of the *National Policy Statement for National Networks (NPS NN*) and are submissions to the Government (Department for Transport) and the Transport Select Committee, the Applicant considers that these matters fall outside the remit of the DCO examination and the Applicant is not required to provide any justification for its adherence to that national policy.

3.3 Dr Andrew Boswell's Written Representation [AS-012 and AS-013]

Section	Paragraph
1. Introduction	**1-8**
The Applicant notes the two key questions submitted as part of the Written Representation which are expanded on in later sections. The remainder of Section 1 sets out recent policy updates which the Applicant notes.	
2. The Scale and Logistical Impact of Net Zero **3. The Revised Net Zero Strategy** **4. Climate Change Committee 2023 Progress Report** **5. Green Alliance Net Zero Policy Tracker** **6. Carbon Budget Delivery Plan**	**9-95**
Sections 2-6 provides a critique of Government policy. The Applicant is not in a position to deviate from government policy and is not required to justify its continued adherence to that policy. The Applicant has completed a detailed review of climate policy within **Case for the Scheme (7.1, Rev 1),** as well as in responses to the draft *National Policy Statement for National Networks* – see **Draft National Policy Statement for National Networks Accordance Table (8.7, REP2-053)** . The Applicant has set out in detail that the obligation to carry out an assessment of the likely significant effects of the Scheme on greenhouse gas emissions arises from the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). In carrying out its assessment, the Applicant has had regard to the applicable law and policy tests, including under the Climate Change Act 2008, the Planning Act 2008 and the *National Policy Statement for National Networks*, as well as Design Manual for Roads and Bridges (DMRB) LA 114 (Highways England, 2021). Section 4.1 in the written response comments on the recommendation from the Climate Change Committee (CCC) that current project road schemes are reviewed so that '*decisions do not lock in unsustainable levels of traffic growth',* before stating that the M3 Junction 9 '*forecasts significant growth rates*'. The traffic growth rates applied to the Scheme's traffic model, as set out in **Table 5** of the **Transport Assessment Report (7.13, REP1-028)**,	

Section	Paragraph
It is noted paragraph 45 in the written response incorrectly references the calculated construction emissions from the Scheme. This is however corrected in later sections, so it is assumed this was a typographical error. In Section 5 and 6 of the written response, comments are made in relation to the Green Alliance's Net Zero Policy Tracker and Professor Marsden's '*Reverse Gear'*. These documents are not Governmental documents and so the Applicant is not required to consider these. The written response makes a specific point on the M3 Junction 9 in paragraph 80 on how the Scheme emissions will be impacted by Electric Vehicle (EV) uptake. The Applicant has provided an appropriate response in relation to the rate of vehicle electrification in response to Winchester Action on Climate Crisis (**REP1-038**), Post hearing submissions including within **Section 2.4** of the **Applicant Response to Written Summaries and Oral Submissions at Open Floor Hearing 1 (OFH1) (8.6, REP2-052)**. In summary, DEFRA's Emission Factor Toolkit V.11, which was used to calculate operational end-user emissions, accounts for likely changes to national vehicle fleet composition such as increasing uptake of EVs. This is the accepted position from Government on future EV uptake in the UK and is a widely accepted approach taken within Environmental Impact Assessments (EIA). Comments in Section 6 of the written response on requesting that the Scheme considers the Carbon Budget Delivery Plan (CBDP) are expanded on within Section 9, for which a response is provided below. A contextualisation of the Scheme's emissions against the CBDP is also provided within **Appendix A** of the **Applicant Comments on Deadline 3 Submissions (Document Reference 8.16).**	
7. Cumulative Assessment of Carbon Emissions from the Scheme	**96-99**
The Applicant responded to comments on the cumulative assessment in RR-018d within the **Applicant Responses to Relevant Representations (8.2, REP1-031)** in which the Applicant confirms that the approach taken in **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** follows the Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, 2021).	

Section	Paragraph
The Do-Minimum and Do-Something scenarios contain sources of greenhouse gas emissions that will occur regardless of whether the Scheme will be built out or not (baseline emissions). The net emissions of the Scheme, (i.e., new emissions) are identified by assessing the difference between the two scenarios, as required by the Design Manual for Roads and Bridges (DMRB) LA 114 (Highways England, 2021). This approach is also supported by IEMA guidance (IEMA, 2022) which states that '*the assessment should seek to quantify the difference in GHG emissions between the proposed project and the baseline scenario (the alternative project/solution in place of the proposed project). Assessment results should reflect the difference in whole life net GHG emissions between the two options"* and "*the significance of a project's emissions should therefore be based on its net impact over its lifetime, which may be positive, negative or negligible.'* The Applicant notes the reference to the three Judicial Review challenges which found the Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, 2021) methodology to be acceptable given that the assessment of greenhouse gases is not limited by a specific geographical boundary and that the UK Carbon Budgets account for cumulative emissions from a number of sectors. For clarity, the High Court decision for Case No: CO/2837/2022, CO/3506/2022, CO/4162/2022 on the A47 schemes confirmed that the Inspector came to the following view on the assessment approach: *'29., based on the current policy framework and guidance, it is my view that the Applicant's approach, through the use of carbon budgets, sufficiently considers the cumulative effects with other projects or programmes.'* The conclusion of the High Court confirms that the approach to the cumulative assessment was lawful by stating: *'89. It follows, therefore, that the Secretary of State succeeds on the primary issue raised by the challenge in that the Court is not persuaded that his approach to the assessment of cumulative carbon emissions was unlawful and/or in breach of the IEIA [Infrastructure Planning (Environmental Impact Assessment)] Regulations.'* Given that the assessment undertaken within **Chapter 14 (Climate**) of the **Environmental Statement (ES) (6.1, Rev 2)** follows the same approach as the A47 scheme's, it is considered that the M3 Junction 9 Improvement Scheme assessment appropriately considers cumulative effects in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.	

Section	Paragraph
8. Transport Decarbonisation Plan Sensitivity Test	**100-101**
The Applicant responded to comments on the Transport Decarbonisation Plan sensitivity test in RR-018c within the **Applicant Responses to Relevant Representations (8.2, REP1-031)** in which the Applicant confirms that this test did not form the basis for the impact assessment.	
9. Contextualisation of M3J9 with CBDP Surface Transport and Industrial Residual Emissions	**102-139**
The Applicant provides contextualisation of the Scheme's emissions against the Carbon Budget Delivery Plan (CBDP) in **Appendix A** of the **Applicant Comments on Deadline 3 Submissions (Document Reference 8.16).** It should be noted that the comparison against the CBDP is for contextualisation only and is not an alternative assessment of the significance of estimated changes in greenhouse gas emissions as a result of the proposed Scheme. This is due to the CBDP providing indicative projected sectoral-based residual emissions that are not to be interpreted as hard sectoral policy targets. This is the same approach taken for the A12 Chelmsford to A120 widening scheme mentioned within the written response. It is noted that the contextualisation provided in Table 4 of the written representation compares the Do-Something scenario to the Carbon Budgets and CBDP. As explained in response to Section 7 above, the appropriate methodology is set out within the Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, 2021) and Section 5.18 of the *National Policy Statement for National Networks* which requires the assessment to be based on the Scheme's net emissions (Do-Something minus the Do-Minimum scenarios). This approach has also been accepted by the High Court for the A47 schemes (case No: CO/2837/2022, CO/3506/2022, CO/4162/2022). The Applicant therefore disagrees with the contextualisation provided within the written representation and has instead provided an appropriate contextualisation that follows the *National Policy Statement for National Networks* and Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, 2021) methodology within **Appendix A** to **Applicant Comments on Deadline 3 Submissions 3 (Document Reference 8.16)**.	

Section	Paragraph
Section 9.3 of the written representation comments on errors within **Table 14.7** of **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** based on the author applying a linear interpolation of emission values for 2027 and 2042. As stated in **paragraph 14.5.34** of **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)**, the assessment applies the 2027 modelled year to the period covered by the Carbon Budgets given that there is no modelled data for the interim years. This approach aligns with the Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, 2021). The Applicant confirms that the numbers in **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** are correct. The written representation makes reference to IEMA Guidance significance thresholds (paragraph 130), however there is no defined threshold within IEMA guidance by which a certain volume of greenhouse gas emissions from a project will lead to a significant effect, nor does it define what can be considered as 'sufficient emission space in the Carbon Budgets'. This is for the Government to determine. This is further supported by the High Court judgement on the A47 scheme, Case No: CO/2837/2022, CO/3506/2022, CO/4162/2022, that states in paragraph 84 that '*this is a matter of judgement for the decision-maker*' and as confirmed in the same Case the A47 schemes, paragraph 97: '*the Secretary of State considers that the Proposed Development's contribution to overall carbon levels is very low and that this contribution will not have a material impact on the ability of Government to meet its legally binding carbon reduction targets.'* The Applicant's response to **RR-096** within the **Applicant Responses to Relevant Representations (8.2, REP1-031)**, sets out how and where the assessment within **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** aligns with IEMA guidance methodology (IEMA, 2022). The response goes on to assess the Scheme under the IEMA guidance (IEMA, 2022), concluding that the Scheme is considered to have a minor adverse and not significant effect. The Applicant therefore disagrees on the written representation conclusion that effects are Major Adverse. The conclusions of **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** remain as previously identified, the Scheme is considered to not have a material impact on the ability of Government to meet its legally binding carbon reduction targets and therefore the effect on climate change is not significant in line with the position set out within Section 5.18 of the *National Policy*	

Section	Paragraph
Statement for National Networks and Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, June 2021).	
10. Comments on Decision Making for the M3J9	**140**
The points raised in Section 10 re-iterate comments from previous sections. The Applicant provides their response to these points above and restates that the assessment of greenhouse gas emissions in **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** complies with all applicable law, policy and standards including the *National Policy Statement for National Networks* and Design Manual for Roads and Bridges (DMRB) LA 114 Climate (Highways England, June 2021). The assessment concludes a not significant effect on climate change given that the Scheme emissions will not materially affect the ability of the Government to meet its climate change obligations.	
11. Conclusions	**141-146**
Please see the Applicant's response to previous sections above.	

Appendix A Carbon Budget Delivery Plan

Appendix A – Carbon Budget Delivery Plan

Subject: Carbon Budget Delivery Plan
BIM Document Reference: HE551511-VFK-ECL-XXXX_XX-RP-LE-40001
Revision: P01
Date: 18 August 2023
Author: M3 Junction 9 Improvement Team, National Highways

1.1 Introduction

1.1.1 This note presents the contextualisation of the M3 J9 Improvement Scheme (the Scheme) against the *Carbon Budget Delivery Plan* (CBDP). It should be noted that the comparison against the *Carbon Budget Delivery Plan* is for contextualisation only and is not an alternative assessment of the significance of estimated changes in Greenhouse gas (GHG) emissions as a result of the proposed Scheme. This is due to the *Carbon Budget Delivery Plan* providing indicative projected sectoral-based residual emissions that are not sectoral policy targets.

1.1.2 The contextualisation provided within this note does not alter the likely significant effects assessment of GHG emissions that is provided by the Applicant in **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)**.

1.2 Carbon Budget Delivery Plan

1.2.1 The *Carbon Budget Delivery Plan* was published in March 2023 and sets out the Government's detailed proposals to enable the delivery of Carbon Budgets 4, 5 and 6 (i.e. to the end of 2037) in accordance with the UK's 2050 net zero carbon commitment under the Climate Change Act 2008.

1.2.2 The *Carbon Budget Delivery Plan* is based on an adjusted version of the Government's Energy and Emissions Projections, which apply assumptions of future economic growth, fossil fuel prices, electricity generation costs, UK population growth and other key variables. The carbon budgets apply to the whole of the UK economy and society.

1.2.3 Table 2 in the *Carbon Budget Delivery Plan* sets out projected sectoral emissions across the UK carbon budgets. Paragraph 19 goes on to explain: *'These figures represent the projected residual emissions, after proposals and policies set out in this report have taken effect. The figures shown for each carbon budget are total emissions over the five-year period. Alongside this, we have shown the actual emissions over the single year of 2021 to show current performance. These are only projections and should not be interpreted as hard sectoral policy targets. Within our overall carbon budgets it is vital to retain a*

degree of flexibility to adjust our plans as circumstances change given the complexity of the net zero system and the inherent uncertainty in any projections. Modelling cannot always take into account systemic feedback effects, which are hard to quantify. Other factors such as consumer behaviour, technological innovation and the speed and structure of future economic growth further contribute to intrinsic uncertainties of long-term sectoral emissions projections.'

1.2.4 Accordingly, the *Carbon Budget Delivery Plan* provides projected sectoral-based residual emissions. The *Carbon Budget Delivery Plan* further sets out the reasons why it is necessary to retain flexibility within the overall carbon budgets.

1.2.5 For ease of reference, the Applicant sets out the *Carbon Budget Delivery Plan* Table 2 projected sectoral-based residual emissions below in **Table A1**.

Table A1: Summary of sectoral residual emissions across carbon budgets (MtCO2e) taken from the Carbon Budget Delivery Plan Table 2

Sector	Current (2021, pa)	CB4 5-yr (average pa)	CB5 5-yr (average pa)	CB6 5-yr (average pa)
Agriculture and LULUCF	49	231 (46)	207 (41)	183 (37)
Buildings	88	350 (70)	320 (64)	217 (43)
Domestic Transport	109	546 (109)	422 (84)	254 (51)
Fuel supply	20	93 (19)	69 (14)	48 (10)
Industry	76	340 (68)	207 (41)	111 (22)
Power	54	143 (29)	63 (14)	42 (8)
Waste and F-gases	30	125 (25)	96 (19)	75 (15)
Greenhouse Gas Removals	N/A	0 (0)	-32 (-6)	-117 (-23)
Intl aviation and shipping (IAS)	20	217 (43)	210 (42)	184 (37)
Total excluding IAS	426	**1829 (366)**	**1353 (271)**	813 (163)
Total including IAS	446	2046 (409)	1563 (313)	**997 (199)**

1.2.6 The Carbon Budgets adopted through the Climate Change Act (CCA), 2008) are shown in bold in **Table A1** above as Carbon Budgets 4 and 5 excluded international aviation and shipping (IAS) but was included within Carbon Budget 6.

1.3 Contextualisation of M3 J9 Improvement Scheme against the Carbon Budget Delivery Plan

1.3.1 The methodology and limitations of the Table 2 projected sectoral emissions are set out in the *Carbon Budget Delivery Plan*. The Scheme emissions are those as presented in **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)** and no further analysis or calculation has been undertaken on these figures beyond the comparison within **Tables A3** and **A4** below.

Environmental Statement assessment

1.3.2 For ease of reference, **Table A2** below provides the emissions assessed within **Table 14.7** of **Chapter 14 (Climate)** of the **Environmental Statement (6.1, Rev 2)** on which the assessment of significance was made. As per the Design Manual for Roads and Bridges (DMRB) LA 114 (Highway England, 2021), the Scheme's assessment of significance of GHG emissions is determined by comparing emissions arising from the Scheme (i.e. net emissions) with National Carbon Budgets.

Table A2: Predicted GHG emissions against relevant UK carbon budgets

Project Stage	Estimated total GHG emissions over carbon budgets (tCO_2e) (DS Scenario)	Net GHG emissions over carbon budgets (tCO_2e) (DS- DM Scenarios)	Net scheme GHG emissions per relevant carbon budget (tCO_2e)			
			Third (2018 - 2022)	Fourth (2023 - 2027)	Fifth (2028 - 2032)	Sixth (2033-2037)
Construction (over period of 2024-2027)	37,070	37,070	N/A	37,070	N/A	N/A
Operation (modelled from 2027 through to 2037)	45,774,146	37,521	N/A	3,411	17,055	17,055
Total	**45,811,216**	**74,591**	**N/A**	**40,481**	**17,055**	**17,055**
% of Carbon Budget	**N/A**	**N/A**	**N/A**	**0.002 %**	**0.001 %**	**0.002 %**

Contextualisation against the Carbon Budget Delivery Plan total residual emissions

1.3.3 **Table A3** contextualises the Scheme's emissions against the total residual emissions across all sectors (excluding aviation and shipping) provided within Table 2 of the *Carbon Budget Delivery Plan*. The Scheme's emissions are shown as a proportion of the emissions available within the Fourth, Fifth and Sixth Carbon Budgets once Government policy measures have been applied (i.e. the residual emissions).

1.3.4 The method for determining the contribution of the Scheme's emissions to the relevant carbon budget is the same method followed within **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2).** Construction emissions fall entirely within the fourth carbon budget period and therefore the total construction emissions (37,070 tCO_2e) are compared against carbon budget 4 only.

1.3.5 For operation, the opening year of the Scheme is 2027, therefore one year of emissions (3,411 tCO_2e) is compared against carbon budget 4. Operational

emissions will occur across the entirety of carbon budgets 5 and 6 therefore, five years' worth of emissions (17,055 tCO_2e), is compared against each.

Table A3: Contextualisation of the Scheme's emissions against Carbon Budget Delivery Plan Total Residual Emissions (after policy savings).

Project Stage	Estimated total GHG emissions over carbon budgets (tCO_2e) (DS Scenario)	Net GHG emissions over carbon budgets (tCO_2e) (DS- DM Scenarios)	Net scheme GHG emissions per relevant carbon budget (after policy saving)		
			Fourth (2023 - 2027)	Fifth (2028 - 2032)	Sixth (2033- 2037)
Construction (over period of 2024-2027)	37,070	37,070	0.002%	N/A	N/A
Operation (modelled from 2027 through to 2037)	45,774,146	37,521	0.0002%	0.001%	0.002%
Total	**45,811,216**	**74,591**	**0.002%**	**0.001%**	**0.002%**

Contextualisation against the Carbon Budget Delivery Plan domestic transport and industry sector emissions

1.3.6 **Table A4** contextualises the Scheme's construction emissions against the residual emissions associated with the 'Industry' sector within the *Carbon Budget Delivery Plan*. It is noted however that the Scheme's construction emissions fall within multiple sectors including 'Resources and Waste', 'Power' and 'Forestry and Other Land Use' sectors in the *Carbon Budget Delivery Plan*. However, to allow for a simplified comparison the total construction GHG emissions from the Scheme have been compared against the 'Industry' sector only.

1.3.7 In addition, contextualisation is provided for the Scheme's operation emissions against the residual emissions associated with the 'Domestic Transport' sector within the *Carbon Budget Delivery Plan*. It is noted that the *Carbon Budget Delivery Plan* defines the 'Domestic Transport' sector as "*emissions from all forms of road and rail transport, domestic aviation and domestic shipping (including fishing vessels).*" The Scheme's GHG emissions values include both domestic and commercial vehicle emissions such as a Heavy Duty Vehicles

(HDVs). As such, the values presented in **Table A4** incorporate a contextualisation of both domestic and commercial vehicles against the 'Domestic Transport' sector.

1.3.8 The Scheme's operational emissions from energy use have been excluded from the comparison against the 'Domestic Transport' sector, given that these fall under the 'Power' sector in the *Carbon Budget Delivery Plan* and are relatively small (92 tCO_2e/yr).

1.3.9 As the construction and operational emissions are compared to two different sectors, the 'Total' percentage contribution is not applicable.

Table A4: Contextualisation of the Scheme's construction emissions against 'Industry' residual emissions and the Scheme's end-user emissions against the 'Domestic Transport' residual emissions reported within the Carbon Budget Delivery Plan.

Project Stage	Estimated total GHG emissions over carbon budgets (tCO_2e) (DS Scenario)	Net GHG emissions over carbon budgets (tCO_2e) (DS-DM Scenarios)	Net scheme GHG emissions per relevant carbon budget for Industry (construction) and Domestic Transport (operation) (after policy saving)		
			Fourth (2023 - 2027)	Fifth (2028 - 2032)	Sixth (2033-2037)
Construction (over period of 2024-2027)	37,070	37,070	0.011%	N/A	N/A
Operation end-user (transport) (2027 to 2037)	45,773,134	36,509	0.0006%	0.004%	0.007%

1.4 Summary

1.4.1 This submission provides contextualisation of the Scheme's emissions against the residual emissions projections given in the *Carbon Budget Delivery Plan*. The Applicant has noted the limitations and assumptions associated with compiling these projections. This submission is provided for contextualisation and information only and does not provide an assessment of significance; nor does it alter the assessment of significance provided in **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)**. All Scheme emission

values within **Tables A1** to **A4** have been taken directly from **Chapter 14 (Climate)** of the **Environmental Statement (ES) (6.1, Rev 2)**.