

M3 JUNCTION 9 NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECT

Examining Authority Third Written Questions (ExQ3) – Response 27 October 2023

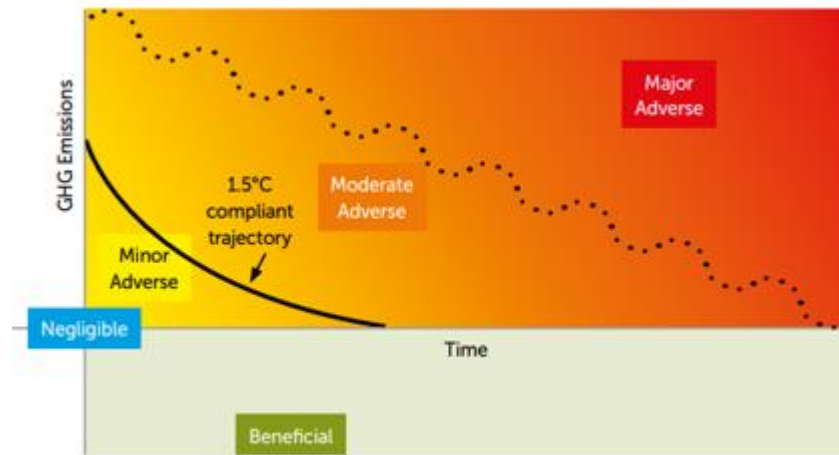
ExQ2	Question	Response
Q1.3.2	At Deadline 5, the Applicant provided further updates to the First Iteration of Environmental Management Plan (fiEMP) including to the appendices [REP5-019]. Please provide any comments in relation to these additions/updates.	<p>The City Council note the additions made to investigate further planting which secures further consultation with the relevant Planning Authorities at a later detailed design stage.</p> <p>WCC has a duty to consider the National Park and its statutory purposes in its decision making and I would also defer to SDNPA officers as the majority of the landscape areas in question sit within the National Park.</p> <p>Quarterly GHG emission data during construction and operation are also now included which is supported.</p> <p>WCC has no further comments to make on the amendments.</p>
Q1.3.3	At Deadline 5, the Applicant submitted a draft Design Principles Report [REP5-028] for the application and ongoing detailed design. Please provide any comments on this submission.	<p>The Design Principles Report (REP5-028) does not contain specific detail of the design measures but includes generic principles duplicated from other documents. The document also appears to exclude specific details for the non-motorised routes. Agreeing acceptable design principles is vital given the location of the site within the National Park. The City Council has a duty to consider the setting of the National Park in decision making and expects the highest standards.</p> <p>It is however acknowledged that the applicant may not be able to provide precise detail at this early stage of development. The City Council would be satisfied to include further iterations of the Design Principles Report as a requirement to allow the applicant to provide further detail at a later stage once technical design work has been undertaken. The Requirement should follow the standard wording, being prior to development and allowing consultation with the Authorities.</p>
Q3.3.1	The WCC response to Q3.2.1 [REP5-037] stated that, regarding monitoring of PM2.5, it would like to explore opportunities further with the Applicant. Please detail what opportunities you consider are available and how these	<p>The opportunities relate to a monitoring station on Easton Lane, Winchester as this is a sensitive area for air quality.</p> <p>The applicant is complying with best practise however the Council's Environmental Health Officer noted during ISH2 that further monitoring by the applicant (in the form of the additional measuring and monitoring station on Easton Lane) would be welcomed.</p>

	would support to objective of the Council and the application.	
Q6.3.1	<p>The WCC Deadline 5 submission [REP5-037] seeks the provision of a single document outlining all Climate mitigation alongside an assessment of how the scheme would function as part of the Applicant's wider Net Zero Plans. The Applicant has declined to provide such a standalone document on the basis, amongst other things, that this would be a duplication of information already available within the application documents and also rejects the inclusion of a related requirement in the Draft DCO to secure this. The ExA notes that mitigation measures are currently spread across different documents, and there would seem to be merit in the provision of a single document to avoid a paper chase for those seeking to understand and enforce such climate mitigation.</p> <p>(iv) Please provide a draft Requirement to enforce the measures that you seek and set out any additional mitigation measures that you believe should be included with justification.</p>	<p>(iv) Draft Requirement – “No part of the authorised development is to commence until a Climate Mitigation and Monitoring Plan has been submitted to and approved in writing by the Secretary of State, following consultation with Winchester City Council, South Downs National Park Authority and Hampshire County Council”.</p> <p>WCC would expect the Climate Mitigation and Monitoring Plan to include all the measures outlined throughout the application in one centralised document, including timeframes for delivery. This would allow clear and documented measures to improve compliance and enforcement.</p> <p>WCC acknowledge the work undertaken by the applicant to provide mitigation for construction impacts. However, the operational emissions require further mitigation. The additional mitigation measures proposed are:</p> <ul style="list-style-type: none"> - Creation of a Carbon Fund - Consideration of lower speed limits through the zone to lower traffic emissions (or justification if not technically possible in this instance). - Consideration of additional design elements to support the Government's Net Zero Growth for Transport e.g., compound to be 'design ready' for a hydrogen fuelling hub or EV charging zone for HGVs/coaches/cars post construction - Contribution towards cycle routes in the area - Tree planting (quantified as a mitigation measure) or purchase of Carbon Credits that would cover the increase in emissions generated by the scheme.
Q6.3.3	<p>The WCC response to Q 6.2.9 (i) [REP5-037] indicates that the council has assessed the emissions to be significant based, amongst other things, on the guidance produced by IEMA. The document 'Assessing Greenhouse Gas Emissions and Evaluating their Significance'. Please provide further details of that assessment.</p>	<p>The City Council's Sustainability Manager has evaluated the significance of the M3 Junction 9 emissions using the IEMA guidance document 'Assessing Greenhouse Gas Emissions and Evaluating their Significance (2nd edition)'. This guidance was developed in consultation with a wide range of expert practitioners in the field of EIA including representatives of National Highways.</p> <p><u>Staying within 1.5 degrees</u></p> <p>The timing of reductions is also critical due to the cumulative effect of GHG in the atmosphere. Achieving carbon neutrality or very low emissions by</p>

2025 instead of 2040 will avoid 15 years of cumulative heating. This is particularly relevant in the operational phase where the increase in emissions can be mitigated or offset.

Chapter 6 of the IEMA Guidance discusses how significance should be assessed with a number of principles on how to assess whether a project's whole life GHG emission align with the UK's net zero compatible trajectory.

The UK has set a legally binding GHG reduction target for 2050 with interim 5 yearly carbon budgets which define our trajectory towards net zero. These budgets are of the required magnitude and rate to meet the goals of the Paris Agreement, which should limit severe adverse effect. To meet the targets, action is required from all sectors to reduce GHG. The purpose of the EIA is therefore to give proportionate consideration as to whether this project will contribute to or jeopardise the achievement of these targets. Where GHG emissions cannot be avoided, the goal of the EIA process should be to reduce the project's residual emissions at all stages.



The graph above is an extract from Chapter 6 of the IEMA Guidance which illustrates how to determine significance depending on the project's whole life GHG emissions by assessing how this aligns with the UK's net zero compatible trajectory. In this case, the project should align with the 78%

		<p>reduction in GHG emissions by 2035 required under the legally binding 6th Carbon Budget accepted by Parliament.</p> <p>Section 6.3 'Significant principles and criteria' states <i>'A project that causes an increase in carbon emissions, or that follows a 'business as usual' approach is considered not to be compatible with the UK's net zero trajectory, and therefore should be considered a significant adverse effect'</i>. The guidance continues that where a project's GHG impacts 'are not mitigated or are only compliant with do minimum standards, do not comply with existing local and national policy, it is likely they are locking in emissions and will not make a meaningful contribution to the UK's trajectory towards net zero, they should be considered major adverse.</p> <p>If they are partially mitigated and meet applicable existing and emerging policy requirements, they can be considered moderate adverse.</p> <p>In assessing the mitigations and offsetting put forward, the lack of quantified data or attempted carbon calculation to demonstrate the impact or otherwise of the mitigations offered (a bridleway, retention of pavements and tree planting) suggest these are minimal compared to the increase in carbon emissions from construction and operation.</p> <p>It should be noted that the comparison against the CCC's 4th, 5th and 6th carbon budgets may not be delivered in full. Risk assessments have been made by central government for this and schemes that increase emissions add to this risk. In this case, the CCC has issued warnings that the UK is not on track to meet these Budgets, including in its 2023 Progress Report to Parliament. Recommendation R2023-148 states that, by the end of 2023, the Government should <i>'Conduct a systematic review of current and future road-building projects to assess their consistency with the Government's environmental goals. This should ensure that decisions do not lock in unsustainable levels of traffic growth and develop conditions (which can be included in the Roads Investment Strategy 3 process and beyond) that permit schemes to be taken forward only if they meaningfully support cost-effective delivery of Net Zero and climate adaptation.'</i> This implies concern about traffic growth arising from schemes like this endangering our ability to meet the climate change targets.</p>
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For the reasons above, the conclusion that the emissions from this scheme are Significant (Major Adverse) have been drawn. The City Council has therefore requested a thorough mitigation plan in a centralised document.

Comparison to emissions arising from existing motorway use

A comparison was made to emissions arising from existing motorway use within Winchester, namely from M3 use. BEIS, now DESNZ publishes annual figures by district which show that emissions in 2021 amounted to 155.5 kTCO₂e.

Table 1.2: Local Authority territorial carbon dioxide (CO₂) emissions estimates 2005-2021 (kt CO₂e) - Full dataset

Winchester	2017	190.3
Winchester	2018	188.6
Winchester	2019	180.0
Winchester	2020	143.5
Winchester	2021	155.2

Source: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021>

The increase in operational emissions in the first year of operation is 2.696 kTco₂e (operational emissions) which equates to 1.7% increase in GHG emissions. Although a small increase, it is in the wrong direction and does not contribute towards meeting the UK's targets under the Climate Change Act.

		<p>The increase in annual public sector emissions of 37.6 tCO₂e will be impacted by the construction emissions of the scheme which are roughly equal at 35.3 KTco₂e.</p> <p><u>Design Manual for Road and Bridges</u></p> <p>The EIA explains that the scheme has been designed using the Design Manual for Roads and Bridges. Section E/1.22 of the Design Manual for Roads and Bridges states:</p> <p style="text-align: center;">Minimise greenhouse gas emissions</p> <p>E/1.22 Carbon emissions (greenhouse gases or carbon dioxide equivalents) associated with the whole life of a project shall be minimised.</p> <p>E/1.22.1 The minimisation of carbon emissions may be achieved by working in accordance with a recognised standard or specification agreed with Highways England e.g. Carbon Management in Infrastructure PAS 2080:2016 [Ref 1.N].</p> <p>PAS2080 goes on to describe a process aligned to the IEMA assessment approach in Chapter 6. An extract from PAS2080 is below.</p> <p style="text-align: center;">4.2 Aligning to net zero carbon transition</p> <p>Asset owners/managers shall prioritize target-setting and carbon reduction measures for the project and/or programme of work that align to and support the transition to net zero carbon as set out at the system, network or national level (see Clause 8 for further details).</p> <p>Where national or sector carbon budgets do not exist, or where downscaling of such budgets at the project/ programme level has not been set due to lack of policy or regulation, asset owners/managers shall engage with other asset owners/managers and regulators/government in their network or system to assess how the project or programme of work aligns with wider decarbonization goals.</p> <p>The lack of any figures, quantified data or indeed Annex analysing the mitigations and offsetting make this harder to assess, but the increase in carbon emissions from this scheme suggest it does not 'support the transition to net zero' as currently designed.</p> <p><u>Targets set by National Highways</u></p> <p>National Highways has published its own Net Zero Strategy that aligns with 1.5 degree trajectory in line with Science Based Targets initiative, (SBTi).</p>
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		<p>This includes certain commitments including construction emissions which are reproduced below as well as others such as 75% of car and vans to be electric by 2025.</p> <p>In terms of road users, commitments include having a preferred investment plan for HGV charging by 2028, for RP4 implementation and to publish a blueprint for EV charging services and energy storage by 2023. We also note that National Highways has already designed and constructed a major Net Zero road scheme.</p> <p>The council believes these are genuine mitigations that would reduce operational emissions.</p>
Q6.3.5	<p>The WCC response to Q 6.2.10 (ii) [REP5-037] in relation to the provision of Carbon Offsetting funds provides figures for both construction and operation derived from the UK ETS (UK Emissions Trading Scheme).</p> <p>(i) For the avoidance of doubt please confirm that these figures represent the level of Carbon Offsetting funds now sought and explain how you anticipate that could be secured and utilised?</p>	<p>WCC would like to see both mitigation and offsetting brought forward, in line with the PAS 2080 standard. The council has asked for a response on a number of suggested mitigations and offsetting but has not received a considered response to date, namely:</p> <ul style="list-style-type: none"> - Creation of a Carbon Fund - Consideration of lower speed limits through the zone to lower traffic emissions - Consideration of additional design elements to support the Government's Net Zero Growth for Transport e.g., compound to be 'design ready' for a hydrogen fuelling hub or EV charging zone for HGVs/coaches/cars post construction. - Contribution towards cycle routes in the area. - Tree planting or purchase of Carbon Credits that would cover the increase in emissions generated by the scheme. <p>The council notes that pushing back the cessation of sales of petrol and diesel cars by 5 years to 2035, as announced in September 2023 by the Prime Minister, could lead to an increase in operational emissions during 2027 to 2035.</p> <p>The concept of the creation of a Carbon Offset Fund to lock in carbon reductions from local projects would seem to fulfil the offsetting requirement over both the construction and operational phases of the junction upgrade.</p>

		<p>Carbon Offset Funds create impact through investments in carbon-reducing projects within the council's boundary. Carbon funds are now common across councils within the South East, for example Milton Keynes, Horsham and Southampton.</p> <p>In general, funds are financed from S106 contributions. In this instance, the funding would arise from a single transport-related infrastructure project from National Highways. It is therefore envisaged that carbon reduction funds would support only local transport related projects that reduce CO2 emissions with a focus on walking and cycling infrastructure improvements to boost active travel, investment in Electric Vehicle Charge Points to build capacity for the end user and innovations around transport technology that will sequester carbon or reduce emissions in another way. Examples of projects that could be supported include:</p> <ul style="list-style-type: none">• Projects that encourage active transports e.g., cycling and walking, such as Cycle path infrastructure particularly in study area of project and Cycle storage at end of cycle path• Electric Vehicle Charge points (installation and operational costs)• Hydrogen or other low carbon vehicle infrastructure• Purchase of Carbon Credits to offset operational emissions.• Nature based solutions including tree planting or rewilding that sequesters carbon. <p>It is envisaged that the fund would operate in a similar manner to the Greater London Authority's Carbon Offset Fund except in this case, the income would be derived from National Highways making a contribution to the City Council at the time of construction (for embedded carbon emissions) and annually for the operational emissions.</p> <p>The council notes that National Highways has a 'designated fund'. The designated fund covers four areas that seem to align with the aims of this Carbon Fund including carbon reduction and boosting biodiversity. It is suggested that consideration is given to using the designated fund to provide the income earmarked for projects within the Winchester City Council boundaries.</p> <p>A suggested level of income has been put forward in alignment with UK ETS (UK Emissions Trading Scheme). The council notes higher values of £126 to</p>
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		<p>£378 tCO₂e for 2023 are advocated in the Valuation of greenhouse gas emissions: for policy appraisal and evaluation - GOV.UK (www.gov.uk). In London, the GLA requested £95/tCO₂e in 2022 as the contribution developers should pay into Carbon Offset Funds, although some councils such as Lewisham have set this at a higher level of £104 tCO₂e. In any case, the value of carbon put forward by the council seems in line with national guidelines and policy and the council confirms that its position is that the UK ETS (UK Emissions Trading Scheme) provides the best benchmark against which to set the value of carbon for the Carbon Offset Fund.</p>																					
Q6.3.9	<p>The WCC Deadline 5 submission [REP5-037] refers to the Carbon Neutrality Action Plan (CNAP) which the Applicant has discounted as motorway emissions are excluded from the Council's Action Plan. WCC states that the reason for this exclusion is because motorway emissions are beyond the scope of the Council's control and motorways are national infrastructure which require a national response. WCC submits that the NSIP process is part of that national response referred to in the CNAP and disagrees that the overall aims of the CNAP should be discounted. That position is also supported by the Winchester Friends of the Earth response to Q 6.2.4 [REP5-040].</p> <p>Please set out what WCC regards as the implications of the M3/J9 scheme for the achievement of its decarbonisation strategy and the offsetting that would be required to make up any shortfall.</p>	<p>The council has set a target of 2030 to be carbon neutral as a district. Direct and indirect carbon emissions will arise from this project and the council sets out in its answer below that a lack of information from National Highways as to how the operational figure was derived in terms of end-user emissions would be very informative in this respect. As you see in Table 14.2.2 reproduced below, it is not possible to discern the local impact.</p> <p>Table 14.2.2: B9 End User Utilisation of Infrastructure Calculations Summary</p> <table border="1"> <thead> <tr> <th rowspan="2">Operation Year</th> <th colspan="3">End-user Emissions (tCO₂e) – life cycle stage B9</th> <th rowspan="2">Total (cumulative) over modelled 60-year operation (2027–2087) DM</th> <th rowspan="2">Total (cumulative) over modelled 60-year operation (2027–2087) DS</th> <th rowspan="2">Difference</th> </tr> <tr> <th>DM Scenario</th> <th>DS Scenario</th> <th>Difference</th> </tr> </thead> <tbody> <tr> <td>2027</td> <td>3,214,777</td> <td>3,217,473</td> <td>2,696</td> <td rowspan="2">160,624,429</td> <td rowspan="2">160,764,188</td> <td rowspan="2">139,759</td> </tr> <tr> <td>2042</td> <td>2,497,839</td> <td>2,500,046</td> <td>2,207</td> </tr> </tbody> </table>	Operation Year	End-user Emissions (tCO ₂ e) – life cycle stage B9			Total (cumulative) over modelled 60-year operation (2027–2087) DM	Total (cumulative) over modelled 60-year operation (2027–2087) DS	Difference	DM Scenario	DS Scenario	Difference	2027	3,214,777	3,217,473	2,696	160,624,429	160,764,188	139,759	2042	2,497,839	2,500,046	2,207
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Looking at contribution of carbon emissions within the Winchester District, the BEIS/DESNZ data shows us that transport remains the highest contributor to the Winchester district emissions at 55% of total emissions.

Source	2020 (kt CO2e)	% share
Transport	351.9	55.4%
Domestic	185.5	29.2%
Commercial	43.7	6.9%
Industry	43.1	6.8%
Public Sector	32.5	5.1%
Agriculture	22.4	3.5%
LULUCF	-44.3	-7.0%
Grand total	634.8	

Splitting this out further, we can see:

- 20% of transport emissions comes from motorways
- 15% of transport emissions comes from A Road
- 18% of transport emissions comes from minor roads

Reducing transport emissions to a carbon neutral level by 2030 is therefore a key challenge the council is facing. Any project that is working in the opposite direction will present further difficulties in achieving this challenging target.

However, aside from the operational emissions, the carbon emissions arising from construction, including construction traffic and fuel and energy consumed on site, will also have an impact. Comparing the construction emissions to annual emissions from the public sector shows these are roughly similar.

		<p>An increase in indirect emissions from the scheme will impact on the council's ability to meet its 2030 target.</p> <p>The council understand that National Highways has agreed to carbon monitoring. This should include detail on what contributions arise from direct and indirect traffic flows. The information can be used to inform both the income (i.e., tCO2e arising multiplied by cost of carbon) to the Carbon Offset Fund and the extent of carbon reduction that the projects the fund support should achieve.</p>
Q6.3.10	<p>The WCC response to Q 6.2.4 [REP5-037] states that the revised CNAP 2023-2030 which was adopted by the WCC Cabinet on 13 September 2023 sets out targets for reducing transport emissions that would be impacted by the additional traffic flows generated by the scheme. Please explain further why you make that assertion and the extent of any anticipated impact?</p>	<p>The council has set a target of 2030 to be carbon neutral as a district. The increased traffic flows on the M3 from the scheme as predicted by National Highways in its modelling, will in part be due to increased local traffic flowing to and from the M3 through the road network within the Winchester District.</p> <p>It is challenging to assess without greater transparency of how the operational carbon emissions were reached. Appendix 14.2 - Operational Greenhouse Gas Assessment Calculations' simply contains the table without any accompanying detail on what contributions arise from direct and indirect traffic flows.</p> <p>Given the size and complexity of the scheme, a far more detailed calculation which clearly implies the study area would be extremely helpful.</p>
Q6.3.11	<p>The WCC Deadline 5 submission [REP5-037] indicates that following the explanation provided by the Applicant at the recent meeting between the parties, it is clear that the data provided in the Applicant's ES Appendix 14.3 – Greenhouse Gas Benchmarking [APP-148] does not provide a true comparison due to the differences in the study areas, and WCC is therefore unable to compare emissions with other schemes. (ii) Please explain why you regard it as necessary, in the light of NPSNN and other relevant policies, for such a</p>	<p>WCC wished to use the information to investigate the amount of mitigation and monitoring provided for the comparable schemes.</p> <p>This was to ensure that the mitigation offered for the M3 Junction 9 Scheme was appropriate and reflective of the development's impact rather than duplicated measures with no site-specific benefit.</p> <p>WCC is asking why the other schemes were chosen as comparisons, and in view of the impact of this scheme for the network and the poor impact on the carbon footprint, why there is not a defined programme of mitigation for the operational period of <i>this</i> scheme.</p>

	comparison to be provided as part of the application.	
Q12.3.1	<p>WCC response to Q 9.2.19 [REP5-037] states that based upon an initial review, the Design Code does not contain specific details of the design measures but includes rather generic principles duplicated from other documents. The document also appears to exclude specific details for the non-motorised routes. This latter point is also referred to in the WCC response to Q 12.2.14.</p> <p>(ii) Please provide a further update once you have had the opportunity to review the document in more detail and provide any suggested drafting amendments to the Draft Design Code and/or Requirement 12 that are considered to be necessary at Deadline 6.</p> <p>(iii) Please explain why you consider that it is necessary for the specific details sought to be included at this stage?</p>	<p>(ii) No further comments on the content of the Report following a further review.</p> <p>As mentioned in the response to Q1.3.3, the Design Principles Report (REP5-028) does not contain specific detail of the design measures but includes generic principles duplicated from other documents. The document also appears to exclude specific details for the non-motorised routes. Agreeing acceptable design principles are vital given the location of the site within the National Park. The City Council has a duty to consider the setting of the National Park in decision making and expects the highest standards.</p> <p>It is however acknowledged that the applicant may not be able to provide precise detail at this early stage of development. The City Council would be satisfied to include further iterations of the Design Principles Report as a requirement to allow the applicant to provide further detail at a later stage once technical design work has been undertaken. The Requirement should follow the standard wording, being prior to development and allowing consultation with the Authorities.</p>
Q14.3.1	<p>WCC does not appear to have provided a response to Q14.2.8 [PD-011]. The ExA acknowledges that there may have been confusion as to whom this was addressed.</p> <p>This states: "The SoCG between the Applicant and WCC [REP4-030] at 2.1 indicates that the WCC agrees that the five strategic objectives of the scheme including reducing delays at the Winchester junction, as well as the M3, A33 and A44, supporting economic growth and improving walking, cycle, and horse routes align with the City of Winchester Movement Strategy (2019) key priorities. The ExA notes the WCC's outstanding concerns and potential</p>	<p>Thank you for clarifying the question was also intended for WCC.</p> <p>The principle of the development is accepted. Paragraphs 5.1.1 – 5.1.2 of the WCC Local Impact Report confirm that whilst the Development Plan does not contain a specific policy to allow the principle of major road infrastructure projects (due to their unique nature), Development Plan policies do provide exemptions and it is acknowledged that the scheme is developing existing infrastructure in the countryside. The development is also a key part of the Winchester Movement Strategy produced by Winchester City Council and Hampshire County Council.</p> <p>In paragraph 1.2 of the Local Impact Report a policy summary was provided. The 'outstanding matters' referred to in the Archaeology, Environmental Health, Biodiversity and Landscape categories have been addressed either by additional information of suitable Requirements. The Statement of Common Ground will be updated accordingly.</p>

	<p>conflicts with Local Plan policies in relation to climate change issues. Please clarify the position of WCC in relation to the acceptability of the principle of the scheme and whether it would be consistent with the overall aims of the Local Plan.”</p> <p>Please provide a response, or direct the ExA to where an answer has already been given in submissions.</p>	<p>As stated, Climate remains the area of disagreement however at this stage the majority of topics comply with the aims of the Local Plan and Movement Strategy.</p>
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Winchester
City Council