The Planning Inspectorate
Yr Arolygiaeth Gynllunio

SCOPING OPINION:

Proposed South East Strategic Reservoir Option (SESRO)

Case Reference: WA010005

Adopted by the Planning Inspectorate (on behalf of the Secretary of State) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

08 October 2024

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1. INTRODUCTION

1.0.1 On 28 August 2024, the Planning Inspectorate (the Inspectorate) received an application for a Scoping Opinion from Thames Water Utilities Limited (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed South East Strategic Reservoir Option (SESRO) (the Proposed Development). The Applicant notified the Secretary of State (SoS) under Regulation 8(1)(b) of those regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development and by virtue of Regulation 6(2)(a), the Proposed Development is 'EIA development'.

1.0.2 The Applicant provided the necessary information to inform a request under EIA Regulation 10(3) in the form of a Scoping Report, available from:

http://infrastructure.planninginspectorate.gov.uk/document/WA010005https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/WA010005/documents

1.0.3 This document is the Scoping Opinion (the Opinion) adopted by the Inspectorate on behalf of the SoS. This Opinion is made on the basis of the information provided in the Scoping Report, reflecting the Proposed Development as currently described by the Applicant. This Opinion should be read in conjunction with the Applicant's Scoping Report.

1.0.4 The Inspectorate has set out in the following sections of this Opinion where it has / has not agreed to scope out certain aspects / matters on the basis of the information provided as part of the Scoping Report. The Inspectorate is content that the receipt of this Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects / matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects / matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.

1.0.5 Before adopting this Opinion, the Inspectorate has consulted the 'consultation bodies' listed in Appendix 1 in accordance with EIA Regulation 10(6). A list of those consultation bodies who replied within the statutory timeframe (along with copies of their comments) is provided in Appendix 2. These comments have been taken into account in the preparation of this Opinion.

1.0.6 The Inspectorate has published a series of advice notes on the National Infrastructure Planning website, including Advice Note 7: *Environmental Impact Assessment: Preliminary Environmental Information, Screening and Scoping* (AN7). AN7 and its annexes provide guidance on EIA processes during the pre-application stages and advice to support applicants in the preparation of their ES.

1.0.7 Applicants should have particular regard to the standing advice in AN7, alongside other advice notes on the Planning Act 2008 (PA2008) process, available from:

https://www.gov.uk/government/collections/national-infrastructure-planning-advice-notes

1.0.8 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (e.g. on formal submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.

2. OVERARCHING COMMENTS

2.1 Description of the Proposed Development

(Scoping Report Section 2)

ID	Ref	Description	Inspectorate's comments
2.1.1	Paragraph 2.7.6	Utility points of connection	Scoping Report paragraph 2.7.6 states that points of connections for utilities may extend beyond the scoping boundary following agreement with network owners and operators. Where this is the case, the Applicant should extend the red line boundary of the Proposed Development site to account for these connections, identify the changes in the red line boundary and their extent and determine if and how this alters the scope of the ES assessments.
2.1.2	Paragraph 2.7.7	Grid connection and energy storage	Scoping Report paragraph 2.7.7 states that renewable energy is proposed to enable a net zero operation and that this would require an export connection and/or energy storage on site. However, the Scoping Report does not discuss potential impacts from grid connection or energy storage options or anticipated energy generation capacity/use. Should these elements form part of the Proposed Development in the ES, the parameters for capacity and any import/export should be described, and associated likely significant effects should be assessed in the relevant aspect chapters across all phases. The ES should describe any associated mitigation measures and explain how they are secured eg an emergency fire management plan for battery storage systems. In the ES consideration of alternatives, this should demonstrate how environmental constraints, viability and consultation have refined options and locations.
2.1.3	Paragraphs 2.7.7, 16.7.7 and 16.7.8	Renewable energy generation options	The Scoping Report identifies potential renewable energy options but does not specify what options are being considered. Each renewable energy option will have its own associated likely significant effects which have not been discussed or considered in the Scoping Report. The ES should assess associated likely significant effects of the option or options presented as part of the description of the Proposed

ID	Ref	Description	Inspectorate's comments
			Development across all phases. In the ES consideration of alternatives, this should demonstrate how environmental constraints, viability and consultation have refined options and locations.
2.1.4	Section 3	Consideration of alternatives	The Scoping Report refers to the Water Resources Management Plans (WRMP) 2019 and 2024 which identify the most feasible options for water supplies under the Water Industry Act 1991. However, the outcomes and conclusions of these plans are not summarised in the Scoping Report. The ES should include a high level summary of the WRMPs to demonstrate why alternative approaches were not considered to be feasible.
2.1.5	Paragraph 7.8.10	Lighting requirements	The Scoping Report refers to the need for lighting during construction and operation, however there is limited detail regarding the type of lighting and when it might be required. The ES should describe the lighting strategy and assess significant effects on sensitive receptors from lighting during construction and operation where they are likely to occur.

2.2 EIA Methodology and Scope of Assessment

(Scoping Report Section 5)

ID	Ref	Description	Inspectorate's comments
2.2.1	Paragraph 5.2.6	Transboundary	The Inspectorate on behalf of the SoS has considered the Proposed Development and concludes that the Proposed Development is unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State. In reaching this conclusion the Inspectorate has identified and considered the Proposed Development's likely impacts including consideration of potential pathways and the extent, magnitude, probability, duration, frequency and reversibility of the impacts. The Inspectorate considers that the likelihood of transboundary effects resulting from the Proposed Development is so low that it does not warrant the issue of a detailed transboundary screening. However, this position will remain under review and will have regard to any new or materially different information coming to light which may alter that decision. Note: The SoS' duty under Regulation 32 of the 2017 EIA Regulations continues throughout the application process. The Inspectorate's screening of transboundary issues is based on the relevant considerations specified in the Annex to its Advice Page Twelve, links for which can be found in paragraph 1.0.7 above.
2.2.2	Paragraphs 5.5.9, 5.5.10, 15.5.16 - 15.5.18	Decommissioning	Scoping Report states in paragraphs 15.5.16 to 15.5.18 that decommissioning of the Proposed Development is not envisaged so will not be included in the EIA. The Inspectorate considers that this is a reasonable approach taking into account the information provided in the Scoping Report and the specific characteristics of the Proposed Development as a whole. However, paragraphs 5.5.9 and 5.5.10 highlight the need for ongoing maintenance and replacement in line with ongoing reservoir management. The Inspectorate considers that any decommissioning associated with

ID	Ref	Description	Inspectorate's comments
			dismantling and replacing particular elements of the Proposed Development should be assessed in the ES.

3. ENVIRONMENTAL ASPECT COMMENTS

3.1 Water Environment

(Scoping Report Section 6)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
3.1.1	Paragraph 6.5.2 and 6.6.11.	Coastal / tidal Flooding – all phases	The Scoping Report seeks to scope out effects of coastal flooding due to the location of the Proposed Development. The Inspectorate agrees that this matter can be scoped out of further assessment.

ID	Ref	Description	Inspectorate's comments
3.1.2	Paragraph 6.6.33	Mitigation of contaminants	The Scoping Report identifies a potential for contaminants such as fuels and oil to be accidentally released into watercourses. The ES should include a description of appropriate measures to mitigate any adverse effects in the event of a leak or spill.
3.1.3	Table 6-12	Securing mitigation	The ES should set out how the proposed mitigation measures identified in the Scoping Report is to be secured, for example through the DCO.
3.1.4	Paragraph 6.5.7	Flood Risk Zones	The Scoping Report states parts of the Proposed Development are located within flood risk zones 2 and 3 but does not identify whether it is located in areas of 3a or 3b flood risk. The ES should clearly identify if and where the Proposed Development is located in flood zone 3b (functional floodplain). This should be used to inform appropriate mitigation and/or compensation in relation to flood mitigation.
3.1.5	Paragraph 6.6.34 and Table 6-14	Erosion and accretion from sedimentation	Scoping Report paragraph 6.6.34 and Table 6-14 identifies potential pollution impacts from sedimentation on surface water quality, but potential impacts from erosion and accretion of sediment on hydrology, geomorphology, flood mitigation assets and the reservoir itself are not included. The ES should assess significant effects from erosion and accretion where they are likely to occur and describe and secure any relevant and appropriate mitigation measures.

ID	Ref	Description	Inspectorate's comments
3.1.6	Table 6.-14	Impacts from water crossings on hydrology	Scoping Report Table 6-14 identifies that potential impacts from watercourse crossings on fluvial geomorphology are scoped in. This impact should also be scoped in for hydrology.
3.1.7	Paragraph 6.7.4	0.5m allowance for modelling uncertainty	A 0.5m allowance is proposed in Scoping Report paragraph 6.7.4 to account for uncertainty in hydraulic modelling. It is not explained why this allowance is appropriate. The ES should justify the applied appropriate allowance to modelling uncertainty and agreement should be sought with the relevant consultation bodies.
3.1.8	Table 6-10	Criteria to determine impact magnitude for flood risk	The Environment Agency consultation response identifies that the Design Manual for Roads and Bridges Guidance (LA113 2020) used to determine the criteria for magnitude of effect in relation to flood risk is not appropriate. The ES should justify the methodology for assessment of flood risk in agreement with relevant consultation bodies.
3.1.9	NA	Geological faulting	The Scoping Report does not mention the potential for geological faulting which is a matter identified by the Environment Agency in their consultation response. The ES should include further consideration of how faulting may influence the hydrogeology beneath the new reservoir - particularly in relation to ground water quality.
3.1.10	Paragraph 6.1.4	Contamination from landfill Sites	The Scoping Report lists the landfill sites considered as potential sources for contamination in Table 14-4, however the Environment Agency consultation response identifies some authorised landfill sites missing from the Scoping Report. The ES should present all landfill sites (including historic landfill) that may be potential sources of contamination.
3.1.11	Paragraph 2.4.3	Impacts from new areas of hardstanding	The Scoping Report identifies a number of infrastructure elements that would include areas of hardstanding eg access roads, pumping station, provision of renewable energy infrastructure. The ES should locate and quantify the areas of hardstanding associated with the construction and operational phases and include these features in the assessment of flood risk and pollution effects.
3.1.12	Paragraphs 6.5.25 to 6.5.27	Water quality surveys in the Ock catchment	Scoping Report paragraphs 6.5.25 and 6.5.26 identify that water quality data sets are limited for the River Thames and baseline surveys are ongoing. Paragraph 6.5.27 states that data is also limited for water quality in the River Ock catchment however, no further surveys are proposed or ongoing. It is unclear why further surveys are not

ID	Ref	Description	Inspectorate's comments
			proposed and how the Applicant intends to fully characterise the baseline environment for water quality. The ES should ensure that the baseline characterisation for water quality across the study area is robust and that the methodology for characterising the baseline is agreed where possible with the relevant consultees.
3.1.13	Paragraph 6.6.26	Sweetening/ dewatering flows for stagnant pipeline water	A sweetening/ dewatering flow is proposed to avoid stagnant water accumulating in the augmentation pipeline. It is unclear how much water would need to be transported in order to achieve this. It is unknown whether extreme weather ie flood or drought, would affect the viability of this flow and if this would have any knock-on effects. The ES should identify whether sweetening/ dewatering flow to avoid stagnant pipeline water could be inhibited in any likely scenario and if so, assess any associated likely significant effects.

3.2 Aquatic Ecology

(Scoping Report Section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.2.1	Table 7-5 and paragraph 7.6.22	Phytoplankton and zooplankton – construction	Scoping Report paragraph 7.6.22 states that phytoplankton and zooplankton are unlikely to be important sources of primary and secondary productivity in watercourses within the SESRO boundary due to the shallow nature of the watercourses, associated flow velocities and limited water residence time. The Scoping Report states that these conditions are not favourable for growth of phytoplankton and zooplankton and significant effects are not likely. On this basis, the Inspectorate agrees this matter can be scoped out of further assessment.

ID	Ref	Description	Inspectorate's comments
3.2.2	Appendix B, Table 1	Survey locations	Scoping Report Appendix B describes the surveys that have been undertaken to inform the Aquatic Ecology chapter. Whilst the locations are described, they are not identified on a figure and the number of surveys and surveys areas are unknown. The ES should identify the location, quantity, timing and extent of surveys that underpin the ES assessment.
3.2.3	Figure 6.1	River Ock and River Thames catchments	The River Ock and Thames catchments are referred to throughout Scoping Report section 7. The study area is identified on Figure 6.1 however this does not show which river reaches are within each catchment. The ES should include a Figure identifying which river reaches are within each catchment.

ID	Ref	Description	Inspectorate's comments
3.2.4	Table 7-3 and Figure 8.1	Location of Local Wildlife Sites (LWS)	Scoping Report Table 7-3 identifies a number of designated LWS as hydrologically connected to the River Thames and the Proposed Development, however, they are not located on Scoping Report Figure 8.1 or any other figure. The ES should identify all designated site receptors that are hydrologically connected to the Proposed Development on a figure and this should correlate with any discussion within the ES chapters.
3.2.5	Paragraph 7.6.11	Box culverts	Box culverts are proposed to be considered for crossing small watercourses and ditches. However, the Environment Agency advise that this is not appropriate mitigation as longitudinal migration of aquatic species must be maintained (see Appendix 2). The ES should describe the mitigation measures for crossing small watercourses and ditches, explain why it is appropriate and how it maintains longitudinal migration of relevant species.
3.2.6	Paragraphs 7.6.14 to 7.6.17	Impacts from piling	Scoping Report paragraph 12.6.8 states that piling may be adopted during construction which has potential to cause noise impacts. Impacts to aquatic ecology during construction includes 'species disturbance, injury or mortality' in Scoping Report paragraphs 7.6.14 to 7.6.17 but impacts from noise are not named. For clarity, the ES should assess significant effects from piling on aquatic ecology where they are likely to occur and this should include any impacts from noise likely to lead to significant environmental effects.
3.2.7	Paragraphs 7.6.32 and 7.6.33	Changes in thermal properties	Scoping Report paragraphs 7.6.32 and 7.6.33 identifies that the changes in flow rates and water levels can impact water quality levels. This also has potential to alter the thermal properties of water, impacting aquatic ecology. The ES should provide an assessment of significant effects where they are likely to occur as a result of thermal changes to aquatic ecology.
3.2.8	Section 7.8	Watercourse buffers	As construction works are proposed along watercourses and adjacent to watercourses, the Inspectorate would anticipate buffers are required for certain works. Watercourse buffers are not included in the proposed mitigation set out in

ID	Ref	Description	Inspectorate's comments
			section 7.8 of the Scoping Report. The Applicant should engage with the Environment Agency on applying appropriate watercourse buffers where relevant and the ES should describe and explain where any buffers are secured.
3.2.9	Paragraph 7.8.2	Translocation of invertebrates to new western and eastern watercourse diversions	Ecological establishment is proposed through both planting and benthic sediment transfer which includes translocation of invertebrates. Such translocations can have associated risks eg introduction of INNS. The ES should set out the methodology for translocation including proposed monitoring and remediation measures to ensure success and assess any associated significant effects where they are likely to occur.
3.2.10	Table 8-3	Zone of Influence for INNS assessment	It is not clear whether the buffer zone of 2km identified in Table 8-3 takes account of hydrological impact pathways for INNS. The ES should either amend the buffer or explain how the 2km buffer takes hydrological pathways into account.

3.3 Terrestrial Ecology

(Scoping Report Section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.3.1	Paragraph 8.6.9	Habitat loss / gain, fragmentation, and modification	The Scoping Report states that no habitat loss will occur during operation of the Proposed Development and, therefore, there is no pathway for an effect to occur. The Inspectorate is content to scope this impact pathway out of further assessments.
3.3.2	Paragraph 8.6.25	Spread of INNS - operation	Paragraph 8.6.25 of the Scoping Report proposes to scope this matter out of further assessment, as the risk of spreading terrestrial INNS during operation of the Proposed Development is considered negligible. Given that construction plant disturbing soil and vegetation will not occur during operation, the Inspectorate agrees to scope this matter out.
3.3.3	Paragraphs 8.6.31-8.6.33	Cuttings and Hutchins Copse Local Wildlife Sites (LWS) - operation	Scoping Report paragraph 8.6.31 explains that the impact pathways relevant to the Cuttings and Hutchins Copse LWS, are only relevant to the construction phase of the Proposed Development and no impact pathway is identified during operation. The Inspectorate is content with this approach and agrees to scope this matter out of further assessment.
3.3.4	Paragraph 8.6.32	Cowslip Meadown LWS and Marcham Salt Spring LWS – all phases	Paragraph 8.6.32 of the Scoping Report explains that whilst these two LWS are both within 1km of the Scoping Boundary, there are considered to be no impact pathways for these sites. The Applicant therefore proposes to scope this matter out of further assessment. Given the nature and scale of these LWS, the Inspectorate is content with this approach and agrees to scope this matter out of further assessment.
3.3.5	Paragraph 8.6.42	Hazel dormouse – all phases	Dormice surveys have not yet been undertaken on the site, although paragraph 8.6.42 of the Scoping Report states that given the lack of suitable habitat currently available on site, Hazel dormice are unlikely are to be present. However, paragraph 8.5.16 of the Scoping Report states that desk based research has identified habitat features with the

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			potential to support dormice. Paragraph 8.6.42 states that if dormice are found during surveys, they will be scoped back in. The Inspectorate agrees with this approach.
3.3.6	Paragraphs 8.6.43 - 8.6.46	Great crested newt (GCN) - operation	The Scoping Report explains that GCN are known to be present within the Proposed Development site boundary, however the Applicant proposes to scope this species out of further assessment during operation as the Scoping Report considers that potential impact pathways identified (mortality and injury, and habitat loss) are only relevant to the construction phase. The Inspectorate considers that due to the nature of the Proposed Development and the creation of wetland areas, there is potential for great crested newts to be affected during operation and therefore does not agree to scope this matter out.
3.3.7	Paragraphs 8.6.50 - 8.6.51	Natterjack toad - operation	The Scoping Report states that natterjack toads have been recorded 1.3km northwest of the Proposed Development site, however it is unknown if the current habitats present on site are suitable for this species, therefore this species is scoped in for the construction phase. The Inspectorate considers that due to the nature of the Proposed Development and the creation of wetland habitats there is potential for effects on natterjack toad and therefore does not agree to scope this matter out.
3.3.8	Paragraphs 8.6.52 - 8.6.54	Other amphibians - operation	Impacts on other amphibians are scoped in for the construction phase as desktop records identify presence of common frogs, toads, palmate and smooth newt. However, the Applicant proposes to scope out impacts on other amphibians during operation of the Proposed Development, as it considers there to be no pathway to effect. The Inspectorate considers that due to the nature of the Proposed Development and the creation of wetland areas, there is potential for great crested newts to be affected during operation and therefore does not agree to scope this matter out.
3.3.9	Paragraphs 8.6.58 - 8.6.59	Reptiles - operation	The Scoping Report seeks to scope out impacts to adder, common lizard, grass snake and slow worm during operation, on the basis that there is no likely impact pathway to effect during operation. However, the Scoping Report does not explain what

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			maintenance activities may be required. The Inspectorate does not agree to scope this matter out and considers that the ES should provide details of maintenance activities and any potential effects on adder, common lizard, grass snake and slow worms.
3.3.10	Paragraph 8.6.59	Sand lizards and smooth snakes – all phases	The Inspectorate agrees to scope this matter out of further assessment on the basis that the Proposed Development site does not contain favourable habitat for these species, and that neither of these species have been recorded on site.
3.3.11	Paragraph 8.6.61	Ancient Woodland – all phases	The Inspectorate is content that this matter can be scoped out, given that historic maps provide no indication of the presence of any woodland on or adjacent to the site prior to 1600AD.
3.3.12	Paragraph 8.8.62-8.8.64 and Figure 8.2.	Ancient/veteran trees - operation	The Scoping Report explains that there are some ancient and veteran trees identified within the Proposed Development site boundary, the location of these trees is shown in Figure 8.2. the Scoping Report states that one ancient tree would be removed as a result of the Proposed Development and further survey work is ongoing to establish if there are other ancient/veteran trees which may be affected. As survey work is still ongoing to establish the presence of ancient/veteran trees, the Inspectorate does not agree to scope this matter out. Effects on ancient and veteran trees should be addressed in the ES, where there is potential for likely significant effects to occur.
3.3.13	Paragraphs 8.6.67-8.6.69	Notable vascular plants - operation	The Inspectorate agrees to scope this matter out of further assessment for operational impacts, as no potential impact pathways to effects have been identified.
3.3.14	Table 8-6	Local Nature Reserves – all phases	The Scoping Report seeks to scope out impacts on Local Nature Reserves as no Local Nature Reserves have been identified within 2km. On this basis, the Inspectorate is content to scope this matter out of further assessment.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.3.15	Table 8-6	Priority habitats - operation	The Inspectorate agrees to scope this matter out of further assessment for operational impacts, as no potential impact pathways to effects have been identified.

ID	Ref	Description	Inspectorate's comments
3.3.16	Paragraph 8.6.43	Great crested newts	The Applicant intends to offset the effects of the Proposed Development on GCN by obtaining a licence through the Natural England District Level Licensing (DLL) scheme. The Inspectorate understands that the DLL approach includes strategic area assessment and the identification of risk zones and strategic opportunity area maps. The ES should include information to demonstrate whether the Proposed Development is located within a risk zone for GCN. If the Applicant enters into the DLL scheme, Natural England will undertake an impact assessment and inform the Applicant whether their scheme is within one of the amber risk zones and therefore whether the Proposed Development is likely to have a significant effect on GCN. The outcome of this assessment will be documented on an Impact Assessment and Conservation Payment Certificate (IACPC). The IACPC can be used to provide additional detail to inform the findings in the ES, including information on the Proposed Development's impact on GCN and the appropriate compensation required.
3.3.17	N/A	Confidential Annexes	Public bodies have a responsibility to avoid releasing environmental information that could bring about harm to sensitive or vulnerable ecological features. Specific survey and assessment data relating to the presence and locations of species such as badgers, rare birds and plants that could be subject to disturbance, damage, persecution, or commercial exploitation resulting from publication of the information, should be provided in the ES as a confidential annex. All other assessment information should be included in an ES chapter, as normal, with a placeholder explaining that a confidential annex has been submitted to the Inspectorate and may be made available subject to request.

3.4 Landscape and Visual

(Scoping Report Section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.4.1	n/a	n/a	No matters have been proposed to be scoped out of the assessment.

ID	Ref	Description	Inspectorate's comments
3.4.2	Section 9.3	Photography / visualisations	The Inspectorate advises that, with regards to landscape photography and visualisations, the Applicant should seek to agree the number and location of wireframes / photomontages with the relevant consultation bodies.
3.4.3	Section 9.9	Residential amenity	The Scoping Report does not propose to assess impacts on residential amenity without explanation. The ES should assess significant effects on residential amenity where they are likely to occur.

3.5 Historic Environment

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.5.1	Table 10-6	Non-designated archaeology – operation	The Scoping Report proposes to scope out this matter on the basis that no adverse effects are identified. No evidence has been provided to support this and the extent of impacts during operation are currently unknown. Due to the lack of information provided, the Inspectorate does not agree to scope this matter out. The ES should assess impacts on the non-designated archaeology during operation of the Proposed Development unless robust justification is provided to demonstrate that significant effects are unlikely to occur. Agreement on this matter should be sought with the relevant statutory consultation bodies.
3.5.2	Table 10-6 and paragraph 10.7.2	Scheduled monuments - operation	The Scoping Report proposes to scope out this matter on the basis that no adverse effects are identified. No evidence has been provided to support this and the extent of impacts during operation are currently unknown. Furthermore, paragraph 10.7.2 states that during operation, there may be changes to hydrological regimes which may affect buried remains. The Inspectorate does not agree to scope this matter out at this stage. The ES should assess impacts on the scheduled monuments during operation of the Proposed Development unless robust justification is provided to demonstrate that significant effects are unlikely to occur. Agreement on this matter should be sought with the relevant statutory consultation bodies.
3.5.3	Table 10-6	Historically important hedgerows - operation	The Scoping Report proposes to scope out this matter on the basis that no adverse effects are identified. No evidence has been provided to support this and the extent of impacts during operation are currently unknown. Due to the lack of information provided, the Inspectorate does not agree to scope this matter out. The ES should assess impacts on the historically important hedgerows during operation of the Proposed Development unless robust justification is provided to demonstrate that

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			significant effects are unlikely to occur. Agreement on this matter should be sought with the relevant statutory consultation bodies.

ID	Ref	Description	Inspectorate's comments
3.5.4	Paragraph 10.4.1 and Figure 9.3	Study area	The Scoping Report states that historic environment data has been acquired for an area which includes a 2km buffer beyond the scoping boundary. However, the Zone of Theoretical Visibility (ZTV) mapping provided at Figure 9.3 identifies potential visibility beyond these extents. The ES should establish the study area with reference to the extent of the likely impacts and informed by fieldwork and the ZTV. The Applicant should agree this study area with relevant consultation bodies where possible. Any receptors outside of this study area but within the ZTV of the Proposed Development should also be included within the assessment.
3.5.5	Paragraph 10.8.10	Assessment methodology – cumulative effects	The Scoping Report states that intra-development effects may arise from the historic environment visual impacts and groundwater impacts. The assessment should cross reference with relevant groundwater impact modelling and assessment to ensure that assets impacted by the changes to ground conditions will be protected throughout the operational period.

3.6 Traffic and Movement

(Scoping Report Section 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.6.1	Table 11-5	Hazardous/large loads - operation	The Inspectorate agrees that, subject to confirmation in the ES, as hazardous/large loads are not anticipated to be required during operation, these may be scoped out of further assessment.

ID	Ref	Description	Inspectorate's comments
3.6.2	Paragraph 11.4.2 and Figure 11.1	Study area	Paragraph 11.4.2 of the Scoping Report states that the study area shown in Figure 11.1 has been defined based on professional judgement and would develop as the design evolves. The ES should confirm the final study area and key roads included in the assessment and justify how this has been selected, with reference to relevant industry guidance, the extent of the likely impacts and locations of sensitive receptors and agreement with relevant consultees. A plan illustrating the extent of the study area, and the expected route(s) of construction and operation traffic, should be included in the ES.
3.6.3	Paragraph 11.5.32	River Thames navigation	Paragraph 11.5.32 of the Scoping Report states that the River Thames is a nationally significant waterway which is navigable in the vicinity of the proposed intake/outfall infrastructure. There is potential for navigational, and disruption impacts to users of the waterways from the construction of intake/outfall infrastructure. The receptors listed in paragraphs 11.6.2 and 11.6.4 do not include consideration of users of waterways or impacts on navigation infrastructure such as weirs. The ES should assess any likely significant effects on watercourse navigation and navigation infrastructure including any river closures, changes in water levels or narrowing to facilitate construction etc.

ID	Ref	Description	Inspectorate's comments
3.6.4	Paragraph 11.5.33	Traffic surveys	The Scoping Report states that further traffic surveys may be required at key junctions to be used for construction and operational routes. The ES should identify the location, timing and duration of all traffic surveys and the extent to which the methodology has been agreed with relevant consultees.
3.6.5	Paragraph 11.6.7	Potential environmental effects - railway safety	The Scoping Report states that the Proposed Development requires construction activity on an operational rail line and the introduction of temporary sidings on the Great Western Rail line which would result in an increase in train movements. It is unclear from the wording of the Scoping Report whether impacts to railways are proposed to be assessed. For clarity, the ES should assess significant effects on railway infrastructure and safety during construction and operation where they are likely to occur; this should include consideration of impacts from vehicles that may utilise railway assets, such as bridges and level crossings.
3.6.6	Paragraph 11.7.4 to 11.7.6	Assessment methodology	The ES should explain how consultation has informed an appropriate methodology for assessing likely significant effects from traffic and transport.
3.6.7	Paragraph 11.7.9	Worst case scenario	The Scoping Report assumes that railway sidings would be used for material transportation, however the construction details have not been finalised at this stage. The traffic and transport assessment should include a 'worst case scenario' option based on no railway siding option being available unless the proportion of the construction material arriving by rail could be confirmed.

3.7 Noise and Vibration

(Scoping Report Section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.7.1	Paragraph 12.1.2	Assessment of noise and vibration impacts on other receptors from the Noise and Vibration ES Chapter	The Scoping Report proposes that the assessment of noise and vibration effects on ecological receptors will be considered in ES Chapter 7: Aquatic Ecology and Chapter 8: Terrestrial Ecology; while impacts to historic receptors would be considered in ES Chapter 10: Historic Environment. The Inspectorate is content with this approach. The Noise and Vibration ES Chapter should provide clear cross-referencing to the sections where the relevant impacts are considered.
3.7.2	Paragraphs 12.6.11, 12.6.17 and Table 12-16	Vibration from pumping station and intake/outfall structures - operation	The Scoping Report proposes to scope out this matter on the basis that significant vibration effects associated with pumps and intake/outfall structures are considered unlikely with the adoption of good practice design and vibration isolation methods. Paragraph 12.6.11 of the Scoping Report supports this by explaining that pumps will be located on large concrete bases with suitable isolation and the pumps and other equipment at the inlet towers would be located within the reservoir and over 1km from the nearest noise sensitive properties. On the basis that the ES confirms and explains how these, or equivalent measures would be secured to demonstrate that significant effects are unlikely to occur, the Inspectorate agrees to scope this matter out.
3.7.3	Table 12-16	Noise from valves - operation	The Scoping Report proposes to scope out this matter on the basis that significant noise effects associated with valves are considered unlikely as all valves would be located within concrete chambers and likely to be below ground or in above ground kiosks. On the basis that the ES confirms and secures these, or equivalent measures to demonstrate that significant effects are unlikely to occur, the Inspectorate agrees to scope this matter out.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.7.4	Table 12-16	Noise and vibration from the underground pipeline – operation	The Scoping Report proposes to scope out this matter on the basis that the pipeline would be located below ground and associated noise and vibration from the flow of water within the pipeline is considered unlikely to be perceptible at receptors. On this basis the Inspectorate agrees this matter can be scoped out.
3.7.5	Table 12-16	Noise during emergency conditions – operation	The Scoping Report proposes to scope out this matter on the basis that atypical emergency conditions would be infrequent; testing of emergency generators or the emergency discharge of water at the outfall at the River Thames would be scheduled to undertake during daytime hours and for short durations. Considering the frequency and duration of the emergency conditions, the Inspectorate agrees that the operational noise from emergency conditions is unlikely to result in significant effects and agrees that this matter can be scoped out of the ES.
3.7.6	Table 12-16	Noise from transformer substations – operation	The Scoping Report proposes to scope out this matter on the basis that transformer substations can be acoustically insulated and located in areas to avoid noise disturbance. As such significant noise effects associated with transformer substations are considered unlikely. On the basis that the ES confirms and secures these, or equivalent measures to demonstrate that significant effects are unlikely to occur, the Inspectorate agrees to scope this matter out.
3.7.7	Table 12-16	Noise from overhead powerlines - operation	The Scoping Report proposes to scope out this matter on the basis that 132kV voltage overhead power lines would be expected to lead to minimal noise emissions. There is limited potential for noise emissions from conductors on overhead lines under certain meteorological conditions, however the distance from receptors and the overhead power lines are currently unclear. The ES should either include evidence to confirm that noise generated by 132kV voltage overhead cables would not result in significant effects on sensitive receptors or provide an assessment of likely significant effects.

ID	Ref	Description	Inspectorate's comments
3.7.8	Section 12.6	Sensitive receptors	Section 12.6 of the Scoping Report sets out the sensitive receptors to be considered in the noise and vibration assessment. The ES should also include flood assets as receptors sensitive to changes in vibration as there is a risk that flood assets could be impacted by construction works that likely to cause vibration including piling and tunnelling. The ES should include an assessment of significant effects from construction vibration on the identified flood assets and specify any mitigation measures and monitoring required. Consideration should also be given to settlement when boring the tunnel, especially near flood assets.

3.8 Air Quality

(Scoping Report Section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.8.1	Table 13-3	Emissions from site plant and machinery – construction	The Scoping Report proposes to scope out this matter on the basis that plant and items of machinery would likely be used for only a limited duration in any one location and spread across the Proposed Development, and due to the absence of sensitive receptors in the vicinity of the proposed works as such significant effects on air quality are considered unlikely. Details of the plant proposed and the location of construction activities, or the location of sensitive receptors are not provided within the Scoping Report. On this basis, the Inspectorate does not agree that this matter can be scoped out at this stage. An assessment of effects should be included unless robust evidence is provided to demonstrate that such machinery would not give rise to significant air quality effects.
3.8.2	Table 13-3	Emissions from proposed freight trains transporting bulk material - construction	The Scoping Report proposes to scope out this matter on the basis that frequency of train deliveries would be low (two trains per day) as such significant effects on local air quality are considered unlikely. Given the low frequency of train deliveries per day, subject to confirmation of train movements in the ES, the Inspectorate agrees that this matter may be scoped out.
3.8.3	Table 13-3 and paragraphs 13.6.11 and 1.5.28	Emissions from construction-related off-site traffic - construction	The Scoping Report proposes to scope out this matter on the basis that predicted construction-related traffic flows associated with construction are likely to be less than the Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) screening criteria. Therefore, the likely effects on air quality are considered not significant. Paragraph 13.6.11 of the Scoping Report states that anticipated construction-related traffic flow data are yet to be finalised at this stage. Details of the location of sensitive receivers are not provided within the Scoping Report, however paragraph 1.5.28 states that an Air Quality Management Area is located directly north of the site. On this basis, the Inspectorate does not agree that this matter can be scoped out at this stage. An

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			assessment of effects should be included unless robust justification is provided to demonstrate that the emissions from construction traffic would not give rise to significant air quality effects.
3.8.4	Table 13-3	Odour impacts - construction	The Scoping Report proposes to scope out this matter on the basis that no significant sources of odour associated with the construction phase are identified. In the absence of information to demonstrate that earthworks activities would not be undertaken in contaminated areas which may contain odorous materials, the Inspectorate does not agree that this matter can be scoped out at this stage. The ES should provide an assessment of this matter, or the information required to demonstrate the absence of a likely significant effect.
3.8.5	Table 13-3 and paragraph 13.6.16	Emissions from off-site traffic - operation	The Scoping Report proposes to scope out this matter on the basis that predicted operational traffic flows associated with construction are likely to be less than the EPUK and IAQM screening criteria. Likely effects on air quality are therefore considered insignificant. Paragraph 13.6.16 of the Scoping Report states that anticipated operational-related traffic flow data are yet to be finalised at this stage. Details of the location of sensitive receivers are not provided within the Scoping Report. On this basis, the Inspectorate does not agree that this matter can be scoped out at this stage. An assessment of effects should be included unless robust justification is provided to demonstrate that the emissions from operational traffic would not give rise to significant air quality effects.
3.8.6	Table 13-3	Emissions of dust and particulate matter - operation	The Scoping Report proposes to scope out this matter on the basis that dust emissions are not anticipated during operation as such significant effects on air quality are considered unlikely. The Inspectorate is content that dust and particulate matter emissions during operation of the Proposed Development are unlikely to give rise to significant effects and agrees that this matter can be scoped out.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.8.7	Table 13-3	Emissions of pollutants from non-road mobile machinery (NRMM), generator and combustion plant - operation	The Scoping Report proposes to scope out emissions of pollutants during operation from NRMM, generator and combustion plant on the basis that mitigation such as appropriate stack height for any back-up emergency generators would be adopted and no highly sensitive receptors are identified in the vicinity. The Inspectorate agrees that this matter can be scoped out provided information on type, duration, location of NRMM, generator and combustion plant with adopted mitigations is shown in the ES to demonstrate that this would not result in likely significant effects.
3.8.8	Table 13-3	Odour impacts - operation	The Scoping Report proposes to scope out odour impacts during operation as no significant sources of odour will occur. Details of the treatment process to be employed at the Water Treatment Works (WTW) are not provided within the Scoping Report. On this basis, the Inspectorate does not agree that this matter can be scoped out at this stage. An assessment of effects should be included unless robust justification is provided to demonstrate that the operation of the WTW would not produce any odour. In the absence of further details, the Inspectorate does not agree to scope out operational odour impacts at this stage.

ID	Ref	Description	Inspectorate's comments
3.8.9	Paragraph 13.4.5	Study area	Paragraph 13.4.5 of the Scoping Report states that the study area for the assessment of potential air quality effects from road traffic would include receptors with 200m of the 'affected' roads considered the change in traffic flows exceed the relevant thresholds set out in the EPUK/IAQM Land-Use Planning & Development Control: Planning for Air Quality guidance. The ES should also consider the potential impacts from changes to air quality in relation to potential increases in pollutants from traffic emissions on ecological receptors. The study area for emissions from road traffic should also include where construction or operation activities would lead to a change in traffic flows on the road network, that exceed the

ID	Ref	Description	Inspectorate's comments
			relevant thresholds set out in Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001).

3.9 Geology and Soils

(Scoping Report Section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.9.1	Tables 14-10 and 14-5	Geological designations – operation	Scoping Report Table 14-5 notes that no sites of geological importance have been identified within the study area. Additionally, the construction phase would have already exposed any potential geologically significant information during the excavation of Kimmeridge Clay and Gault Formation. Therefore, the Inspectorate is content with this approach and agrees to scope these matters out as the permanent loss of soil would occur during construction.
3.9.2	Table 14-10	Soils supporting biomass production – operation	The Scoping Report notes that the permanent loss of soil resources will occur during the construction phase, and no further loss is expected during operation. Therefore, the Inspectorate is content with this approach and agrees to scope this matters out.
3.9.3	Table 14-10	Soils supporting sites of ecological importance – operation	The Scoping Report notes that the potential impacts on soils associated with the Cuttings and Hutchins Copse LWS would occur during the construction phase and further loss of soil resources are not anticipated to take place during operation. Therefore, the Inspectorate is content with this approach and agrees to scope this matters out.
3.9.4	Table 14-10	Soil carbon – operation	The Scoping Report notes that the disturbance of soil carbons would occur during the construction phase and further soil disturbance is not anticipated to occur during operation. Therefore, the Inspectorate is content with this approach and agrees to scope this matters out.

ID	Ref	Description	Inspectorate's comments
3.9.5	Paragraph 14.5.6	Provisional Agricultural Land Classification (ALC) data	With respects to soil, Scoping Report Paragraph 14.5.6 states that the study area is dominated by Grade 4 and undifferentiated Grade 3 soils. The ES should include ALC survey/data which differentiates between Grade 3a and Grade 3b soils.
3.9.6	Table 6-8	Geological stability	With respects to geology, Scoping Report Table 6-8 states that the reservoir will be underlain by Upper Greensand and Gault Clay (hard geology). It must be noted that in other areas of the country that the Upper Greensand has the possibility to become "flow sands". Therefore, it is recommended that a geotechnical investigation is undertaken as part of the ES to ensure that the foundations of the reservoir embankments do not become destabilised by ground movements caused by increased pore pressures in the subsurface below the proposed reservoir.

3.10 Materials and Waste

(Scoping Report Section 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.10.1	Table 15-16	Mineral safeguarding sites – construction and operation	The Scoping Report notes that whilst there are currently allocated mineral safeguarding sites within the development study area, these are unlikely to be worked/extracted during construction or operation and are not within designated Mineral Strategic Resources Areas and Mineral Safeguarding Areas. Additionally, there is a low probability of new mineral safeguarding sites being allocated during construction and operation. The Inspectorate is content with this approach and agrees to scope these matters out provided that the proposed reservoir does not affect any mineral safeguarding areas, regardless of whether the sites have been allocated.
3.10.2	Table 15-16	Materials availability – operation	The Scoping Report notes that as the Proposed Development is at an early stage, the consumption of materials is yet to be quantified. However, based on IEMA guidance, professional judgement and the operational nature of the Proposed Development, it is considered unlikely that there will be significant materials consumption within the first three years of operation. The Inspectorate is content with this approach and agrees to scope this matter out subject to materials being quantified in the ES.
3.10.3	Table 15-16	Landfill void capacity – operation	The Scoping Report notes that as the Proposed Development is at an early stage, waste generation and waste disposal is yet to be quantified. However, based on IEMA guidance, professional judgement and the operational nature of the Proposed Development, it is considered unlikely that there will be significant operational waste generation during any one full representative year within the first three years of operation. Subject to an appropriate waste management plan being submitted and secured with the application, the Inspectorate is content to scope this matter out.

ID	Ref	Description	Inspectorate's comments
3.10.4	Paragraph 15.4.9 and Figure 15.1	Mineral safeguarding sites	The Scoping Report indicates that Figure 15.1 identifies the development study area; Mineral Strategic Resource Area; and Mineral Safeguarding Area. However, Figure 15.1, does not clearly identify/label the Mineral Strategic Resource Area and Study Area. The ES should include a figure which clearly identifies/labels the Mineral Strategic Resource Area/Study Area.

3.11 Carbon and Climate Change

(Scoping Report Section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.11.1	Table 16-16 and paragraph 16.6.19	Vulnerability to climate change – construction	The Applicant proposes to scope out this matter on the basis that projected changes over the short term would be minimal and controlled through appropriate construction mitigation and management plans. The Inspectorate considers that there is presently not sufficient evidence to support this and does not agree to scope this matter out. The ES should assess vulnerability to climate change during construction where significant effects are likely to occur.
3.11.2	Table 16-16 and paragraph 16.6.18	Vulnerability to climate change – operation – impacts due to projected changes in wind speed	The Applicant proposes to scope out this matter on the basis that projected changes in wind speed would be relatively small and potential impacts can be addressed through the proposed design measures. On this basis, the Inspectorate agrees to scope this matter out.
3.11.3	Table 16-16	Vulnerability to climate change – In combination climate assessment during construction phase	The Applicant proposes to scope out this matter on the basis that projected changes over the short term would be minimal and controlled through appropriate construction mitigation and management plans. The Inspectorate considers that the construction timescales are significant enough to necessitate an in-combination assessment for that phase and does not agree to scope this matter out. The ES should assess vulnerability to in-combination climate change during construction where significant effects are likely to occur.
3.11.4	Table 16-16 and paragraphs 16.5.9 – 16.5.10	Micro-climate - Potential changes to local temperatures and winds during construction and operation phases	The Applicant proposes to scope out this matter on the basis that effects are likely to be minimal. Due to the nature of the Proposed Development, the Inspectorate considers that significant effects are unlikely and agrees to scope this matter out.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.11.5	Table 16-16 and paragraph 16.5.9 – 16.5.0	Micro-climate - Potential changes to frost and fog during construction phase	The Applicant proposes to scope out this matter on the basis that effects are likely to be minimal. Due to the nature of the Proposed Development, the Inspectorate considers that significant effects are unlikely and agrees to scope this matter out.

ID	Ref	Description	Inspectorate's comments
3.11.6	N/A	N/A	N/A

3.12 Communities

(Scoping Report Section 17)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.1	Table 17-5	Impact to public services – operation	The Applicant proposes to scope this matter out on the basis that no impacts are expected, given the relatively small workforce proposed. The Applicant considers that visitors to the Proposed Development will pose no additional requirement on public services than a visit to any other facilities in the area. On the basis that the anticipated workforce is quantified in the ES and demonstrates that it will be sufficiently small not to impact public services, the Inspectorate agrees to scope this matter out.
3.12.2	Paragraph 17.5.5	Temporary or permanent amenity effects from breeding flies – all phases	The Applicant proposes to scope out this matter on the basis that adverse effects in the form of annoyance would be unlikely, as temporary fly swarms would be unlikely to move beyond the proposed body of water and associated wetlands areas. The Applicant proposes that adverse effects on residential amenity would also be unlikely given the distance from nearby sensitive receptors (residential development). On this basis, the Inspectorate agrees to scope this matter out.

ID	Ref	Description	Inspectorate's comments
3.12.3	Section 17.3	Methodology - engagement	The Applicant should make effort to agree the approach of the assessment with the relevant consultation bodies, to ensure it is appropriate to the construction, operation and maintenance of the Proposed Development.

3.13 Human Health

(Scoping Report Section 18)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.4	Paragraph 18.7.15	Substance misuse, problem gambling, communicable illness and diet	The Inspectorate agrees to scope this matter out during construction and operation on the basis that significant effects are not expected due to the nature of the Proposed Development.
3.12.5	Paragraph 18.7.15	Housing determinants with regard to dwelling mix, social housing, affordability and adaptations	The Inspectorate agrees to scope this matter out during construction and operation on the basis that significant effects are not expected due to the nature of the Proposed Development.
3.12.6	Table 18-15	Safeguarding and modern slavery	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that such matters would be informed by Thames Water's honest and ethical behavioural policy. The Inspectorate agrees to scope this matter out on this basis.
3.12.7	Table 18-15	Population out-migration	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate agrees to scope this matter out on this basis.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.8	Paragraph 18.7.15	Economic/employment determinants with regard to recruitment and retention of staff, working conditions, displacement, labour productivity and economic loss	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate agrees to scope this matter out on this basis.
3.12.9	Table 18-15	Procurement and investment, working conditions and family structure - operation	The Applicant proposed to scope these matters out for the operation phase on the basis that significant effects are not expected. The Inspectorate agrees to scope this matter out on this basis.
3.12.10	Paragraph 18.7.15	Social determinants with regard to transitional arrangements for education and family structures	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate agrees to scope this matter out on this basis.
3.12.11	Table 18-15	Impact of the Proposed Development on health and social care services – operation	The Applicant proposed to scope this matter out for the operation phase on the basis that significant effects are not expected. The Inspectorate agrees to scope this matter out on this basis.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.12	Paragraph 18.7.15	Wider health determinants with regard to food production, malnutrition and exacerbation of chronic conditions	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate agrees that LSE are unlikely to arise as a result of the Proposed Development.
3.12.13	Paragraph 18.7.15	Wider societal benefits from communication and IT infrastructure and climate change	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate agrees that LSE are unlikely to arise as a result of the Proposed Development.
3.12.14	Paragraph 18.7.15	Air quality impacts to Human Health with regard to plant, process and vehicle emissions and odour	The Applicant proposed to scope this matter out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate considers that there is potential for significant effects from air quality on sensitive receptors, including human receptors and therefore does not agree to scope this matter out. Please see boxes 3.8.1, 3.8.3 and 3.8.4 of this Scoping Opinion for further detail.
3.12.15	Table 18-15	Radiation with regard to the risk of new ground pollution, ionising actual risk and ionising risk perception	The Applicant proposed to scope this matter out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate agrees that LSE are unlikely to arise as a result of the Proposed Development.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.16	Table 18-15	Radiation with regard to the risk of electro-magnetic fields actual risk	The Applicant proposed to scope these matters out for both the construction and operation phases on the basis that significant effects are not expected. Paragraph 12.6.17 of the Scoping Report identifies that there is potential to divert overhead powerlines of >132kV. The Inspectorate therefore does not agree to scope this matter out and the ES should identify the location and proposed diversions of any cables 132kV and above in relation to the location of sensitive receptors and assess significant effects on human health where they are likely to occur, or provide evidence of agreement with relevant consultation bodies.
3.12.17	Table 18-15	Drinking water quality	The Applicant proposed to scope this matter out for both the construction and operation phases without explanation. Considering that there will be intake and outfall to the River Thames where water is abstracted, the Inspectorate considers that there is pathway for effect. On this basis, the Inspectorate does not agree to scope this matter out; the ES should provide an assessment of significant effects on drinking water quality where they are likely to occur.
3.12.18	Table 18-15 and 14-10	Risk of new ground pollution, mobilisation of historic pollution and food resources and safety - operation	The Applicant proposed to scope this matter out for both the construction and operation phases on the basis that significant effects are not expected. The Inspectorate is content with this approach on that basis.
3.12.19	Table 18-15	Environmental conditions: climate change during the construction phase	The Applicant refers to the reasoning provided in Scoping Report section 16. The Inspectorate does not agree to scope this matter out on the basis that not enough information has been provided. Please see box 3.11.1 of this Scoping Opinion for further information.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.2.0	Table 18-15	Environmental conditions: air quality during the operational phase	The Applicant proposes to scope out this matter based on the reasoning provided in the Air Quality section. The Inspectorate does not agree to scope this matter out on the basis that not enough information has been provided in relation to operational traffic movements and routing. Please see box 3.8.5 of this Scoping Opinion for further information.

ID	Ref	Description	Inspectorate's comments
3.12.2.1	Section 18.3	Methodology - engagement	The Applicant should make effort to agree the approach of the assessment with the relevant consultation bodies, to ensure it is appropriate to the construction, operation and maintenance of the Proposed Development.

3.13 Major Accidents and Disasters

(Scoping Report Section 19)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.13.1	Table 19-2	Insect Infestation/disease	Table 19-2 of the Scoping Report states that insect breeding will occur due to the nature of the Proposed Development involving the presence of open stagnant water. Whilst disease vectors (such as mosquitos carrying malaria) could potentially spread to the UK due to climate change, and potentially breed at the development site, this event would cover a regional or national level and not specifically related to the Proposed Development. On this basis the Inspectorate agrees that this matter can be scoped out of further assessment.
3.13.2	Table 19-2	Severe weather events (heatwaves, drought, rain, low temperatures, heavy snow, hail, lightning, high winds and tornado)	Table 19-2 of the Scoping Report explains that extended periods of drought or heatwaves could result in the embankment clay drying out. It states this would not compromise the integrity of the thick embankments to the level where they could fail or leak, however no evidence has been presented to support this. Therefore, whilst the Inspectorate agrees that low temperatures, heavy snow, hail, lightning, and tornado can be scoped out of the assessment, the topic of severe weather cannot be scoped out in its entirety. The ES should take a precautionary approach and include assessment of heatwaves, droughts, rain, and high winds. Accordingly, the ES should include an assessment of these matters or information demonstrating agreement with the relevant consultation bodies and the absence of an LSE.
3.13.3	Table 19-2	Landslides/mass movements	Table 19-2 proposes to scope out landslides from further assessment as whilst a possible risk of landslides during construction is identified, the Scoping Report suggests any risk can be mitigated through a Safety Management Plan. In view of the Environment Agency's (EA) advice (see Appendix 2 of this Opinion) that mass land movement could adversely affect flood storage and flood flow routes and increasing flood risk, the Inspectorate therefore does not agree with the approach in the Scoping Report, and this topic should be scoped into the ES for the construction phase of the development. Accordingly, the ES

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			should include an assessment of these matters or information demonstrating agreement with the relevant consultation bodies and the absence of an LSE.
3.13.4	Table 19-2	Sinkholes	Table 19-2 explains that sinkholes are proposed to be scoped out of the assessment given the underlying clay geology, however the Scoping Report states that baseline assessments are currently still on going and not yet complete. In view of the EA's advice that sinkholes could lead to changes in land levels that may increase flood risk, the Inspectorate does not agree to scope this topic out of further assessment. Accordingly, the ES should include an assessment of these matters or information demonstrating agreement with the relevant consultation bodies and the absence of an LSE.
3.13.5	Table 19-2	Reservoir/dam breach/collapse	Table 19-2 explains that the Applicant proposes to scope reservoir/dam breach/collapse out of further assessment, as the design of the reservoir will follow the Reservoir Act 1975 to reduce the likelihood of dam failure to a low level. In view of the Environment Agency's advice (see Appendix 2 of this Opinion), the Inspectorate does not agree that this matter can be scoped out of further assessment at this stage. Accordingly, the ES should include an assessment of these matters or information demonstrating agreement with the relevant consultation bodies and the absence of an LSE.
3.13.6	Table 19-2	Building fire/failure	Table 19-2 of the Scoping Report states that the risk of building fire/failure will be mitigated through a Design Fire Strategy or equivalent including fire and safety measures. The Inspectorate is content with this approach and agrees this topic can be scoped out of further assessment.
3.13.7	Table 19-2	Critical infrastructure failure/utilities failure not associated with the Proposed Development	The Scoping Report explains that once the diversion of services across the Proposed Development has been completed, the Proposal would not have an impact on such infrastructures/utilities. Therefore, the Inspectorate is content to scope this matter out of further assessment.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.13.8	Table 19-2	Critical failure of the existing electrical substation (Steventon)	Table 19-2 states that although some works will be required to the existing Steventon sub-station, these shall be undertaken by an appropriately qualified company in accordance with standard best practice and therefore would unlikely result in a major accident or disaster. The Inspectorate is content with this approach and agrees this matter can be scoped out of further assessment.
3.13.9	Table 19-2	Ground instability	Table 19-2 explains the Applicant proposes to scope this matter out of further assessment as there is little risk of ground instability given the design of the Proposed Development and states the works will be undertaken according to Reservoirs Act 1975. However, in view of the EA's advice (see Appendix 2 of this Opinion) that land movement has the potential to adversely affect flood storage and flood flow routes, increasing flood risk. the Inspectorate does not agree to scope this matter out at this stage. Accordingly the ES should include an assessment of these matters or information demonstrating agreement with the relevant consultation bodies and the absence of an LSE.
3.13.10	Table 19-2	Defence / military accidents (UXO)	The Scoping Report states in Table 19-2 that Unexploded Ordnance(UXO) surveys will be undertaken prior to works commencing, and construction workers will be given toolbox talks on what to do should UXO be found. Therefore, the Inspectorate agrees that this matter can scoped out of further assessment.
3.13.11	Table 19-2	Industrial sites (Control of Major Accident and Hazards (COMAH) / Major Accident Control Regulations (MACR))	The Inspectorate is content to scope this matter out of further assessment, given the distance between the Proposed Development and the nearest COMAH facilities.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.13.12	Table 19-2	Water sports accidents/drowning	Table 19-2 explains that measures will be put in place to reduce any risks of drowning or water sports accidents, such as lifeguards and rescue boats, as well as the preparation of a Safety Management Plan. The Inspectorate agrees this matter can be scoped out of further assessment, but the ES should explain how these measures would be secured.
3.13.13	Table 19-4	Terrorist attack on people (bomb, chemical, vehicle, malicious drone incident)	The Scoping Report explains even though the likelihood of a terrorist attack occurring is low, security measures will be put in place (such as CCTV, infra-red security, and a manner gatehouse) to prevent such an event from occurring. The Inspectorate agrees that this matter can be scoped out of the further assessment, but the ES should explain how these measures would be secured.

ID	Ref	Description	Inspectorate's comments
3.13.14	Paragraph 2.7.7	Electricity storage	Paragraph 2.7.7 of the Scoping Report explains that electricity may be generated and stored on the site, the ES should include consideration of drainage and pollution prevention at this potential electricity storage site, including an explanation of how firewater would be managed.

3.14 Cumulative effects

(Scoping Report Section 20)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.14.1	n/a	n/a	No matters have been proposed to be scoped out of the assessment.

ID	Ref	Description	Inspectorate's comments
3.14.2	Paragraph 20.7.5	Assessment methodology – intra-development cumulative effects	The Scoping Report states that professional judgement would be used to identify potential intra-development cumulative effects could occur across the aspects and would be reported that deals with the receptor affected. The ES should set out the methodology for the assessment of cumulative effects on individual receptors in combination with other environmental aspects, in particular how the sensitive receptors would be selected.
3.14.3	Section 20.8	Loss of solar energy apparatus	For the purposes of clarity, the ES should include an assessment of the loss of solar farm apparatus and identify any associated likely significant effects, if applicable.
3.14.4	Section 20.8	Scope of assessment	For the purposes of clarity, the ES should include the potential effects of the different timescales for construction and completion of the Proposed Development, when compared to that of other known proposals within the study area. Intra-development cumulative impacts, for example (but not limited to) the construction and operation of the River Thames intake/outfall and the construction of the Wiltshire and Berkshire canal within the site, should also be assessed. The Applicant is advised to seek agreement regarding the developments to be included in the assessment with the relevant consultation bodies.

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES

Bodies prescribed in Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (the 'APFP Regulations (as amended)')

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Secretary of State for Defence	Ministry of Defence
The relevant parish council or, where the application relates to land in Wales or Scotland, the relevant community council	Abingdon on Thames Parish Council
	Ardington Parish Council
	Appleford on Thames Parish Council*
	Appleton with Eaton Parish Council*
	Chilton Parish Council*
	Clifton Hampden Parish Council*
	Culham Parish Council
	Didcot Parish Council*
	Drayton Parish Council
	East Challow Parish Council*
	East Hendred Parish Council
	East Hanney Parish Council
	Farnborough Parish Council*
	Fyfield and Tubney Parish Council*
	Garford Parish Council
	Grove Parish Council
	Harwell Parish Council*

SCHEDULE 1 DESCRIPTION	ORGANISATION
	Kingston Bagpuize with Southmoor Parish Council*
	Lockinge Parish Council
	Marcham Parish Council
	Milton Parish Council*
	Nuneham Courtney Parish Council*
	Radley Parish Council*
	Steventon Parish Council
	St. Helen Without Parish Council
	Sunningwell Parish Council*
	Sutton Courtenay Parish Council
	Wantage Parish Council*
	West Hanney Parish Council*
	West Hendred Parish Council
	West Ilsley Parish Council*
	Wootton Parish Council*
The Environment Agency	The Environment Agency
Natural England	Natural England
The Forestry Commission	Forestry Commission
Relevant AONB Conservation Boards	Chilterns Conservation Board
	Cotswolds Conservation Board
The Historic Buildings and Monuments Commission for England (known as Historic England)	Historic England
The Canal and River Trust	The Canal and River Trust

SCHEDULE 1 DESCRIPTION	ORGANISATION
The relevant Highways Authority	Oxfordshire County Highway Department
	National Highways
The Civil Aviation Authority	Civil Aviation Authority
The Health and Safety Executive	Health and Safety Executive
NHS England	NHS England

*these bodies were not identified as a consultation body due to a technical error and responses will not be considered as part of the Scoping Opinion. Any response will be published on the Planning Inspectorate's website and sent to the Applicant for consideration along with any other late responses.

TABLE A2: RELEVANT STATUTORY UNDERTAKERS

'Statutory Undertaker' is defined in the APFP Regulations (as amended) as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
The Crown Estate Commissioners	The Crown Estate
The relevant police authority	Thames Valley
The relevant ambulance service	South Central Ambulance Service NHS Foundation Trust
The relevant fire and rescue authority	Oxfordshire
	Royal Berkshire*
The relevant Integrated Care Board	NHS Buckinghamshire, Oxfordshire and Berkshire West Integrated Care Board
NHS England	NHS England
The relevant NHS Foundation Trust	South Central Ambulance Service NHS Foundation Trust

STATUTORY UNDERTAKER	ORGANISATION
Railways	Network Rail Infrastructure Ltd
	National Highways Historical Railways Estate
Canal Or Inland Navigation Authorities	The Canal and River Trust
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertaker	Thames Water
	Thames Water Commercial Services
The relevant public gas transporter	Cadent Gas Limited
	Northern Gas Networks Limited
	Scotland Gas Networks Plc
	Southern Gas Networks Plc
	Wales and West Utilities Ltd
	CNG Services Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd

STATUTORY UNDERTAKER	ORGANISATION
	Fulcrum Pipelines Limited
	GTC Pipelines Limited
	Harlaxton Gas Networks Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Inovyn Enterprises Ltd
	Last Mile Gas Ltd
	Leep Gas Networks Limited
	Mua Gas Limited
	Quadrant Pipelines Limited
	Stark Works
	National Gas
The relevant electricity generator with CPO Powers	RWE Generation UK Plc - Didcot Power Station (A and B)
The relevant electricity distributor with CPO Powers	Southern Electric Power Distribution Plc
	Advanced Electricity Networks Ltd
	Aidien Ltd
	Aurora Utilities Ltd
	Eclipse Power Network Limited
	Energy Assets Networks Limited
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Distribution Connection Specialists Ltd

STATUTORY UNDERTAKER	ORGANISATION
	Independent Power Networks Limited
	Indigo Power Limited
	Last Mile Electricity Ltd
	Leep Electricity Networks Limited
	Mua Electricity Limited
	Optimal Power Networks Limited
	Stark Infra-Electricity Ltd
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc
	National Grid Electricity System Operation Limited

*these bodies were not identified as a consultation body due to a technical error and responses will not be considered as part of the Scoping Opinion. Any response will be published on the Planning Inspectorate's website and sent to the Applicant for consideration along with any other late responses.

TABLE A3: LOCAL AUTHORITIES AS DEFINED IN SECTION 43(3) OF THE PA2008

LOCAL AUTHORITY
Oxford City Council
Vale of White Horse District Council
South Oxfordshire District Council
West Oxfordshire District Council
Cotswold District Council
Cherwell District Council

LOCAL AUTHORITY
Warwickshire County Council
Oxfordshire County Council
Gloucestershire County Council

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Abingdon-on-Thames Town Council
Cadent Gas
Canal and River Trust
Cherwell District Council
Chilterns National Landscape
Cotswolds National Landscape
Culham Parish Council
Environment Agency
Historic England
Health and Safety Executive (HSE)
Marcham Parish Council
Ministry of Defence (MoD)
National Grid
National Highways
NATS
Natural England
Network Rail
Oxfordshire County Council
Sutton Courtenay Parish Council
Vale of White Horse District Council
Warwickshire County Council - Highways
Warwickshire Minerals and Waste Planning Authority

Abingdon-on-Thames
Town Council
Roysse Court Offices
Bridge Street
Abingdon
OX14 3HU

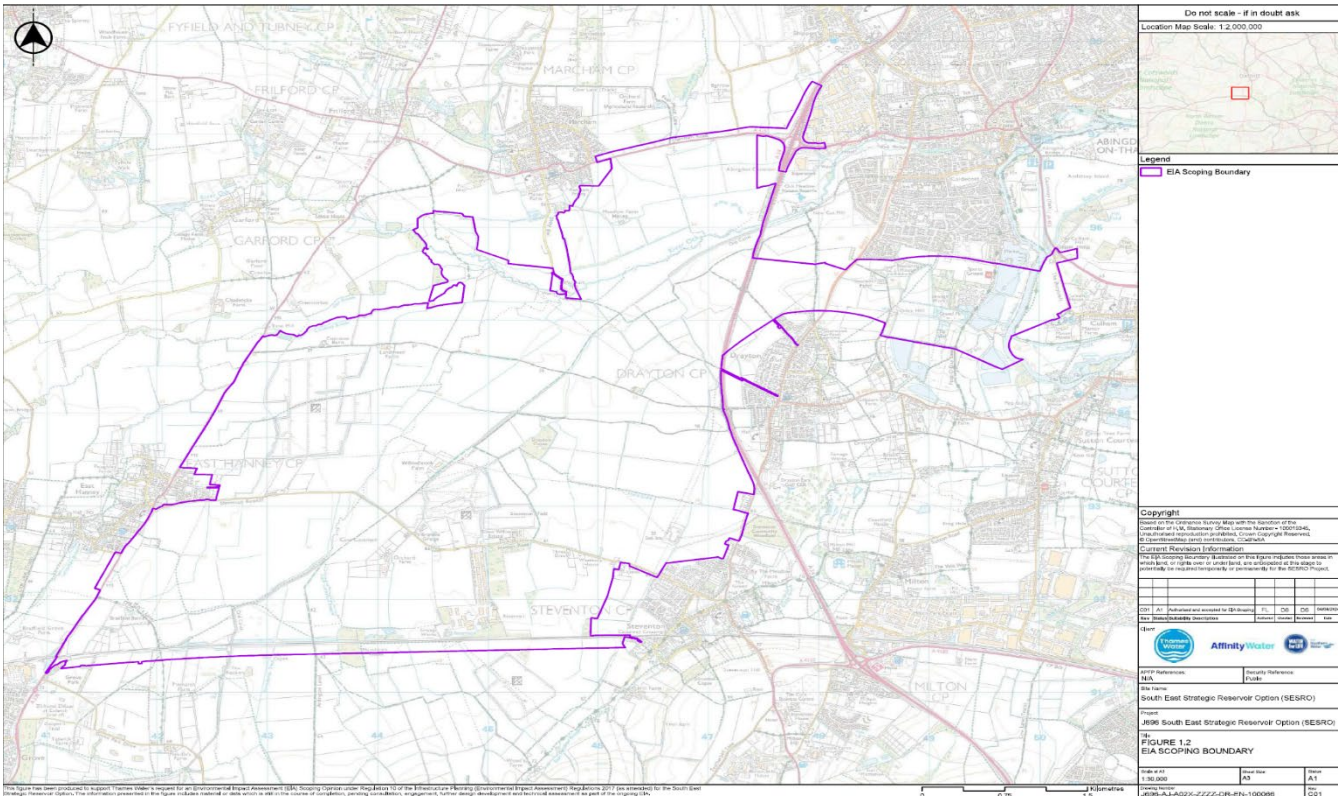
Abingdon Town Council Planning Inspectorate Thames Water SESRO EIA Scoping response

Thank you for consulting Abingdon Town Council on Thames Water's proposed EIA Scoping proposal.

As with our response to Thames Water's voluntary public consultation this July and August, the Council has some significant concerns regarding omissions, assertions and methodology in this proposal as follows:

Scoping Comments

1. **EIA Assessment area boundaries – Fig 1.2**

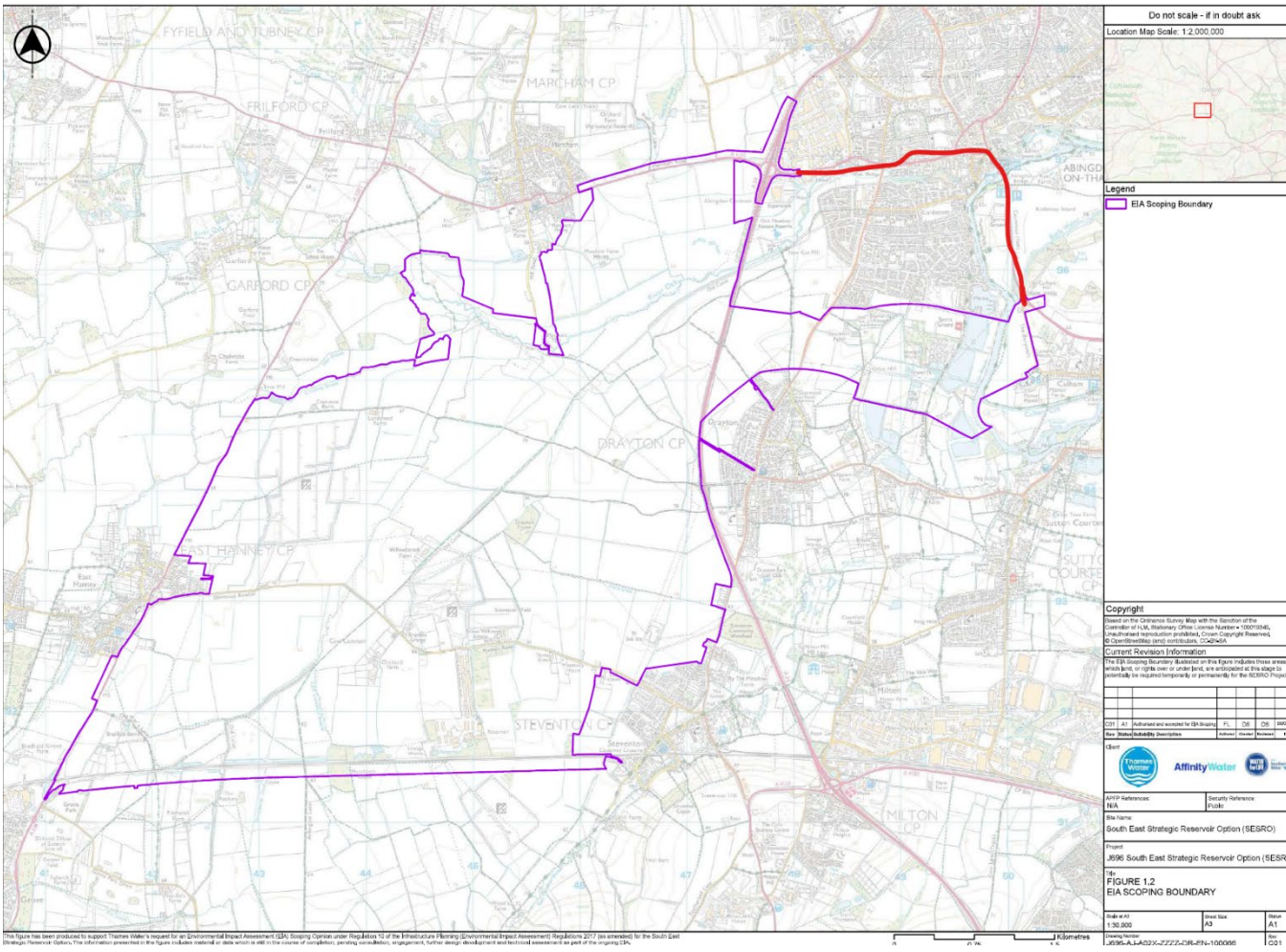


Abingdon Town Council has an issue with these boundaries as they the areas of south Abingdon, in particular the River Ock floodplain from the A34 culvert, continuing in close proximity or through residential areas that have in the past been affected by flooding, to the confluence of the Ock and the Thames.

In the Council's opinion this area should be scoped into the assessments as the S19 Flood Incident Report referred to in point 4 occurred within that area and we have concerns that SESRO will cause additional water course and groundwater flooding in this well-populated area.

Our scoping would follow Marcham Road, Ock Street and the High Street to the North and

Bridge Street to the East as shown:



2. Climate Projections clarity - statement made in Sections 6.6.3 & 7

'Climate projections generally indicate wetter, milder winters, a shorter sharper groundwater recharge season, higher temperatures, potential increased evaporation and drier soils. During extended drought periods it is expected that the wetter winters would not offset the impact of dryer summers. As a result, summer flows in the River Thames may be lower in the future

meaning augmentation from the SESRO Project has the potential to provide beneficial effects during certain low flow periods.'

Abingdon Town Council is unclear, given that SESRO is predicted to need abstraction from the Thames for a minimum 2 years to fill, how resilience as a sustainable water supply solution can be maintained given this statement?

This needs clarification and scoping in and also leads to our next point

3. 2018 National Infrastructure Commission (NIC) report1 – reservoir alternatives

Thames Water discuss only one option, SESRO, but there are other ways as in the recommendations of the 2018 National Infrastructure Commission (NIC) report1:

- Provision of at least 1300 Ml/day of water through a national water network and additional supply infrastructure (smaller scale dispersed reservoirs, re-use, desalination schemes) by the 2030s
- Halving of leakage between 2018 and 2050
- Compulsory water metering

They considered water transfers, reservoirs, desalination, and re-use, the latter three always had potentially significant drawbacks. However, the NIC says of Water Transfers they are the exception:

"A range of studies have all found a positive cost-benefit case for greater transfers and water trading (see Annex 3 NIC Report1 2018). However, transfers currently only make up a small proportion of total supply (about 4%). This is likely to be because the incentives in the current system make developing a strategic transfer network difficult, meaning that the decision needs to be made at a different level."

Scale of water made available by inter-regional water transfers is greater than combination of any projected reservoir projects.

Severn-Thames Transfer (STT) alone could make 300-500 Ml/day of water available to Southeast from plentiful existing reservoirs in North West and Wales and be available in under a decade.

SESRO output is believed to be 270Ml/day

The Severn Thames Transfer is only mentioned as a potential future add on, should it become necessary, because SESRO is not capable of maintaining supply. In the current scoping

'alternatives' appear to only refer to possible locations for SESRO, as opposed to 'is this the best, most resilient solution for future water supply'.

Abingdon Town Council believes the option of Severn Thames Transfer with local reservoirs, needs a thorough and robust all-criteria comparison against SESRO for cost, delivery, environmental and most important, sustainable supply and should be scoped as substantive validation for the reservoir option. As to date, Abingdon Town Council has been unable to easily ascertain if this has been done.

4. **River Ock flood area – Chapter 6.6.31 statement and see Town Council amended boundaries plan**

'SESRO, once constructed, would capture rainfall that would otherwise contribute to catchment flows, notably in the diverted watercourses. This means that the overall contributing catchment to the diverted watercourses is slightly reduced. In addition, diverted watercourses would change some of the flow routing in some reaches of the Childrey Brook and lower River Ock. Preliminary modelling has shown that the reduction in catchment area results in an overall effect on flow in the lower River Ock that is very small and, therefore, the effect on the hydrology of the River Thames is negligible. However, this remains scoped in to review against currently ongoing modelling updates'

The Town Council want to see a very robust scoping policy for the flood risks both for the construction and operational phases as there have been significant flood events on a regular basis in the area including early in 2024 running back from where it flows into the Thames through the town up to the Tesco Super store, which has had several lost days of trading in 2024 due to its car park being flooded, as it has also done in previous years.

- Residential properties have been affected as evidenced in Oxfordshire County Councils S19 Flood Investigation Report at: https://www.oxfordshirefloodtoolkit.com/wp-content/uploads/2024/07/S19-Report-Nash-Drive-v1.0-FINAL.pdf
- At our Council meeting of the 31st July 2024 Thames Water assured us that they would ensure the position would be the same as it is now.
- "As it is now" would result in a repeat of the incident detailed in the S19 Report.
- This is clearly not acceptable for residents with affected homes, Tesco and the residents of Abingdon and the surrounding areas who rely on that store.
- Residential developments have to pass stringent requirements and so should this scheme under robust methodology.

- The Council strongly believes this situation will be worse without the area of the reservoir available as arable land further upstream, allowing mitigation schemes on the Ock through natural measures.
- Increasing backup at the confluence with the Thames could seriously impact residents and businesses in areas already on EA flood maps including upstream of the Ock /Thames, past Abingdon Bridge in an area including historic buildings.
- These areas of Abingdon require scoping into the EIA.
- Currently, Thames Water say they have limited groundwater data for River Ock area, more modelling and data is needed, but our fear is SESRO occupying this location will increase flood risks for the town and surrounding areas.
- 6.6.18 Preliminary groundwater modelling (currently in development) suggests the introduction of SESRO could lead to an increase in groundwater levels. Groundwater flood risk is, therefore, also scoped in which is reassuring but needs to be extremely robust
- There are limited details of the proposed flood hold back area for the Ock. That also needs to be robustly modelled, as a further concern for the town is that the Environment Agency's ability to deliver a suitable additional scheme under a Capital Flood Risk Project, as highlighted in the S19 Report for the Ock above, might not be able to be implemented or prove ineffective in this scenario.

5. Movement of personnel, equipment and material impacts

In the Town Council's response to Thames Water's public consultation this August under this heading our comment was:

'The scheme seems to rely on the hope that the railway delivery and handling yard is permitted on a very crowded main line, which has not yet been agreed, and will take 2 years at least to build with the potential to impact scheduling on the London to Bristol main line.

Locally , it is well known the A34 is at or beyond capacity and has frequent accidents, especially in the Milton and Marcham interchange areas and cannot be considered a robust and sustainable option.

Abingdon is already regularly a gridlocked town without these now too frequent incidents, but when they occur, hours of ongoing extreme disruption and significantly increased pollution are generated, which the town and residents should not be expected to accept.'

Reviewing Section 11 for Traffic and Movement the Council is disappointed as:

- Scoping to cover for the option of permission for a construction rail siding being denied is not included.

- The Council's understanding of the railway siding location is that it is on a section of track where commuter services run at 125mph in an already very busy network timetable so is the scheme achievable with road only access needs to be modelled with all the associated environmental impacts.
- Scoping is not possible for the construction and operational phases as the statement is given that plans for these have not been drafted or are insufficient in detail, so the Council feels this scoping be held back until there is more detail available.
- Scoping should also include the possibility that construction takes longer than predicted. Recent significant Infrastructure projects like Crossrail and currently HS2 were, and are not, running to time, so contingency needs to be built in, possibly to the mid 2040's
- There are a large number of assumptions regarding workers being predominantly local and their travel possibilities. Scoping needs to allow for options such as workers' buses or park and ride areas to minimise any traffic increases.
- Construction traffic management scoping should add enforcement items like ANPR cameras on prohibited routes to prevent inappropriate rat runs with all the associated environmental harm and damage to residents' health property and environment. The EIA is aware of Abingdon's historic buildings hence the Council's wish to see adequate protection options studied.
- The preferred main site access road option on the A415 is very close to the Marcham A34 / A415 junction, which frequently operates at very high capacity and already causes delays at peak times. Extremely rigorous modelling will be needed to prove sufficient capacity exists to accept the construction and operation phases traffic. The scope should be 'worst case scenario' needs based on no railway siding option being available until proven otherwise.
- 11.5.7 acknowledges there are already significant traffic volumes in the town, reinforcing Abingdon Town Council's view that no construction traffic should be added.
- Abingdon Town Council also has the microclimate impact concerns that a reservoir the size of Gatwick Airport will bring to the local area, and so impact on both the A34 and other local roads and cycleways.

6. Interaction with new local Plan Developments scheduled for SESRO timescale.

- This was also mentioned in our Thames Water Consultation response due to the well-progressed work on the new Vale of White Horse and South Oxfordshire Districts Joint Local Plan 2041 for redevelopment of Dalton Barracks (2,700 houses) and Culham Science Village (Science Park and 3,500 houses) to meet local needs

- Scoping must be included for SESRO traffic assessments to allow for these projects while avoiding total grid lock to Abingdon as all three projects are proceeding on similar timescales.
- Scoping needs to prevent any construction traffic using Abingdon's roads. The town's one historic bridge recently had to have significant remedial work and single lane working applied. The bridge, our other historic buildings, and 33,000 residents and their homes should not have to cope with prolonged exposure to construction traffic and years of frustration, so road management plans must be scoped to meet that requirement.

7. Project Scale, Management, Delivery and Accidents / Disasters

- SESRO is to Abingdon Town Council's understanding one of the largest, if not the largest reservoir to be constructed using the bunded method in this country. At over 10 times the capacity of the nearby Farmoor Reservoir and occupying an area the size of Gatwick Airport the use of the bunded method of construction at this scale is untested.
- The Council is concerned that the trial bund being planned is a very minor smaller scale test, not representative of the scale of the actual build so would suggest that the EIA should include an assessment of whether this significant scaling-up is valid.
- Thames Water frequently quote the UK 1975 legislation covering reservoirs, dams and embankments but scoping in additional contingency in view of the size and scale of the project would be prudent to minimise potential failures / breaches. (Section 19)
- Severe weather has been factored out, yet Thames Water have quoted climate change in Sections 6,7 & 16 of the scoping document, as mentioned earlier in our response. The Meteorological Office have reported tornados and extreme rainfall events in the UK this year, so the Council feels severe weather should remain in the scoping. (Section 19)
- Landslides and slips have also been scoped out but during such an extended and large-scale construction running and with wetter winters and drier summers under climate changes, the Council feels this should remain scoped in. (Section 19) In Section 16 those wetter and flood events for erosion/scour damage are listed, so possible embankment failure impacts being scoped again post construction seems prudent.
- Failure of Steventon electricity substation has been scoped out as connections to it will be made by competent contractors. But what about a catastrophic substation failure and an urgent requirement for a drawdown of water back to the Thames being required? (Section 19)

8. Air Quality

- Odour emissions to be monitored up to 2km away from the site during construction. Potential impact above that distance is not considered likely. The site is Southwest of Abingdon and our prevailing winds are south westerlies blowing to the north east so the Council feels Abingdon should be included in the scoping.
- Vehicle emissions during construction using the A415 to join the A34 at Marcham Interchange would be passing allotments owned by the Town Council. These would be well used during the Spring to Autumn prime construction months each year, so the Council feels an assessment for that part of the A415 should be scoped in.
- The Council feels construction vehicle emissions should be scoped in as it will not be a small amount of plant required.
- Dust can travel substantial distances with wind and as mentioned Abingdon is North East of site in south westerly wind track so modelling must include the town.
- The Thames Intake / Outfall construction will generate dust and odours and is very close to major residential areas of South Abingdon so requires a robust assessment as work will be in months people want to be outside.

9. Noise and Vibration

- In construction phase, the Council is concerned that Abingdon's location could be impacted by construction plant and delivery traffic increasing cumulative load already in place from the A34
- The Thames Intake / Outfall construction will generate noise and vibration and is very close to major residential areas of South Abingdon. The Council would ask that this is scoped in, especially the impact of a Tunnel Boring Machine running 24 hours a day, as during the Crossrail construction there were instances of pauses to allow for securing property that had started to be adversely affected.
- Assessment is also needed on whether these vibrations in South Abingdon could cause damage to property and what is the maximum transmission distance from the route as we have a very high number of historic buildings in the town.
- Construction delivery vehicles have to have approved routes enforced both for SESRO main and Intake / Outfall sites to ensure validity of assessments.

Abingdon-on-Thames
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Abingdon
OX14 3HU

10. Materials and Waste

- The Town Council is disappointed that on many parts of this section statements are being made that it is too early in the SESRO process to quantify supplies and landfill requirements to give details for scoping.
- The Council considers that moving to the next stage PEI to include these matters is not appropriate and scoping should be paused until the necessary work is complete to allow full and proper scoping consideration.

11. Carbon and Climate Change

- 16.5.9 & 16.5.10 suggests micro climate effects will be minimal so will be scoped out of the EIA. The rationale is that although a large body of water it is not significant enough. However, as a reservoir ten times the size of the current Farmoor Reservoir Abingdon Town Council believes this should be scoped (as stated in our comments regarding Traffic earlier).
- The Council would like to see a contingency added to the scoping for construction as projects taking longer to achieve . Extending this period to 2042/3 would seem prudent and representative for construction GHG

12. Biodiversity and environmental net gain

The Town Council's August Consultation response to Thames Water stated:

'The length of the build plan and the extreme disruption of the local environments and wildlife cover at least a 10 year plan and probably significantly longer, so how long will reaching that stage actually take?

The Council has very strong concerns that local wildlife, watercourses and fauna will need a similar time to recover and remain to be fully convinced that they will. This will impact residents, their children and grandchildren for potentially a couple of decades at least, if not irrevocably.'

The Council notes the scoping for Aquatic (Section 7) and Terrestrial (Section 8) Ecology, Landscapes and Visual Effects (Section 9).

Regrettably, especially concerning Landscape and Visual Effects, the conclusion is Thames Water are looking at a 15 year period following construction for blending in, so there is at least

25 years to attempt to reach that point from build commencement. Visually, even at year 15 residual landscape effects may remain which causes us concern. (9.6.10)

The Town Council feels scoping on this aspect needs to be extremely robust as it is not clear whether net gain will actually be achieved even within that timescale.

Scoping should also include over what timescale is the 10% net gain anticipated to be returned as this is not clear, which is not acceptable to residents.

13. Transfer main/ run off channel changes and the Berks/Wilts Canal

Previous schemes allowed for this to be an open channel to allow supporting Berks & Wilts Canal Trust efforts to progressively restore and reopen the canal to offer far more amenity use.

Now it is to be subsumed into the reservoir area and lost for the future with a major tunnelling effort disrupting a significant area of the country from the site to the Thames.

The Council supports scoping alternatives to the intake/outfall tunnel, especially as in both the Climate Change (16) and Emergencies (19) sections changes in climate and groundwater are being flagged as potentially impacting the ability to use the underground channel.

14. Communities Section 17

The scoping of impacts needs to be robust especially in areas like incoming work force and potential employment possibilities for local residents.

Although SESRO could potentially bring economic benefits to Abingdon, the Town Council has some very serious concerns over impact on public services and our local housing market.

For example, all NHS Services in Abingdon are running above capacity with no plans to address capacity, even though we currently have 1100 houses being built in the north of the town.

Far more detail needs to be scoped for this section. However, as this appears to be dependent on having far more overall construction plan detail, again the Council feels the EIA should be paused to allow for that to happen.

15. Health Section 18

The Council notes the scoped in items which need to be robustly examined. We feel the noise, air quality (including dust) and all the associated significant disturbances including pollutants, of such a major development have a significant potential to severely impact health outcomes,

including mental health, for all residents and especially those with existing conditions or susceptibilities.

Consequently, those should be scoped in.

The 10-year minimum construction timescale makes this section extremely relevant with the added anxieties that will arise in the Council's opinion.

Summary

Thames Water have stated that the EIA process is designed to be flexible as some information is only available at later stages.

However, there appears to be a large amount of key information for significant component parts of the project that are not able to be specified.

Abingdon Town Council accepts that major developments by nature have some evolution but in our opinion there are far too many unknowns in the current iteration. There is a lot of proscribed legislated working process shown but it is tempered by what appears to be high levels of assumption, details not yet available or not considered so scoped out.

The Council is extremely concerned that for the EIA Scoping exercise to be a meaningful, valid stage of the process it should be paused until more data is available for the following items:

- River Ock catchment
- Flood risk
- Potential design
- Construction and quantities
- Whether the proposed railway siding is actually likely to proceed.

25th September update – over the last 24 hours the River Ock and the South Abingdon residential and Tesco areas flooded in January 2024 including all in the S19 Flood Investigation are once again flooded with water levels still increasing.

Facebook Community comment links are provided here for review to show why this process needs pausing while full survey and monitoring data is obtained, and proper solutions are sought to cope with predicted ground and surface water changes in the future.

[redacted]

Abingdon-on-Thames
Town Council
Roysse Court Offices
Bridge Street
Abingdon
OX14 3HU

[redacted]

[redacted]

Thank you once again for consulting Abingdon Town Council on behalf of our residents.

[redacted]

[redacted]
Town Clerk/CEO

Hi.

I can confirm that this project falls outside of Cadent’s operational area.

We have no comments to add.

Kind regards

Toby

Canal & River Trust
Making life better by water

sesro@planninginspectorate.gov.uk

Your Ref

Our Ref IPP - 240

25/09/2024

NSIP: South East Strategic Reservoir Option (SESRO) Scoping Consultation

Waterway: N/A

Thank you for your Scoping consultation.

We are the charity who look after and bring to life 2000 miles of canals & rivers. Our waterways contribute to the health and wellbeing of local communities and economies, creating attractive and connected places to live, work, volunteer and spend leisure time. These historic, natural and cultural assets form part of the strategic and local green-blue infrastructure network, linking urban and rural communities as well as habitats. By caring for our waterways and promoting their use we believe we can improve the wellbeing of our nation. The Trust is a prescribed consultee in the Nationally Significant Infrastructure Projects (NSIPs) process.

The Trust has reviewed the proposal and confirm that it appears unlikely to have any impact on our waterways. If your proposal becomes significantly altered, we ask that you re-consult us in order that we can re-consider this position.

It is noted that the proposal is likely to have implications for canal restoration schemes in the region and we understand that some canal societies believe that a greater contribution to restoration could be made with amendments to the preferred option. The Trust believes that increasing the size of the navigable waterway network for public benefit can bring economic, environmental and social wellbeing to communities and the nation and we believe life is better by water.

We request that the scheme promoters continue to engage with the affected canal societies to properly test appropriate options as part of the scheme development process.

Please do not hesitate to contact me with any queries you may have.

Yours sincerely,

[redacted]
Area Planner
[redacted]
[redacted]

[redacted]

Canal & River Trust
Fradley Junction, Alrewas, Burton-upon-Trent, Staffordshire DE13 7DN
T 0303 040 4040 E canalrivertrust.org.uk/contact-us W canalrivertrust.org.uk

Planning and Development

[redacted], Assistant Director – Planning and Development

Cherwell DISTRICT COUNCIL NORTH OXFORDSHIRE

FAO [redacted]
on behalf of the Secretary of State
Environmental Services Operations Group 3
Temple Quay House
2 The Square
Bristol
BS1 6PN

Bodicote
House
Bodicote
Banbury
Oxfordshire
OX15 4AA

www.cherwell.gov.uk

[redacted] [redacted] [redacted]
[redacted] [redacted] Your Ref: **WA010005**

20th Sep. 2024

Dear [redacted],

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Your Ref:	**WA010005**
CDC Ref:	24/02348/SCOP
Applicant's Name:	Thames Water Utilities Limited
Location:	South East Strategic Reservoir
Consultation end date:	**25 September 2024**

Thank you for consulting Cherwell District Council (CDC) on 28 August 2024 regarding a Scoping Opinion for the South East Strategic Reservoir (SESRO).

It is recommended that the Environmental Statement required for the proposed development should cover the format and topics as proposed by the applicant. CDC has considered the scope of each chapter to remain in the Environmental Statement in regards to its relevance to CDC and provides advice below as to where that scope should be widened.

The EIA should be undertaken in accordance with current legislation, national, regional, local and neighborhood plans as relevant to the environment. The Environmental Statement should demonstrate the ways in which it complies with that requirement.

The following matters should also be addressed in the Environmental Statement.

Need and Alternatives Considered

Section 3.1.1 of the scoping report highlights that under the Thames Water's Water Resources Management Plan (WRMP), the SESRO is one of the options considered to ensure that there is sufficient water available to meet anticipated demands under various weather conditions including during dry and very dry conditions, whilst protecting the environment. Therefore, the need is considered to be sufficiently demonstrated. Section 3.2.1 of the Scoping report states that; *Thames Water identified reservoir options through a site selection / feasibility process that considered suitable sites for a range of reservoir sizes.* Section 3.2.1 outlines why the specific SESRO location was selected but there is not a breakdown or mention of the other considered sites in the south-east and why they were discounted. The EIA should, therefore, include a detailed consideration of reasonable alternatives sites.

The scoping report does however consider several options in terms of the associated infrastructure for the SESRO and the approach to appraise the infrastructure options is considered acceptable by CDC.

Proposed Scope of Assessment: Environmental Statement Chapters

Historic Environment

Section 10 of the scoping report outlines the scope methodology for the historic environment assessment for the SESRO. The assessment covers matters related to Archeological remains (known and unknown) and the potential impacts and effects arising on them from the SESRO. Furthermore, the assessment covers the location and value of built heritage assets such as Conservation Areas, Listed Buildings and non-designated historic buildings, and the potential changes to their value arising from SESRO. Lastly, the presence and value of historic designed landscapes and the capacity for SESRO to affect these heritage assets.

A study area has been identified within the scoping report. This area relates to the relevant historic environment data for both designated and non-designated assets within the EIA Scoping Boundary (outlined in ***Figure 1.2*** in the SESRO Figures Part 1 document) and a 2km buffer zone extending outwards from it. The study area was agreed in engagement with Oxfordshire County Council (OCC).

There are no CDC designated and non-designated heritage assets identified within the EIA Scoping Boundary and 2km buffer zone extending outwards from it. The CDC boundary is at least 5km from the 2km buffer zone. Therefore, there are no heritage asserts within Cherwell District which need to be scoped into the EIA.

Landscape and Visual Resources

Section 9.41 of the scoping report states that, *'The landscape and visual study area for scoping incorporates the EIA Scoping Boundary* ***(Figure 1.2*** in the SESRO Figures Part 1 document) *and the extent of the Zone of Theoretical Visibility (ZTV) within an offset of up to approximately 7km from the EIA Scoping Boundary. The extent of the ZTV is illustrated on Figure 9.3.'*

CDC boundary is well outside the ZTV (at least 5km). Therefore, it's not considered that the SESRO would have any landscape and visual impacts on Cherwell District. It is however mentioned that the scoping report in terms SESRO's landscape and visual effects has been undertaken in accordance with Guidelines for Landscape and Visual Impact Assessment (3rd edition) (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment (IEMA), 2013), which represent good practice. Overall, it's not considered that any landscape considerations within the Cherwell District Boundary need to be scoped into the EIA.

Ecology and Nature Conservation
Section 7.4.3 of the scoping report states that, *'For the purpose of the aquatic ecology assessment, the study area associated with aquatic ecological features includes all watercourses and ponds within the SESRO EIA Scoping Boundary as well as those in hydrological connection where flows may change due to the presence of the reservoir, abstraction or discharges.'*

Section 7.4.4 goes on to say*,' the study area has been sub-divided into a number of study reaches as outlined in Chapter 6 - Water Environment (see Figure 6.1)'.* The study area includes a small section within the south-western part of Cherwell District. The relevant reach is the River Thames (Reach 4 - upstream of SESRO) within Thames (Evenlode to Thame) Water framework directive (WFD) river waterbody catchment (as per ***Figure 6.1*** in the SESRO Figures Part 1 document).

Section 7.5.23 states that; '*Further surveys are required to update the understanding of the baseline and the sensitivity of the aquatic ecological features. This includes the continuation of the monitoring program for the River Thames with targeted surveys also recommended for the watercourses within the Ock catchment (see Appendix B). Survey specifications have been discussed and agreed with the Environment Agency and Natural England and are initially proposed for 2024 and 2025'*. Furthermore, the following section to the above in the scoping report states that, '*further surveys are also required to maintain and/or update the understanding of the baseline sensitivity of the aquatic environment within key reaches of the River Thames.'*

Overall, CDC expects the EIA to scope for and establish the impacts on the relevant aquatic receptors (habitats and species) related to the waterbodies which overlap into the CDC boundary.

In terms of terrestrial Ecology, Section 8.10.1 states that Ecological surveys are ongoing in 2024 and will continue through 2025 to establish the ecological terrestrial baseline and the implications of the development on terrestrial species. CDC expects the EIA to scope for part of Cherwell District that fall within the Zone of Influence Buffers for ecological features (i.e. SACs, LWSs etc.).

Hydrology and Flood Risk
As already mentioned in the section above the study area for water environment for the SESRO includes a small section within the south-western part of Cherwell District. The relevant reach is the River Thames (Reach 4 - upstream of SESRO) within Thames (Evenlode to Thame) Water framework directive (WFD) river waterbody catchment (as per ***Figure 6.1*** in the SESRO Figures Part 1 document).

Section 6.10.1 of the scoping report states that; '*Further hydrology, fluvial geomorphology, water quality and topographic surveys have been identified to update the understanding of the baseline and the sensitivity of the watercourses and reaches. These surveys will be continued once land access is agreed, and the outcomes considered when completing the EIA'.* Furthermore, Section 6.6.10 states that: '*The hydraulic model requires updating and the effects noted as a result of preliminary modelling work are only indicative. Flood risk, therefore, remains scoped into the EIA.'*

Overall, there is an acknowledgement within the scoping report that further surveys are required to inform the EIA. Therefore, CDC expects that the relevant reaches and watercourses implicated to be comprehensively scoped into the EIA to the understand the hydrological and flood risk implications of watercourses/reaches within Cherwell District Boundary, related to the SESRO.

Geology and Soils
Section 14.4.1 of the scoping report states that; '*The Geology and Soils study area is defined by the construction footprint and any areas which are likely to be disturbed to enable construction, plus a 250m buffer area (Figure 14.1)'.* Figure 14.1 was not included in the submission. Therefore, it's difficult to ascertain whether any part of CDC would form part of the study area. The submitted EIA needs to include 'Figure 14.1' for us to establish whether CDC forms part of the study area and

what implications the proposal would have on Ground conditions.

Transport and Movement
Section 11.4.1 of the scoping report states that; *'At this early stage there is no information regarding where the construction and operational workers will live, therefore, there is no information on the generation and distribution of such traffic and other transport modes travelling to the SESRO Project. The study area for this scoping exercise has therefore been defined based on the anticipated routes that both construction and operational traffic are likely to use to access SESRO. These assumptions are based on professional judgement and will develop as the design of SESRO evolves'*. Some of the anticipated routes (i.e. A34/ M40 from J10) falls within the CDC boundary. Therefore, CDC, expects that any forthcoming EIA (when the SESRO design has further evolved) needs to account /scope for any traffic generation which transits through the CDC boundary what cumulative effects on CDC's local highway network this would have. There is reference to Figure 11.1 which account for the 'Highway study area'. However, this has not been included in the submission, this would need to form part of the EIA to provide us with better context of this area and implications for CDC.

Noise and Vibration
Section 12.4.3 of the scoping report states that *'the study area (for both the scoping and impact assessment stages of the EIA process) for the construction vibration assessment is 100m from any construction activity, or the area within which vibration levels from the SESRO Project are forecast to give rise to potential impacts, whichever is the greater'*. The CDC boundary is well outside the 100m construction buffer zone for SESRO (at least 5km). The scoping report also includes considerations for construction rail and movement noise and vibration, operational road traffic noise, baseline noise and vibrations, together with sensitive receptors. None of these elements fall within proximity of the CDC boundary. Therefore, it's not considered that the SESRO would have any Noise and Vibration impacts on Cherwell District that need to be scoped into the EIA.

Climate Change
The study area for climate change vulnerability defined within Section 16.4.11 of the scoping report relates to the geographical area within the EIA Scoping Boundary (see ***Figure 1.2*** in the SESRO Figures Part 1 document). Furthermore, within Section 16.4.10, the climate vulnerability sensitive receptors associated with SESRO are listed as;
• *Receptors associated with the construction process (e.g. working areas, compounds, the workforce, plant and machinery).*
• *Infrastructure and operational assets (e.g. the reservoir and embankments, pumping station, conveyance tunnels, other channels and pipelines, access roads, public access areas and public education and recreation facilities), landscaping/habitats and the workforce.*
The CDC boundary is well outside the EIA Scoping Boundary (at least 10km) and none of the receptors above currently relate to CDC. Therefore, it is not expected that any climate change considerations directly related to CDC is included in the EIA, unless specific information arises which requires such a consideration/scoping.

Communities
The community assessment in the scoping report includes;
• *Accessibility*
• *Land take*
• *Amenity*
• *Economic (split into economic activity, employment, skills, accommodation and public services)*

The study area covers the whole the Oxfordshire County (including CDC). The scoping report details that all the above will be scoped into the EIA for the construction and operation phase of the SESRO. However, public services during the operation phase will not be scoped in as there are not expected to be any impacts to due to the small workforce during the reservoir's operation

and Visitors to SESRO will pose no additional requirement on public services than a visit to any other facilities in the area. CDC is satisfied that the approach outlined in the Scoping Report is acceptable and it expected that CDC's community benefits and drawback related to the SESRO are clearly outlined and illustrated within the EIA.

Waste and Materials
Section 15.4.1 of the scoping report states that;
- *'The first study area (the development study area) – extends to the EIA Scoping Boundary for the SESRO Project (Figure 1.2). Within these areas, materials would be consumed; mineral safeguarding sites could be sterilised; and waste would be generated*
- *The second study area (the expansive study area) – extends to south-east England's regional (or where justified, national) availability of construction materials and capacity of waste management infrastructure, including remaining landfill void space'.*

The CDC boundary is well outside of the EIA Scoping Boundary. However, the 'expansive study area' might extend into the CDC boundary but at this stage as per Section 15.4.3 of the scoping report, the expansive study area is yet to be accurately defined and this will be done at the ES stage of the SESRO Project, when further information on the materials to be consumed and wastes to be disposed of becomes available. CDC, therefore, expects any waste and materials considerations which implicate Cherwell to be scoped into the EIA when the expansive study area becomes clearer.

Human Health
Section 18.4.1 of the scoping report states that *'The EIA Scoping Boundary for SESRO is predominantly within the VoWHDC area with a slight incursion into the SODC area on the eastern bank of the Thames where options for intake/outfall structures are present. The following study areas have been used for baseline data in respect of Human Health:*
• *5km buffer for health receptors*
• *District level and wider region boundaries (Vale of White Horse (VoWH) and South Oxfordshire (SO), Oxfordshire County (OC), south-east England and England) for baseline health conditions and comparison purposes.*

CDC falls within Oxfordshire. Table 18-15 with the scoping report outlines the health determinant matters to be scoped in and out of the EIA. CDC is satisfied that the approach and rationale outlined in the Scoping Report is reasonable.

Cumulative Effects and Inter & Intra -relationship
Section 20.7.8 of the scoping report states that; *'It is not considered practicable to undertake a meaningful assessment of the likely significance of potential cumulative effects at this early stage'.* The scoping report does however include short and long list of developments (as per PINS Advice Note 17). Long list (stage 1) developments, in Appendix O of the scoping report, account for existing and / or approved developments and the short list (stage 2) in Appendix P of the scoping report, includes a shorter list of developments narrowed down and derived from the long list which require further assessment. Such developments in combination with the SESRO Project, have the potential to result in significant cumulative effects. The short list of projects includes a CDC NSIP project (Botley West Solar Farm). The scoping report concludes that, the Long and Short List of other existing development and/or approved developments will be revised throughout the EIA process, in consultation with the LPAs.

The scoping report highlights a plan to gather information related to the relevant applications/projects in terms of design, location, proposed program of construction, environmental assessment etc. to help consider the cumulative effect of the SESRO Project with each other development identified.

Overall, at present there is no conclusive information regarding the cumulative effects considerations

within the scoping report. However, at this early-stage CDC is satisfied that the approach outlined in the Scoping Report.

Air Quality

Dust
Section 13.4.3 states that for dust emissions the assessment focuses on areas with a 500m distance from the construction site exit(s). CDC Boundary is significantly away from the buffer zone.

Vehicle exhaust emissions
The study area for the scoping assessment includes receptors within 200m of 'affected roads'. In the traffic and movement section it is noted that some of the anticipated routes for the development (i.e. A34/ M40 from J10) falls within the CDC boundary. Therefore, CDC, expects that any forthcoming EIA to account /scope for air quality implications related to the 'affected roads' within CDC.

Non-Road Mobile Machinery (NRMM) emissions
Section 13.4.8 of the scoping report states that; *'A qualitative assessment of emissions from plant and machinery (i.e. NRMM), during construction would consider the potential effects at the nearest receptors within 500m of the EIA Scoping Boundary for SESRO'*.). CDC Boundary is significantly away from the buffer zone.

Odour emissions
Section 13.4.9 of the scoping report state that; *'the study area for the assessment of emissions of odour is limited to the closest adjacent land users within 2km of the EIA Scoping Boundary for SESRO'.* CDC Boundary is significantly away from the buffer zone.

In terms of Human and Ecological receptors related to air quality, none of them identified in the scoping report are in proximity of the CDC boundary.

Major Accidents and Disasters
There is no study area for the major accidents and disasters outlined in the scoping report. The study areas outlined in the scoping report for the other relevant environmental considerations (Ecology, Human Health, Traffic and Movement etc.) will be used to as a guiding factor in assessing the likelihood of potential disasters. It is expected that where the study area falls within the CDC boundary, the most likely associated risks in terms of Major Accidents and Disasters, which would implicate CDC are scoped into the EIA.

Summary of the Council response
Subject to the above being taken into account, Cherwell District Council is broadly in agreement with the Environmental Statement topic areas set out in the Scoping Report August 2024 and the rationale for the identified study areas of environmental impact relative to the CDC boundary. If you have any questions or queries regarding the above, please contact the Case Officer using the details provided above.

[redacted]

[redacted]
Assistant Director – Planning and Development

Checked By: [redacted]

Contact: [redacted]
Email: planning@chilterns.org.uk

By planning portal upload to Dacorum BC & Central Beds DC planning portals

My Ref.: F:\Planning\DM\South East Strategic Reservoir Option.

PINS Ref: WA010005

11th September 2024

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) Regulations 10 and 11

Application by Thames Water Utilities Limited (the Applicant) for an Order granting Development Consent for the Southeast Strategic Reservoir Option (SESRO) (the Proposed Development) - scoping consultation. PINS reference: WA010005

CCB (Chilterns National Landscape) Scoping Comments.

Thank you for consulting the Chilterns Conservation Board (CCB). We propose to submit brief comments.

The Chilterns AONB is now referred to as a National Landscape, following the Government's acknowledgement of this reform, following the recommendations of the Landscape (Glover) Review's finding, published in September 2019. The AONB status remains in law, and the Chilterns Conservation Board is a body constituted under section 87 of the Countryside and Rights of Way Act 2000 (CROW Act), which establishes Conservation Boards with statutory purposes to conserve and enhance the natural beauty of the AONB and to increase the understanding and enjoyment of the special qualities of the AONB. The Levelling UP and Regeneration Act 2023, section 245 bolstered this duty by amending it to include,
In section 85 (general duty of public bodies etc) ((a) before subsection (1), insert—
"(A1) In exercising or performing any functions in relation to, or so as to affect, land in an area of outstanding natural beauty in England, a relevant authority other than a devolved Welsh authority must seek to ***further the purpose of conserving and enhancing the natural beauty*** *of the area of outstanding natural beauty"*. (our emphasis, which links to our conclusions – please see below).

The amendment that led to Section 245 of the LUR Act as a whole was justified to the House of Lords by its proposer the Baroness Scott of Bybrook in these terms "The clause strengthens the duty on certain public authorities when carrying out functions in relation to these landscapes to seek to further the statutory purposes." The intention was clearly to lead to a step-change in the level of attention that public bodies should pay to the purposes of designation of protected landscapes.

In this scoping opinion, that *'step change'* applies to the proposed impacts and mitigation upon the AONB, its setting and the broader catchments/hydrological relationships with Chalk Streams.

To assist the process, the Chilterns Conservation Board would wish to make two key points on (a) the application of the new 'duty to further' and (b) the relationship to hydrology and Chilterns Chalk Streams.

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(a) The strengthened duty to further the purpose of conserving and enhancing the natural beauty of the Chilterns National Landscape under s.85 of the CROW Act.

85 General duty of public bodies etc.

(A1) In exercising or performing any functions in relation to, or so as to affect, land in an area of outstanding natural beauty in England, a relevant authority other than a devolved Welsh authority must seek to further the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty (continues)

(2) The following are relevant authorities for the purposes of this section—

(a) any Minister of the Crown,

(b) any public body,

(c) any statutory undertaker,

(d) any person holding public office.

This applies to the following bodies involved in the SE Strategic Reservoir option: the Secretary of State, the Examining Authority (EXa), Vale of White Horse and South Oxfordshire DC (as a local authority), and the applicant (as a utility body). The applicant is included in this list and must comment on how the proposal would comply with this duty.

The Oxford English Dictionary defines 'to seek' as 'to go in search or quest of; to try to find, look for (either a particular object—person, thing, or place—whose whereabouts are unknown, or an indefinite object suitable for a particular purpose) (OED https://www.oed.com/dictionary, sourced 10th September 2024).

The new duty requires the decision-maker to undertake a proactive process, including approaching the relevant AONB bodies to discuss the potential impacts of the proposal, their mitigation or any compensatory measures for those impacts since the passing of the Levelling-Up and Regeneration Act 2023 or the commencement of the parts relevant to the strengthened duty on 26th December 2023. In the Scoping Papers at 4.2.3, we see that the North Wessex Downs has been approached.

This legal test is focused on a particular objective derived from the rationale for designating an AONB, i.e. its natural beauty. This is a meaningful change to the duty in the CROW Act, rendering it an active, as opposed to a passive duty. The clear intention of the change is to move away from a situation that merely calls for passive regard to the designation in favour of a positive and proactive assessment of how that activity will be able to "further" the purposes of designation, i.e., the conservation and enhancement of the area's natural beauty. When discussed in the House of Lords at its Third Reading (September 2023) and in response to the Government's amendments to the Levelling Up and Regeneration Bill, Baroness Jones of Whitchurch responded for the then opposition that,

My Lords, first, I remind noble Lords of my interest in the South Downs National Park. I add my welcome to that of the noble Lord, Lord Randall, for government Amendment 9, which fulfils the commitment that was made on Report to take the rather weak phraseology of public bodies "having regard to", which we knew in practice was not working, to a much stronger phraseology —that public bodies should "further the interests and statutory purposes" of national parks. It sounds technical, but it makes a big difference in practice. The fact that that is linked to management plans and the targets and so on really helps make sure that those processes will work in tandem and will be in force (Hansard, Vol 832, 21st Sep 2023).

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CCB (Chilterns National Landscape) Scoping Summary & Key Point – The CCB has assumed that this project does not impact the Chilterns landscape, taking a landscape perspective exclusively. However, it does impact the North Wessex Downs National Landscape. We would seek reassurance on this point within the landscape contents, currently section 9 of the Scoping Study.

(b) The Water Environment and the Chilterns AONB (National Landscape).

Section 6 (pages 121+) deals with this. We also noted that in paragraph 2.4.6, this project is also linked to Affinity Water's Strategic Resource Option.

The Chilterns Conservation Board (CCB) has managed the Chilterns Chalk Streams project for 25 years, involving practical conservation and river restoration work and management advice to riverside landowners. The 2022/23 Annual Report reviews this work and can be found at https://www.chilternstreams.org/our-work/. Despite the rarity and value of chalk streams, these precious and unique freshwater ecosystems are at risk. The chalk streams in the Chilterns are widely regarded as among the most threatened in the UK. Please see https://www.chilternstreams.org/chalk-streams-in-crisis/threats/

The River Chess Smarter Water Catchment (SWC) is a linked project established in March 2021 and funded by Thames Water. It promotes physical works to deliver six key themes: improving water quality, managing flow, improving wildlife corridors, managing invasive non-native species, working together, and involving people. Please see https://chesssmarterwatercatchment.org/what-we-do/celebrate-our-successes/. Thames Water's stated headline objective is to '*protect and enhance our water environment'.*

Other work, notably the State of the River Chess Report (2022) includes indicators of change covering urbanisation/land-use change. The Chiltern Society is active in promoting the advocacy of best practices and active management strategies around the River Chess, especially.

The SWC project is now promoting the development of a Chalk Streams Position Statement to address the deficiency of planning guidance in this area, promote awareness of best practices within catchments, and assist in delivering the six key themes as identified previously.

CCB (Chilterns National Landscape) Scoping Summary & Key Point – The CCB has assumed that this project does not generally impact the Chilterns chalk streams, their catchments and hydrology. We would seek reassurance on this point within the water environment and nature conservation contents, currently (in part) section 9 of the Scoping Study.

The Chilterns Conservation Board (Chilterns National Landscape) is grateful for the opportunity to submit these representations.

Yours sincerely,

The Chilterns National Landscape (Chilterns Conservation Board)
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11th September 2024

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Dear [redacted]

Thank you for consulting the Cotswolds National Landscape Board on the proposed South East Strategic Reservoir Option (SESRO).

I am writing to let you know that the Board has no comments to make on this proposal.

Kind regards,

[redacted]

[redacted]
Planning Lead
Cotswolds National Landscape

Email: [redacted]
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SOUTH EAST STRATEGIC RESERVOIR OPTION (SESRO) (the Proposed Development)

Below is the response of consultation body, Culham Parish Council, to the application by Thames Water Utilities for a Scoping Opinion as to the scope and level of detail to be provided in its Environmental Statement relating to the Proposed Development.

Submitted by: [redacted], Clerk to Culham Parish Council

Address:

Date: 25 September 2024

Sent via email to: sesro@planninginspectorate.gov.uk

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1. Overview

Thames Water Utilities Limited ('the applicant') is in the process of applying for a new reservoir, known as the South East Strategic Reservoir Option (SESRO), under the requirements of the Planning Act 2008 (as amended) and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

The proposed reservoir would be located to the south west of Abingdon, between the villages of Steventon to the east and East Hanney to the west. The proposed reservoir would comprise a strategic resource for the south-east of England and be used to supply Thames Water, Affinity Water and Southern Water customers. The reservoir would have a surface water area of 6.7 square kilometres and contain 150 million cubic meters of water.

Once the reservoir is constructed, water would be abstracted from the River Thames initially to fill the reservoir. The preferred location for the intake/outfall structure is on the right bank of the River Thames, to the south of the town of Abingdon and to the west of the village of Culham. The preferred location is to the south of the existing Thames Water sewage treatment works outfall. During normal operating conditions, water would be abstracted from the River Thames to fill the reservoir and, at other times, would be returned to the river to add to water supplies for downstream abstraction. Thames Water has advised that the intake would provide a maximum abstraction of 13.9 metres cubed per second and the outfall would provide a maximum discharge of 6.9 metres cubed per second.

In an emergency event, the water in the reservoir would be discharged to the river at an elevated rate compared to normal operating conditions to enable the water level in the reservoir to be lowered quickly. Given the extremely large surface area of the proposed reservoir, the emergency flow rate would comprise 75 metres cubed per second to facilitate a required drop of one meter per day within the reservoir. This would total 6,500,000 meters cubed per day. It is proposed that the reservoir would be connected to the River Thames via a 6.6 meter (outer diameter) tunnel of sufficient capacity to take the full emergency discharge flow (i.e. 75 meters per second).

Thames Water aims to apply for Development Consent in 2026 and, subject to the receipt of approval, would commence construction in 2029. Operation of the reservoir would commence in 2040 following the completion of the 10 yr construction project.

The application for Development Consent is required to be accompanied by an Environmental Statement (ES) which sets out the potential impacts and likely significant effects of the proposed development on the environment. The applicant has written to the Planning Inspectorate requesting a Scoping Opinion on the scope, level of detail and information to be provided in the ES relating to the proposed development. The proposed scope of the ES is set out in the following document submitted to the Planning Inspectorate by the applicant: *South East Strategic Reservoir Option EIA Scoping Report (Thames Water, August 2024)*. To facilitate the preparation of their Scoping Opinion, the Planning Inspectorate is in the process of consulting relevant consultation bodies. **This document presents comments from Culham Parish Council regarding the scope of the ES. Due to the proposed siting of the intake/outfall within the boundary of the Parish of Culham, particular consideration is given to this aspect of the proposed development.**

2. Information That Should be Provided in the ES

Flood Risk (Chapter 6)

NOTE: the area for the proposed intake/outfall is principally Flood Zone 3, with some of the eastern bank Zone 2:
https://flood-map-for-planning.service.gov.uk/flood-zone-results?polygon=[[451025,195493],[449769,195654],[449510,194388],[451029,194290],[450917,194304],[451025,195493]]&center=[450269,194972]&location=OX14%25204LZ

- **Emergency drawdown to the River Thames**. Negligible information is presented in the applicant's scoping report regarding the assessment of the impact of the emergency drawdown to the River Thames despite its critical importance as the key measure for maintaining the operational safety of the reservoir. It is noted in Table 19.4 that an emergency drawdown event '***could have an impact on the River Thames, potentially resulting in inland flooding which is considered to be a major accident or disaster'***. It is therefore 'scoped in' to the risk assessment and stated that detailed work will be undertaken of the risks. However, no information is provided regarding the scope of this work, or the potential geographical extent of the impact. This omission is considered to be **a significant gap in the proposed Environmental Impact Assessment methodology**. Although not stated by the applicant, it appears that there is the potential for a major accident or disaster to affect properties and communities within the vicinity of the discharge of the emergency drawdown to the River Thames, notably numerous residential properties downstream from the proposed discharge within the village of Culham and, potentially the villages of Clifton Hampden and Sutton Courtenay. It appears that no preliminary modelling has been undertaken to assess the potential acceptability of the location of the discharge potent for the emergency drawdown to the River Thames and its ability to accept the discharge of the required elevated flows of

water in the event of an emergency without resulting in **catastrophic impacts on downstream communities and associated infrastructure such as roads and bridges.** It is essential that such modelling is undertaken prior to selecting a preferred option for the location of the emergency drawdown to the River Thames. In particular, preliminary modelling should assess the potential for, and scale and impact of, flooding on downstream communities as a result of the discharge of 6,500,000 cubic meters per day during peak baseline flow rates in the River Thames (as a worst-case scenario). This modelling should include the impact of the discharge on surface water levels as well as the impact on shallow groundwater levels, both of which are key contributors to the flooding of homes, roads and infrastructure which have occurred in the recent past along the River Thames in Culham, Sutton Courtenay, Clifton Hampden and other villages downstream from the proposed location of the intake/outfall. The modelling should take into account the impact of other planned and proposed developments that have the potential to impact the flows in the River Thames including the Oxford Flood Alleviation Scheme. In addition, consideration should be given to the effect of the presence of the Culham Cut and the associated lock on the behaviour of the flow of water associated with the emergency discharge. Information obtained as a result of this modelling exercise should be made available to stakeholders in a transparent manner to aid the detailed design of the scheme. This issue is a particular concern to the communities of Culham, Sutton Courtenay and Clifton Hampden due to the adverse impact of recent flooding events and their location immediately downstream from the discharge of the emergency drawdown to the River Thames. **In the event that the location is not able to support the emergency drawdown discharge without adverse impacts on downstream communities, the acceptability of the overall SESRO project should be questioned and ultimately rejected.**

Terrestial Ecology (Chapter 8)

- **Overall consideration of the intake/outfall in the ES**. In the description of the assessment methodology, the focus of the applicant's scoping report is on the site of the proposed reservoir. **The scope of work proposed in relation to the assessment of the construction and operation of the River Thames intake/outfall and supporting infrastructure, is not clearly stated or specified. This is considered to be a significant omission in the scoping report.**

- The scope of the assessment proposed to be undertaken in relation to the River Thames intake/ outfall should be specified in a transparent manner in all technical areas considered. For example, specific studies in the category of terrestrial ecology may be considered appropriate in relation to the site of the River Thames intake/outfall that may not be relevant to the location of the proposed reservoir. Otters, a European Protected Species, have been recorded on the stretch of the River Thames proposed as the location for the intake/outfall. We note that the Otter species is scoped IN, but we would stress that surveys are undertaken to assess the significance of the locality for this key species and the likelihood of impacts as a result of the construction of infrastructure and long-term operation of the intake/outfall.

Landscape and Visual Effects (Chapter 9) / Traffic & Movement (Chapter 11) Noise and Vibration (Chapter 12)

- **Impacts on stakeholders associated with the construction and operation of the River Thames intake/outfall.** The ES should identify, and quantify the significance of impacts on, all stakeholders within the vicinity of the proposed River Thames intake/outfall. The stretch of water within the vicinity of the intake/outfall is one of the most well-used parts of the River Thames. It is used by both the Abingdon Rowing Club and the Abingdon School Rowing Club. Both are likely to experience significant disruption during the extensive construction phase of the proposed development. In addition, the River Thames in this area is used by a large number of long boats and other pleasure boats (many of which travel along the Culham Cut to reach the Culham Lock), kayaks, canoes and other motorised and non-motorised craft. In addition, there are a number of boats which are used year-round for owners who choose to live along the Thames. This part of the Thames is also a very popular place for fishing, including a number of competitions in the course of the seasons which will be affected by the construction and operation of the intake/outfall. The proposed intake/outfall will impact the hikers, dog walkers and others using the Nationally important Thames Path which runs directly opposite the proposed location of the intake/outfall on the left side of the River Thames. Finally the construction and operation will also affect users of the Hanson Way, part of Sustrans Route 5 of the National Cycle Network from Didcot to Oxford (a shared route for cyclists & walkers and horse-riders). All the above users (rowers, boat owners, walkers, cyclists, riders) will be impacted by either closures and diversions, obstruction due to construction craft and/or vehicles, noise, vibration and visual amenity. **Vibrations form the intake/outfall structures currently scoped out should be scoped IN.**

  Outfall locations. A number of outfall locations are still being considered in tandem by the applicant in the scoping report (refer to Figure 3.3). It is requested that further consultation is undertaken with key stakeholders to reduce the number of options in the scheme considered in the ES. **It is also suggested that options G and H should be rejected due to the likelihood for significant and unacceptable permanent and irreversible impacts as a result of: landscape and visual impacts, due to their location within the Green Belt on a greenfield site in proximity to the village of Culham; and their proposed location directly on the route of the Thames Path, a Nationally-important footpath and amenity resource.** FURTHERMORE the options on the left (east) bank were not mentioned or shown in any diagram during the recent pubic consultation and exhibitions, nor at the presentation made to Culham Parish Council in June 2024. The intake/outfall structure would require screens and control penstocks. It would therefore require electrical power and control systems which would be required to be located above flood level and would require the creation of a permanent and visible above-ground structure adjacent to the River Thames where currently there is no building or structure. The access road and construction therefore would cause significant adverse impacts.

Major Accidents and Disasters (Chapter 19)

- **Major accidents and disasters and the construction and operation of the River Thames intake/outfall.** No appropriate consideration appears to have been given to the potential for major accidents and disasters to arise in relation to the operation of the River Thames intake/outfall, as described in Section 19 of the applicant's scoping report. For example, no consideration is given to the potential impact of a water pollution incident in the River Thames upstream from the intake/outfall location. The potential risks associated with the intake/outfall should be identified and considered as appropriate in the ES. This is particularly relevant given that a common intake/outfall is being considered for the operation of two separate strategic water supply projects (SESRO and STTSRO).

Cumulative Effects (Chapter 20) / Traffic and Movement (Chapter 11)

- **Intra-development cumulative impacts and the construction and operation of the River Thames intake/outfall.** It is essential that appropriate consideration is given to the potential for cumulative impacts to arise as a result of the construction and operation of the River Thames intake/outfall and other planned and proposed developments in the locality. The list of potentially- relevant projects is expected to be different to those associated with the reservoir structure itself. Relevant projects could include (but not be limited to): the River Severn to River Thames Transfer (STT) Strategic Resource Option (SRO) and the Oxford Flood Alleviation Scheme. The construction and operation of the SESRO and STTSRO intakes/outfalls at a common location has the potential to result in significant cumulative environmental impacts in addition to material operational business risks and dramatic reduction in the resilience of strategic regional water supplies. **This is considered to be a fatal flaw in the site selection process** and the shared location will need to be justified in the ES. As noted previously, the potential for cumulative impacts to arise during the emergency drawdown to the River Thames should also be considered.

- **Inter-development cumulative impacts**
  There is no consideration in the Scoping Opinion of the inter-development cumulative impacts of either the construction of the proposed HIF-1 scheme, a huge project of roads and bridges from Didcot to Culham (currently pending the Secretary of State's ruling once he has the recommendation from the Planning Inspector). There is no consideration of the planned construction of thousands (21,750) homes in the immediate area by 2041, including 3500 in Culham alone and all the North Abingdon developments. See South and Vale Joint Local Plan 2041 (now at Reg19).

  Culham and Abingdon need to be Zones of Influence. Traffic modelling needs to take into account the impact not only on the major junctions listed so far in the Scoping Opinion, but also on Abingdon Town Centre's one-way gyratory. Traffic modelling also needs to consider the A4074/A415 junctions and the A415 lighted junction with Tollgate Road and traffic light-controlled Sutton Bridge in both directions. Heavy goods vehicles will not all use the A34 exit from Milton interchange. And we understand there could be c.700 workers (at peak construction

times). Most will be travelling in cars and vans from all over Oxfordshire and likely to come through Abingdon or Culham/Sutton Courtenay/Drayton.

The Burycroft through Culham village and all local traffic in Culham and the 33 bus route would be negatively impacted by construction of the intake/outfall options G & H and this needs to be modelled and scoped IN, notwithstanding our assertions that these options should be removed for the reasons given above.

[redacted]
Senior EIA Advisor (PIEMA)
Environmental Services Operations
Group 3
Temple Quay House
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BS1 6PN

Our ref:XA/2024/100147/01-L01
Your ref:WA010005

Date: 25 September 2024

Dear [redacted]

PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (THE EIA REGULATIONS) – REGULATIONS 10 AND 11

APPLICATION BY THAMES WATER UTILITIES LIMITED (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE SOUTH EAST STRATEGIC RESERVOIR OPTION (SESRO) (THE PROPOSED DEVELOPMENT)

SCOPING CONSULTATION AND NOTIFICATION OF THE APPLICANT'S CONTACT DETAILS AND DUTY TO MAKE AVAILABLE INFORMATION TO THE APPLICANT IF REQUESTED

SOUTH EAST STRATEGIC RESERVOIR OPTION (SESRO)

Thank you for referring the above consultation which was received on 28 August 2024.

We have reviewed the Scoping Opinion J696-AJ-A02X-ZZZZ-RP-EN-100100 for the South East Strategic Reservoir Option revision C01 dated August 2024 and have the following comments to make.

Table 0-1 Scoping Summary provides a high level description of what is proposed to be scoped in and out of the EIA. We broadly agree with this, however recommend the following issues are scoped in, where they are currently proposed to be scoped out:

- Residual risks from a dam failure scenario
- The impacts of climate change on flooding during the construction phase
- Climate Change – in combination assessment
- Vulnerability to climate change - projected changes in wind speed

- Severe weather (notably heatwaves, drought, rain, high winds)
- Landslides / mass earth movements during the construction phase
- Sinkholes
- Linked water transfer projects

Dam Failure

Regarding dam failure, this has been scoped out based on the controls set out under the Reservoirs Act 1975.

We do not support the approach taken to scoping out reservoir dam failure.

The proposed reservoir will introduce a substantial hazard not currently present within this landscape. In the event of dam failure there would be several clear pathways between this hazard and a large number of receptors which could result in significant long-lasting effects to human health, welfare and/or the environment that would require the use of resources beyond those of the applicant to manage.

Such effects may also stretch beyond the current scoping boundary and the search extent for affected planning applications detailed within 20.7.12.

Whilst we accept that regulation of the reservoir under the Reservoir Act 1975 will reduce the likelihood of dam failure to a low level, planning is uniquely placed to make additional contributions to reducing risks through:

The primary mitigation of the site selection process - by ensuring that the significant effects that would result in the event of dam failure have been considered when selecting the preferred site (NPPF December 2023: paragraph 165, paragraph 168, paragraph 170 b), paragraph 173 d), NPS for Water Resources Infrastructure April 2023: 4.7.6, 4.7.7, 4.7.8, 4.7.15, 4.7.17)

Considering the need for additional secondary mitigation measures that could further reduce risks in ways not controlled through the tertiary mitigation of regulation under the Reservoir Act 1975.

Enabling relevant receptors to be made aware of the potential risks and to make representations on them.

The Reservoir Act 1975 exercises no control over the site selection process for a new ‘large raised reservoir’ based on the consequences of dam failure. Furthermore, the Reservoir Act 1975 cannot require off-site mitigation measures to contain and reduce the consequences of dam failure.

Whilst relevant local authorities will be responsible for co-ordinating off-site plans for what the emergency services will do if a dam were to fail, such plans only address warning, informing, evacuation, shelter and recovery. They play no role in improving the resilience of sensitive receptors or delivering other structural measures for reducing risks (e.g. eliminating or controlling pathways). It must be acknowledged that in the event of an unanticipated dam failure, for some receptors there is likely to be little or no prospect of warning or evacuation before the onset of hazardous flooding.

Further consideration is needed of the potential for a reservoir dam failure to cause major accidents or hazards. This should consider the number and type of receptors that could lie within the area potentially affected, including things like homes, businesses, infrastructure such as roads, railways, airfields, pipelines, electricity

infrastructure, and industrial sites such as COMAH facilities. Doing so enables consideration of the measures required to avoid or mitigate the impacts associated with dam failure. Without an initial assessment of the flood risk that would result in the event of dam failure, it is difficult to see how these potential effects have been robustly considered and scoped out.

Given the nature of the reservoir construction and the relatively flat surrounding land, consideration may need to be given to dam failure at several different failure points, to ensure an appropriate envelope of impacts is identified. For the different pathways available, the assessment will need to identify the extent of potential flooding and should include sufficient detail to allow identification of significant effects.

For the purposes of informing the site selection process, we are comfortable that a less detailed agreed methodology can be adopted for alternative sites which focuses on the extent of potential flooding and the likely number and vulnerability of receptors involved.

The EIA Scoping Report states in Table 19-2 page 576 on reservoir/ dam collapse section that a Flood Plan can only be definitively produced once the design has been finalised. We believe, for the reasons given here any alterations, at this stage, to reduce and or mitigate the impact, will have been negated. As the embankment design is yet to be finalised, we would expect the developer to consider the worst-case likely scenario regarding reservoir / dam dimensions to inform the breach analysis (Advice Note Nine: Rochdale Envelope 1.2, and 2.3).

Please see the section on the Sequential Test for further consideration of how assessment of a breach could inform the proposals (NPPF December 2023: paragraph 167).

<u>Climate Change – Construction Phase</u>

Impacts during the construction phase are scoped out because changes over the short term are expected to me minimal and appropriate construction management plans would be in place.

We do not support this approach and advise it should be scoped in.

The construction phase will be considered 2030 to 2040. With respect to peak fluvial flows, this falls within the 2020's epoch. The 2020's epoch Central and Higher Central fluvial peak flow uplifts for the Gloucestershire and the Vale management catchment are 11% and 17% respectively. These are not insignificant changes in potential peak flows for watercourses within the developable area. The impact of climate change on peak flows during the construction phase should be scoped into the assessment. This would help to ensure that any construction compounds, materials, and temporary construction infrastructure are sensibly placed, and any potential impacts can be properly assessed.

<u>Climate Change – In Combination Assessment</u>

In combination assessment has also only been scoped in for operation but this environmental aspect should also be scoped in for construction.

As the construction period is 10 years (2030 to 2040), the effects of climate change may increase for each factor and therefore the in combination assessment in necessary too. For example:

> Flood flows are within the 2020's epoch and the higher central uplift is 17% for the Gloucestershire and the Vale Management Catchment.
> Rainfall intensity may increase, please see the government guidance Flood risk assessments: climate change allowances - GOV.UK (www.gov.uk)

Vulnerability to Climate Change – Projected Changes in Wind Speed

We disagree that changes in wind have been scoped out has been scoped out for further assessment. This environmental aspect local changes in wind speed should be scoped in for operation.

The structure may change the local behaviour of winds in terms of direction and speed. It is of significant dimensions within a relatively flat area. There is potential for localised acceleration or turbulence which will influence the potential for wine waves which themselves may pose a flood risk.

Severe Weather

We disagree that severe weather events have been scoped out for further assessment. Severe weather events should be scoped in for operation.

Whilst we accept the justification (Table 19-2) provided for low temperatures, heavy snow, hail, lightning, and tornado, we would expect further consideration of heatwaves, drought, rain and high winds for the following reasons.

- *Heatwaves and drought*
  The developer has suggested that heatwave and drought could lead to the clay core of the embankment drying out, but stated that this would not compromise the integrity of the thick embankments to the level where they could fail or leak. No evidence has been provided however to support this conclusion and we find it difficult, without further justification, at this stage, that this should be scoped out. Taking a precautionary approach, we believe that until baseline assessments have been carried out and agreed, all aspects need to be scoped in.

  If the core cracks to form a leakage path through the dam this could result in either a fast and catastrophic failure, or a weakness within the structure leading to a slower internal failure mechanism. It may be challenging to predict the severity of the internal failure mechanism from a visual inspection. Internal leakage paths can also lead to internal erosion. Notably, the leakage pathway could become exacerbated as the reservoir encounters heavy rainfall / abstraction from the River Thames. It may therefore be sensible to

consider failure mechanisms brought about from a series of wet and dry spells, especially in the context of a changing climate with wetter winters and drier summers.

- *Rain*
  The developer is proposing to alter the catchment characteristics in terms of hydrology, hydrogeology, and hydraulics – for which the baseline assessments are incomplete. The effects from an extreme rainfall event, with SESRO in place, is therefore not possible to accurately predict in the context of a high rainfall event and may lead to an increase in flood risk.

- *High winds*
  High winds can lead to waves within the reservoir which could potentially damage the reservoir and associated infrastructure. The applicant should consider the effects of 'wind waves' caused by strong winds which may lead to overtopping of the embankment. This could lead to erosion on both sides of the earth embankment, increasing the rate of degradation and increasing the probability of failure.

  We recommend consideration of the EurOtop Manual on wave overtopping of sea defences and related structures. The assessment of wind waves can help to inform the crest height and appropriate riprap design, dimensions, and placement. Notably the proposed design considers riprap on the internal edge of the embankment (see Table 2-1, Zone 6). Considering section 3.3.32, it is unclear how it can be assumed that wave height will be reduced in one area based on the prevailing wind direction.

<u>Landslides</u>

Contrary to Table 0-1 Scoping Summary, landslides/mass movements should be scoped in for construction. There is a risk that displacement of material caused by these events could lead to a loss of floodplain storage during construction which may adversely affect flood flow routes.

Landslides / mass movement could lead to a change in land levels forming an encroachment into the floodplain. This would adversely affect flood storage and flood flow routes, increasing flood risk. Whilst construction methods will set out minimise this risk, it is still of a concern and should be assessed in greater detail.

<u>Sinkholes</u>

Sinkholes have been scoped out for both construction and operation, however this environmental aspect should be scoped in for both construction and operation.

Sinkholes could lead to a change in land levels. This could adversely affect flood storage and flood flow routes, increasing flood risk. The developer has suggested that sinkholes are not considered possible given the underlying clay geology however, the developer has had limited access to the site and baseline assessments are incomplete,

we therefore consider it premature to scope out sinkholes until site investigation has been completed and a conceptual model developed.

Linked Water Transfer Projects

Section 2.4.4 mentions two other water transfer projects that have a direct interface with SESRO and its DCO boundary: Thames to Southern Transfer (T2ST) and Swindon and Oxfordshire (SWOX) raw water transfer. Both schemes will require either a treatment or pumping station plus pipes within the site boundary. It is understood that the T2ST treatment plant may or may not be determined via the SESRO DCO however will be included within the EIA process to assess cumulative impacts.

It is unclear if the associated T2ST pipelines are to be included within the scope of the EIA. Additionally, it is unclear whether the works associated with SWOX proposals are to be scoped in to this EIA. Given the detail of the proposals relating to T2ST and SWOX proposals it is unclear the extent of impact they may have on the scheme and whether or not they should be included within the EIA. We would recommend that a precautionary approach is given, and all aspects to do with these proposals (including below ground infrastructure such as pipelines) are scoped into this EIA.

3.3.17 and 3.3.18 discuss T2ST and the ongoing assessment of the location of its treatment plant. It is understood that the works relating to this comprise of a waste water treatment plant and associated pipe, however we understand there were previous discussions regarding a new offtake further downstream to facilitate this. If this is still included in the proposals it should be considered in the assessment of alternatives.

Please see appendices for further detailed comments.

If you have any queries please do not hesitate to contact me.

Yours sincerely

[redacted]
Planning Specialist

Appendix 1: Detailed comments

Appendix 2: Licencing requirements

Appendix 1

Approach to Flood Risk

The site is located with large parts of the proposals are located within Flood Zone 2 and 3, land assessed as having between a 1 in 100 and 1 in 1,000 annual probability (1% - 0.1%) and land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) in any given year. Other parts are located within Flood Zone 1 which is land defined as a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%) in any given year.

We therefore welcome flood risk being scoped in to the assessment, with a Flood Risk Assessment (FRA) being submitted as an appendix to the ES.

Sequential Test

In accordance with National Planning Policy Framework (NPPF) the Sequential Test (Paragraph 168), should be applied to ensure a sequential, risk-based approach to the location of development. In light of this, if there are any opportunities for development to be located outside of flood zones 2 and 3 and into flood zone 1, this should be prioritised.

We welcome confirmation within Section 6.6.21 that this proposal will be supported by a Sequential Test.

The spirit of the sequential approach to managing flood risk is to steer development to locations which would result in the lowest flood risk. The sequential test will need to consider all sources of current and future flood risk to the proposed development. Given the residual flood risk the proposed development will introduce, consideration should be given to expanding the scope of the sequential test to account for the flood risk that would result in the event of dam failure.

It may be appropriate to combine or consolidate the sequential test with the assessment of alternatives in the Environmental Statement.

Sequential Approach

A sequential approach should then be applied to the layout of infrastructure within the Order Limits, positioning the most vulnerable components to the areas of lowest flood risk. This should include consideration of vulnerable components of linked water infrastructure projects such as pipework, valves, treatment plants and pumping stations, and construction phase positioning of compounds, stockpiles etc. The outputs of the breach modelling may also be useful to inform this element of the proposals. It should also inform appropriate mitigations which could be implemented to safely manage the residual flood risk (NPPF, Paragraph 168).

Flood Zone 3b (functional floodplain) should be clearly identified to help inform the sequential approach to managing flood risk and compliance with the NPPF.

Vulnerability Classification

NPPF Annex 3 does not specifically describe water supply reservoirs. However it is likely to be appropriate to consider a ‘large raised reservoir’ to be ‘Essential

Infrastructure' such that it should remain operational during times of flood (see notes to Table 2 of PPG).

Exception Test

In line with Table 2: Flood Risk Vulnerability and Flood Zone Compatibility within the NPPG, the Exception Test will also be required for Essential Infrastructure proposals within these flood zones.

Please note, for any development within Flood Zone 3b (functional floodplain), that has passed both tests, it must be demonstrated that the scheme is designed and constructed to:

- Remain operational and safe for users in times of flood.
- Result in no net loss of floodplain storage.
- Not impede water flows and not increase flood risk elsewhere.

It is also a requirement of National Planning Statement for Water Resources Infrastructure section 4.7 Flood risk (section 4.7.7) that the development should remain operational during the design flood plus climate change flood (where the lifetime of the development is agreed).

These matters should be further explored within the detailed FRA. The following comments provide additional advice in relation to this.

Assessment of Flood Risk

Carbon and Climate Change

Vulnerability to climate change – in combination assessment has also only been scoped in for operation but this environmental aspect should also be scoped in for construction.

We disagree that micro-climate - potential changes to local temperatures, and winds has been scoped out for further assessment. This environmental aspect should be scoped in for operation.

Study Areas

We agree with section 6.4.6 which states that current modelling is not sufficient to provide an informed representation of an appropriate study area for flood risk impacts.

We would urge a conservative approach for the modelling. It should be taken into consideration that Teddington weir can become drowned out in a Spring tide (e.g. February 2014), so the tidal extent in practice is up to Molesley Weir rather than Teddington Weir. This may affect the approach taken to modelling of Reaches.

Order Limits

Consideration should be given to uncertainty within the proposal which may lead to an increase in the required Order Limits (e.g., unknown embankment dimensions, unknown flood storage compensation required) and factor this into the proposed Order Limits at this stage, via a buffer zone. This would ensure that uncertainty within the proposal

would not result in the Order Limits being increased at a later stage in the DCO regime. For example, if flood storage compensation is required, we would expect this to be adequately considered now so that offsetting elsewhere does not require consideration.

Baseline Assessment

Section 6.5.1 suggests that the baseline surveys are ongoing and as a result data sets are insufficiently complete to fully inform the scoping of the EIA. Without a baseline assessment, it is unclear how the developer can justify the exclusion of some environmental matters.

Clarification should be provided for the future baseline, specifically to what year the current baseline would be extrapolated to.

Section 2.7.7 suggests that electricity storage on site may be included as part of the proposal. Note that a battery energy storage system (BESS) is considered sensitive equipment in terms of flood risk and will require consideration of emergency fire management systems and how water from these systems will be safely stored to prevent contamination during the design flood plus climate change flood event.

Resiliency of Intake / Outfall Operation

It is understood an electricity supply will be required to operate the intake/outfall equipment. Resiliency should be built into the system to take into account this failing, and the possibility of emergency drawdown with a contingency plan should be put in place to facilitate this.

Flood Assets

Please note, if the road designs were to result in flows the impediment (or impounding) of flood flows they may need to be considered as a flood asset.

Clarity should be provided regarding the proposed flood assets which may be altered or protected and how this will be achieved. We are able to give a list of EA Flood Assets for such assessment.

We are pleased that noise and vibration will be scoped in for the construction phase. However, there is a risk that flood assets could be impacted by construction, therefore we would wish to see flood assets considered as a sensitive receptor during the construction phase of the development. An assessment of the impacts of vibration on such assets should be carried out, in addition to the setting of a safe vibration-limit (during the construction phase) for works likely to cause vibration (e.g., piling and tunnelling) near flood assets to ensure no adverse effects. The assessment of safe limits and real-time monitoring during the works may be required.

Consideration should be given to settlement when boring the tunnel, especially near flood assets.

Surveying should be undertaken pre and post construction works to identify any defects that will need to be remediated.

Erosion and Accretion

It is identified that the release of suspended solids may occur as a result of construction works. In addition to the impact of this pollution upon ecology, the impacts on the channel shape through altered processes of erosion and deposition should be taken into account, as well as the capacity for this to erode flood assets.

Erosion to the River Thames may also occur as a result of the intake/outfall structure. We would likely require bed and bank protection and a stilling basin to mitigate this. Maximum velocities (e.g., emergency drawdown scenario) should be assessed and used to inform the design.

Crossings

The proposals include provisions to cross the River Ock, the eastern watercourse diversion and the western watercourse diversion. Further details of the proposed crossings should be provided, ideally within a Crossing Register which details the proposed crossings placements and types. This would allow us to assess flood risk and also determine whether the proposed crossing position is optimal in both the context of flood risk and future adaptation of flood assets. Additionally, crossings may need to be modelled to ensure they do not increase flood risk. Please note that bridge soffits should be 600mm above the design flood plus climate change flood event.

Consideration should be given to the effects of any proposed crossings on hydrology and geomorphology.

We would oppose the culverting of any watercourses and would recommend that clear-span bridge crossings are installed. This is in line with the Environment Agency's anti-culverting policy. A permit for a culvert will only be granted where there is no reasonably practical alternative, and if the detrimental effects would be sufficiently minor that a more costly alternative would not be justified or there are reasons of overriding public/economic interest. If culverts are proposed, the developer will need to model the hydrology of the culvert installation and how this relates to flood risk.

Watercourse Realignments

Table 2-1 (Zone 1, 2 and 4) suggests that Cow Common Brook, East Hanney Ditch, River Ock, the eastern watercourse, ditches that comprise the Mere Dyke system, and other ditches (which lie within the reservoir footprint) will be realigned or diverted. The proposed realignment will require hydrological and hydraulic modelling to inform on the risks, involving flood risk.

Compensation

Flood storage compensation will be required for structures, or changes in ground level, within the design flood plus climate change flood extent. Flood plain compensation should be:

- Level-for-level.
- Volume-for-volume.

- Localised and the compensation within the same hydrological catchment as the loss.
- Shown to achieve net gain where possible.
- Demonstrated to not inhibit flood flow routes and behaves in the same way as existing (timing and flow route) for all flood events up to and including the design flood..
- Clearly set out that for each area of loss there will be a phasing plan to show that the relevant acceptable compensatory area will be constructed prior to those floodplain losses. This ensures there is no overall loss of floodplain during construction.

During construction and operation phases, compensation may require hydrological and hydraulic modelling to help manage flood risk. In any event we still require level for level volume for volume to be undertaken for flood compensation. Modelling alone cannot be accepted to ensure there is no increase in flood risk elsewhere. We agree with section 6.6.19 which suggests that construction activities without mitigation could exacerbate flood risk. For example, consideration should be given to the impact of construction on the temporary rail siding and materials handling area (RSMH) with material storage, reservoir embankments / earthworks and storage of spoil.

Finished Floor Levels

The finished floor level (FFL) of sensitive equipment (e.g., the Water Treatment Works) should be 600mm above the design flood plus climate change flood level.

Surface water drainage should be considered within the FRA. For advice on this, please refer to the Lead Local Flood Authority (LLFA). The Environment Agency will feed-in as appropriate to cover our water quality remit. Going forward, joined up consultation between the Environment Agency and the LLFA may be beneficial in regards to certain topics.

Access and Egress

Section 6.5.7 the SESRO main access road, the access road to the intake/outfall structure, and the proposed access road to the north-east of the main reservoir boundary lie within the Flood Zone 3. The FRA should demonstrate how essential access will be maintained during a flood event, including depth and velocity analysis for the critical 100 year plus climate change event. Multiple access routes to the reservoir crest could provide resilience in the design, such that emergency access is possible if one was to becomes obstructed.

Groundwater Flood Risk

The report suggests that groundwater flood risk may be an issue in some areas and that the proposals may impact the hydrogeological environment in terms of groundwater levels and flows. It is understood that a preliminary groundwater model has been undertaken, however this work is incomplete. Consideration of both superficial geology

and bedrock should be undertaken to adequately justify that groundwater flood risk is limited to the superficial aquifers.

Flood Modelling

We broadly agree with what is scoped into the assessment and the methods and data presented although we have comments around the application of climate change, the assessment of impact magnitude, and the emergency drawdown. The sections below highlight areas where further consideration is sought.

Flood Modelling

The applicant's flood risk consultant, Mott Macdonald, has already undertaken some initial hydraulic modelling for the River Ock and its surrounding tributaries. This modelling has built on Environment Agency hydraulic modelling of the River Ock and Tributaries undertaken in 2017. Mott MacDonald's baseline hydraulic modelling and accompanying hydrological assessment were reviewed by JBA consulting on behalf of the Environment Agency via call-off contract in December 2022. Several updates and recommendations were suggested as part of JBA's review of the baseline (pre-development) hydraulic modelling and hydrology. The recommendations from JBA's review of the Gate 2 modelling should be taken on board when developing modelling to inform baseline flood risk, future baseline, and the proposed reservoir scenarios.

The timescales between planning, detailed design, and construction can be long. It is important to remember that updates to the methods regarding design flood flow estimation and modelling methods might change. It is important to build in quality assurance checks to consider the currency of any modelling evidence which is used in later stages of the project development such as the detailed design and construction phases.

Please note: There is 0.5 metre resolution bathymetric data dated 2015 for the River Thames in the vicinity of the intake/outfall location. This may be useful in understanding historic channel bed profiles. This is available at Defra Survey Data Download

The guidance on undertaking modelling for Flood Risk Assessments available online at Using modelling for flood risk assessments - GOV.UK should also be consulted when developing hydraulic models for the proposed development.

For any changes to the floodplain, the applicant will be required to submit an evidence-based review to us within 6 months of the reservoir being operational to ensure the new floodplain outlines can be updated in the published flood maps.

Where the applicant makes changes to the reservoir design which results in changes to flood risk, these will be required to be put through the river model as updated post development scenarios. This can involve multiple revisions to the model at various stages, and result in changes to compensation and mitigation.

Any fluvial flood risk modelling which is developed to inform the baseline, future baseline, and with development proposals should be reviewed and approved by the Environment Agency.

Baseline Flood Risk

Predicted flood risk areas have been identified using existing Environment Agency hydraulic models updated with new Lidar data. It is acknowledged within 6.6.10 that hydraulic modelling requires updating. This is welcomed and should address issues previously raised by the Environment Agency when we last reviewed the model. The recommendations from the Environment Agency review of the River Ock and tributaries baseline hydraulic modelling and hydrological assessment should be considered when developing hydraulic modelling to inform the baseline, future baseline, and with reservoir scenarios. Furthermore, since the last review of the hydraulic modelling and hydrological assessment (Environment Agency, 2022), there have been flood events in 2023 and 2024. It is important to verify the performance of any hydraulic modelling against recent floods in the historical record.

Rainfall Capture

6.6.31 describes how the reservoir once constructed would capture rainfall that would otherwise contribute to catchment flows. Please note it is important that the flood hydrological assessment reflects the changes in catchment area and response because of the proposed reservoir. The baseline and proposed hydrological assessments are likely to be different given the impact that the reservoir's presence will have on rainfall-runoff processes, critical storm duration, flood volume, and overall catchment response.

Residual Uncertainty

Hydraulic modelling is based on several assumptions and consequently uncertainties exist in predicted flood levels. Section 6.7.4 describes how typically a 0.5 metre allowance gets included on predicted flood levels to account for uncertainties and this is known as freeboard. It is not clear how this figure has been derived.

It is important to note that the residual uncertainty in model results and any resultant freeboard required to achieve a particular design standard will vary spatially and will be dependent on the system being modelled, the extent to which a model has been calibrated, and the performance of the model when verifying the outputs against observations.

There is guidance on accounting for residual uncertainty available online at Accounting for residual uncertainty: an update to the fluvial freeboard guide - GOV.UK. This provides a framework for assessing uncertainty in model results. Typically, a residual uncertainty assessment is used when calculating the required freeboard for raised flood defences. There are aspects of the residual uncertainty guidance which may be of use for understanding overall uncertainty in the model results which are used to inform the development and the associated impacts to third parties.

Uncertainty in model results and the implications of model uncertainty with respect to the proposed development will need to be fully addressed within the ES.

Increase in Flood Risk

The scoping report indicates that the scheme will not increase flood risk. With regards to impact magnitude as described within table 3.71 within the Design Manual for Roads

and Bridges (DMRB) which is presented in table 6-10 of the scoping report, increases in peak flood levels of less than 10 millimetres are described as negligible. Section 6.6.9 suggests that if properties are already at flood risk, then as long as the increase is not significant it is acceptable.

Please note that the classification presented within this table is not aligned with the requirements of Paragraph 173 of the National Planning Policy Framework which details that there should be no increase in risk to third parties as a result of development, and it will be this requirement that the scheme will need to comply with.

In addition, in line with NPS for Water Resources the development must not result in an increase in flood risk elsewhere.

Any impacts to flood risk will need to be reviewed on a case-by-case basis as the spatial extent of any increase is also an important consideration not just the magnitude of any increase in peak water levels.

Furthermore, considerations around modelling precision may also influence what is classed as an observable increase or impact versus what might be attributable to model precision limitations and instability. There is a section on the impacts on off-site flood risk within the guidance on undertaking modelling for flood risk assessments which should be consulted and provides some useful considerations. This is available online at Using modelling for flood risk assessments - GOV.UK.

Climate Change

Section 16.1.5 describes how the assessment of flood risk will incorporate future climate change. This section is not specific on which climate change allowances will be considered for peak river flows.

As Essential Infrastructure, the impact of climate change on fluvial peak flows for the operational lifetime (60 years) of the development should be based on the higher central allowance for the 2080's epoch. A credible maximum scenario should also be considered for climate change. For fluvial peak flows this should be based on the Upper estimate for the 2080's epoch.

This is particularly important as there are aspects of the development which are sensitive and may have a design life longer than 100 years. Furthermore, the scoping report implies that the operational life of the development will operate in perpetuity.

For further information, see Flood risk assessments: climate change allowances - GOV.UK

Emergency Drawdown

It is noted that Emergency drawdown to the River Thames is scoped into the assessment. This is welcomed. In terms of the level within the River Thames when modelling emergency drawdown waters, the guidance on drawdown capacity for reservoir safety and emergency planning (SC130001 Volume 1 – available online) section 5.2 page 29 provides some information on inflow pass through rate. Whilst this does not explicitly mention the magnitude of flow for any receiving watercourses (the

River Thames in this case) it does describe the assumptions around inflows to a reservoir when assessing drawdown capacity and describes the use of a Q50 flow.

We would recommend modelling the emergency drawdown with a Q50 flow for the River Thames.

We expect emergency drawdown to feature in the FRA, whilst it is cited as being detailed in the Major Accident and Disaster section of the ES, due to the flood risk implications, this process must also be set out in the FRA.

Additionally, we would suggest testing the emergency drawdown with larger flows in the River Thames such as bank full and more extreme events.

Controlled Waters

The following comments are made in relation to the protection of Controlled Waters, and are based on details within Chapter 6: Water Environment and Chapter 14: Geology and Soils. Matters relating to human health should be directed to the Local Planning Authority.

The majority of the site is underlain by superficial deposits consisting of sand and gravels members of the River Terrace Deposits and smaller areas of Alluvium and Head deposits. The superficial deposits are underlain by the Ampthill Clay Formation and Kimmeridge Clay Formation. Small areas of Lower Greensand Group sandstone, Gault Mudstone Formation and Stanford Limestone Formation (Corallian Group) are also present beneath the site. The River Terrace sands and gravels, Alluvium and Head deposits are classified as Secondary A aquifers. The Lower Greensand is also classified as a Secondary A aquifer. The mudstones associated with the Gault, Ampthill Clay and Kimmeridge Clay Formations are all classified as Unproductive aquifers. The Stanford Formation of the Corallian Group is classified as a Secondary A aquifer. The site is not within a groundwater source protection zone.

We are largely satisfied with what has been scoped in and out of requiring further assessment but would like to highlight areas where additional assessment should be undertaken.

Geological Faulting

The structural geology underlying the reservoir is not mentioned within the report. We are aware that previous discussions about earlier iterations of the scheme included consideration of faulting and whether this could influence the hydrogeological regime beneath the new reservoir. We would welcome this being considered in further assessments in relation to groundwater quality risks.

Proposed Groundwater Drain

Paragraph 6.5.65 discusses the potential inclusion of a groundwater drain within the scheme to alleviate potential increases in groundwater levels and flows around the reservoir embankment. We expect to see detailed information about how this drain will be designed, monitored and managed, especially in terms of protecting groundwater

quality and ensuring that any permitting requirements (ie abstraction licence) are appropriately secured.

Landfill Sites

The title of Table 14-4 appears to be incorrect. The table content covers landfill sites not non-landfill, as titled. This table has also missed a couple of authorised landfill sites which fall within the footprint of the one listed. These are co-disposal cells Phase 1A and 1B of Sutton Wick Landfill, under licences EA/EPR/3106GS and EA/EPR/FB3016FB.

Contamination from Landfill Sites

The applicant must consider contamination from landfill sites, particularly historic landfill sites which are not contained or regulated by the Environment Agency. Information on historic landfill sites can be obtained from the relevant Local Authority.

Net Gain Opportunities

Section 14.9.8 lists areas of potential net gain opportunities in relation to soil and geology. One of these is the removal or remediation of soil and/or groundwater contamination. However, in conflict, Paragraph 14.9.1 states that development will avoid areas of potential land contamination.

When looking at net gain opportunities, consideration should be given to *not avoiding* areas of known contamination and instead providing betterment by remediating or removing risks from these areas of contamination.

We note that additional baseline studies to assess risks to controlled waters are planned and these will be used to inform the need for mitigation measures and remediation strategies. At this stage land contamination has been scoped in for further assessment which we welcome.

Water-based Ecology

We support the aquatic and terrestrial features scoped in and out for the construction and operational phases within Table 7-5 and Table 8-6.

Priority Habitats

As coastal and floodplain grazing marsh are located near the northern extent of the scoping boundary, it is good to see that priority habitats have been scoped in as a terrestrial biodiversity feature. However, there isn't much reference to the conservation of this specific priority habitat in the text, other than to identify that it is present. Following the completion of the UK habitat classification survey, it is recommended that Table 8.6 is updated following the identification of any priority habitats on the site, and each specific habitat is also given due consideration as part of mitigation measures.

Invasive Non-Native Species (INNS)

We welcome the scoping in of the introduction and spread of INNS has been scoped in. Table 8-3 outlines the Zone of influence (ZoI) buffers for ecological features, however no consideration has been given to hydrological pathways, which may require a greater ZoI greater than those listed (e.g. transfer of INNS, water quality issues, etc.). This should be rectified.

No INNS specific mitigation has been identified with regards to the operational phase (e.g. monitoring, provision of biosecurity associated with recreation, measures associated with augmentation, etc.). We recommend measures such as this are considered to manage unintentional spread of INNS from the reservoir. It has previously been recommended that SAI-RAT (Strategic Resource Option Aquatic Invasive Non-native Species Risk Assessment Tool) v2.0 is used, which was commissioned to inform assessment of INNS Risk associated with assets and water transfers. This tool could be used as part of a wider risk assessment, to help identify sources of risk and priorities for biosecurity measures.

Biodiversity Net Gain (BNG)

BNG will become a legal requirement for NSIPs in November 2025. It is positive to read that the applicant intends to deliver a minimum of 10% BNG on-site, and that the mitigation hierarchy will be followed (2.7.10). We would welcome consideration whether it would be possible to go beyond this and provide beyond the statutory requirement. The applicant should submit a Biodiversity Net Gain Report alongside the DCO application.

The applicant should use the latest statutory (official) version of the biodiversity metric tool to calculate BNG, and we recommend the use of the Watercourse Metric (where appropriate).

Offsite Opportunities

We are currently planning projects to remove barriers for fish passage on the downstream reaches of the Letcombe Brook closest to its confluence with the Childrey Brook, which this scheme could potentially link in to in order to bring about joint wins. Similarly, Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust and the Letcombe Brook Project are currently running a scheme for mink trapping, where they identify areas with engaged landowner/ residents to deploy mink rafts for the trapping and dispatch of the invasive species. The landcover of SESRO could offer good opportunity to support and connect fragmented water vole populations via mink control.

The SESRO scheme could also support the delivery of ongoing local projects, such as the Letcombe Brook Chalk stream Restoration project and a project restoring the Boars Hill alkaline Fen complex, both led by the Ock Catchment Partnership and Freshwater Habitats Trust. This would also provide an opportunity for the applicant to provide off-site BNG enhancements. The Thames and Ock catchment partnerships are

collaborating in their delivery of a Landscape Recovery project and would be key partners to contact for planned schemes in the area.

Oxfordshire County Council have been appointed the responsible authority to develop the Local Nature Recovery Strategy. The council have prepared a habitat mapping tool where they've gathered ongoing habitat works (https://letstalk.oxfordshire.gov.uk/lnrs-phase2/maps/ph2), and are currently preparing for formal public consultation in October 2024 where they will publish draft versions of the LNRS documents and a draft map. We advise that the applicant refers to these documents and maps to inform decisions on where to site off-site BNG delivery and potential enhancements.

Possible improvements to fish passage in the River Thames may also be an option.

Landscape Masterplan

The interim landscape master plan and associated proposed biodiversity enhancements are generally well thought-out (Figures 3.8 & 3.9), providing a variety of aquatic habitats across the scoping boundary (7.6.25). It is positive to read that watercourse alteration works will be completed prior to the construction of the reservoir, and that planting and benthic sediment transfer is being considered to assist with establishment (2.6.2 & 7.8.20).

Culverting

Provisions in the general mitigation are positive, such as the covering of excavations, the use of wildlife-sensitive lighting and considerate planting to increase site connectivity and reduce noise and light along the riverbanks (7.8.10 & 8.8.1). Section 7.6.11 mentions the possibility of using box culverts across small watercourses and ditches. We would strongly recommend against the use of culverts, and encourage the construction of open-span bridges as an alternative.

Watercourse Buffers

There is no consideration of using watercourse buffers as a mitigation proposal. We would look for the provision of a 10-metre buffer from watercourse bank-tops during construction. We are aware however that if carried out along the whole watercourse stretch, this may constrain the watercourse in places where natural geomorphic processes take place (such as lateral channel migration). We recommend that buffers greater than 10m are considered where watercourse migration is identified, where possible.

Water Vole and Otter

The scoping report does not provide species-specific mitigation, which we would welcome more information on particularly with regards to protected species such as water vole and otter. Off-site areas may also need to be surveyed in case these will need to be used as part of a mitigation strategy (e.g. translocation).

Water Framework Directive

Any biodiversity enhancements proposed around waterbodies should compliment the local environmental objectives and programmes of measures within the River Basin Management Plan. Reference should be made to the The Ock Catchment Plan produced by the Ock Catchment Partnership, to understand issues facing the catchment (such as barriers to fish passage and invasive species).

Fisheries

Culverting

7.6.11 discusses river crossings, with more significant watercourses being proposed for single-span bridges, and box culverts being considered for smaller watercourses and ditches if the culvert is appropriately designed. As stated above under the Water-based Ecology section, there should be no culverting of watercourses, regardless of size. Small watercourses that may be proposed for culverting can still hold important fish habitat and thus longitudinal migration should be maintained with open span crossings and natural riverbed.

Intake / Outtake structure

The impacts on the new intake/outfall structure on the River Thames are looked at in 7.6.12, with marginal habitat being lost. Marginal habitat is important fish habitat for juvenile fish, European eel and brook lamprey. As well as vital macroinvertebrate habitat, which in turn supports fish through food resource. Should loss of this habitat occur compensation should be provided locally on the Thames.

Fish Element of WFD

Paragraph 7.5.16 discussed fish classifications within WFD and availability of baseline data on this topic. Care should be taken when viewing the Thames (Evenlode to Thame) fish status as 'Poor' when assessing any impact. The waterbody is classified from a survey on a side stream in Oxford which showed a diverse population of fish expected in the stretch of Thames. It is likely that the 'Poor' status is due to a lack of minor species (minnows and bullheads) in survey results. We expect the main Thames (Evenlode to Thame) to hold a good population fish species, (including minor species). Additionally, the Letcombe Brook has a population of brown trout (NERC S41 priority species).

We would like to advise that there are also Environment Agency boom boat electric fishing CPUE (catch per unit effort) timed surveys conducted on the Thames. This data could also be incorporated into the baseline information.

Gymnocephalus cernua

It should be noted in relation to 7.5.32 that ruffe are in fact common in the east and south of England and not considered as an INNS throughout the Thames.

Construction Risks

During the construction of diverted watercourses (para 7.6.18) the fate of fish that would normally be attracted into the River Ock and associated tributaries must be considered. I.e. will fish be trapped in coffer-dammed sections, or be susceptible to being stranded in areas of watercourse that have poor water quality because of reduced flow?

Standing Water Habitat

It is stated within 7.6.25 that floating islands could act as refuge for juvenile fish in reservoir. Consideration should be given as to what is the source of fish in the reservoir if screening is in place, and the risk of entrapment of fish in the reservoir when discharging to the Thames during low flows. Implications for INNS and pathogens if the fish are non-native. Any stocking or keeping of fish in the reservoir may require permission to do so by the Environment Agency under the Keeping and Introduction of Fish (England and River Esk Catchment Area) Regulations 2015.

Changes in Flow

Paragraph 7.6.31 discusses how this could have a direct impact on nursery habitat availability. We recommend that consideration of increased flows causing fry washout and dispersal downstream is assessed.

Abstraction and Augmentation

It should be noted in paragraph 7.6.33 that less diluted water during abstraction may also impact fish by being exposed to higher levels of background ammonia in the Thames. The thermal properties of the plume from augmentation and impacts on fish needs to be assessed. Changes in water temperature from a plume may cause fish to be attracted to or avoid such areas of the river.

Impacts on Fish Passes

To understand how the changes in flow/level due to the scheme may impact on fish passes, an assessment (for all fish species present) should be undertaken to ensure the fish pass is able to function effectively under all flow scenarios (as per guidance in the National Fish Pass Manual).

Impacts on Juvenile and Larval Fish

It is stated in paragraphs 7.6.35 and 7.6.36 that the new abstraction may result in impingement and entrainment of fish. In particular this may impact juvenile and larval fish due to poor swimming ability. An assessment should be carried out to understand

how an increase in flow due to augmentation may influence approach velocities at intakes downstream of SESRO. This assessment should be used to inform whether approach velocities will increase entrainment and impingement of juvenile and larval fish. The same assessment should also be undertaken for the new proposed intake for SESRO.

Screening Design

The screening of the intake/outfall structure should be designed in such a way that ensures that the risk of entrainment and impingement to juvenile and larval fish is acceptable, i.e. it does not cause a deterioration in WFD status. This should also apply to screening design for SESRO on the whole.

Any over-pumping of watercourses during construction should ensure that pump inlets and outlets are adequately screened to comply with the Eels (England and Wales) Regulations 2009.

Piling

As mentioned in section 12.6.8, as piling methods may be used as part of the construction of SESRO, the impact assessment should include fish as a receptor from noise associated with any piling near the River Thames or other main rivers. Should piling methods be required we would favour silent or vibro piling over percussive piling.

As a small point of note, the Rivers of Life project referenced in 5.21 is led by The Earth Trust in partnership with the Environment Agency, not the Environment Agency as stated.

Geomorphology

We welcome confirmation that Fluvial Geomoprhology has been scoped into the assessment and that a WFD Assessment will be conducted in support of the proposals.

MoRPh Surveying

It is encouraging that MoRPh surveys will be used to inform BNG and that survey values have been linked to Environmental (Sensitivity) value (Table 6.9). However paragraph 6.5.69 should be clarified as to whether 20% of each watercourse would be surveyed or only 20% of the total number of watercourses. If it is 1 in 5 watercourses, consideration should be given as to how will it be ensured that this is a representative selection.

River Morphology

Section 6.6.39 states that there will be an overall positive effect due to the 47km of enhanced channel, however it has not been made clear how this is the case. It currently reads that there will be deterioration and loss a number of reaches, but that there is an overall enhancement, without a clear explanation of how it will be an enhancement. We

understand that the use of natural channel designs will be key, but this should be further expanded and detailed.

It should be noted that the Cow Common Brook is already morphologically able to support good status, even though failing in other respects. Care should be taken when designing the new channels to ensure that Good Ecological Potential is possible (these will be Artificial Waterbodies) and that any morphological features that support good status in the existing channels are duplicated/enhanced in the new AWB, e.g. floodplain connectivity.

River Capture

It should be ensured that the new channels do not risk impacting the reservoir embankments, e.g. through ground raising/landscaping. Scenario testing should be carried out, to deem whether river capture is a possibility, and whether it may be preferable to the construction of an entirely new diversionary channel. However, any activity such as this, unless occurring naturally, would probably require a water transfer license.

Culverting

As raised elsewhere within this response, culverted crossings should be avoided as they damage the bed of the river, restrict natural fluvial processes and can also harm biodiversity. Clear span bridges that do not interfere with the activity of the channel, or the channel banks, should be used in preference.

Geological Stability

With respects to Geology, the report mentions that the reservoir will be underlain by Upper Greensand and Gault Clay (hard geology). It must be noted that in other areas of the country that the Upper Greensand has the possibility to become “flow sands”. We would recommend that a geotechnical investigation is undertaken to ensure that the foundations of the reservoir embankments do not become destabilised by ground movements caused by increased pore pressures in the subsurface below the proposed reservoir.

Water Quality

Overall, we support the topics that have been scoped into the assessment. Pollution prevention is broadly included and will be scoped into the ES. However, the following topics should also be assessed within that scope.

Foul Drainage

The introduction of new sewage flows and/or trade effluents on Abingdon Sewage Treatment Works (STW), with particular regard for the quality of the final effluent from the STW on the receiving environment. This applies to any new discharges to foul sewer during construction or operation. There is a risk that increased sewage or trade effluent flows could risk non-compliance with Abingdon STW’s water discharge activity permit, increase the frequency that any storm overflows could operate, or introduce or

increase the concentration of substances not controlled by emission limits within the permit.

Watercourse Diversions

The impact of diverting watercourses on water quality. Although we acknowledge that these impacts could be minor, with most of the Reasons for Not Achieving Good Status being registered to upstream inputs, the risks of worsening water quality and the opportunities to improve it (for example through changes in hydrogeomorphology) should be explored within the WFD assessment.

Rainfall Capture

Section 6.6.31 confirms that rainfall captured by the scheme will reduce the flows into some of the reaches of the Childrey Brook and the lower River Ock. It confirms that the impact this will have on the hydrology of the downstream environment will remain scoped in. We believe that impacts that this may have on water quality, as a result of lower dilution, should also be scoped in for further assessment.

Hardstanding

Impacts from surface water drainage from new areas of hard standing. This could include surface water drainage from the water infrastructure, or from new car parks, roads or access tracks.

Electricity Storage

Section 2.7.7 references that the scheme may generate and store electricity on site. We would like to stress that drainage and pollution prevention at this possible electricity storage site, including how firewater will be managed, should be considered as part of ES.

Abstraction from and Discharge to the Thames

We note the extensive work completed to assess the risks to water quality from the abstraction and re-entry of water into the River Thames. The Environment Agency will need to review the evidence behind the final assessment to properly consult on the potential impacts to water quality. We encourage continued pre-application engagement through our pre-application planning advice services and provide detailed evidence within the Environmental Statement appendices.

Baseline Environment

Section 6.5.27 confirms that there is limited baseline water quality data for watercourses within the Ock catchment. Considering the Ock catchment is one of the closest potential receptors to the scheme, we would expect some further surveys to be completed to allow a better understanding of the baseline water quality. This would be in line with the proposed further surveys, and existing water quality data, within the River Thames, as discussed in sections 6.5.25 and 6.5.26.

Mitigation

We welcome the proposal to produce a Water Quality Management Plan and a Construction Code of Practice. We would like to encourage the applicant to secure the production of an Environmental Monitoring Plan within these documents, to ensure that compliance is maintained throughout construction. We would look to review and advise on these documents as and when they are produced (pre- or post-determination).

Reservoir Aeration

We also welcome the proposal to include equipment to aerate or recirculate water within the reservoir to prevent stratification and minimise algal growth. We encourage the applicant to incorporate these systems into their assessment, and if possible within their water quality monitoring, to ensure their efficacy and effectiveness are properly understood.

Water Resources

Discharge/Re-abstraction

The scoping report does not take into consideration some of the implications for the discharge and re-abstraction relating to the potential for losses to occur. The report commissioned by Thames Water to HR Wallingford evaluates these losses and recommends that further investigation may improve confidence in the conclusions that between 2-10% of water may be lost between the release of water from the reservoir and the abstraction in the Lower Thames.

This may have implications for how the abstraction and discharge are licensed. In some other discharge/re-abstract examples, licences have been issued with the requirement to discharge more than is abstracted in order to compensate for this.

We would encourage this assessment and any further iterations to be made available at application for licences and recommend early pre-application engagement with the National Permitting Service to establish any potential for required conditions based on it's conclusions.

Sweetening Flow/Periodic Dewatering

Section 6.6.26 describes a sweetening flow or periodic dewatering undertaken to avoid stagnant water accumulating in the augmentation pipeline. It is inferred from section 7.6.31 which describes flow changes in the River Thames, that this would be a transfer of water from the river to the reservoir. The report acknowledges the requirement of a hands-off flow for the abstraction to fill the reservoir, it is unclear however whether this sweetening flow is intended to be included within the same restrictions.

A sweetening flow during medium to low flows typically experienced in the summer months is not likely to be practical within the conditions which will be imposed by an abstraction licence. The impacts of summer abstraction from the River, and/or the practical implications for the scheme of this not being possible, should therefore be scoped in to the assessment of flow changes to the River Thames.

Consumptive Uses

The scoping report makes no reference to consumptive water use during the construction phase of the project. This might include dust suppression techniques as described in Chapter 8; machinery and wheel wash down; concrete batching (though Chapter 11 states that this could possibly be done off site). Access to significant volumes of water during construction should not be underestimated. Thames Water may intend to supply its own water demands for construction needs, but this is not mentioned explicitly in the report and should be clarified.

We recommend that large projects consider a basic water resources assessment at the EIA stage which identifies water demands and the intended sources of supply for activities during construction so that any implications for the effect of potential licence restrictions can be problem solved early on.

Dewatering

We are pleased to see that the potential effects of dewatering are scoped into the assessment. De-watering activities may require an abstraction licence if it doesn't meet the criteria for exemption in *The Water Abstraction and Impounding (Exemptions) Regulations 2017 Section 5: Small scale dewatering in the course of building or engineering works*. It may also require a discharge permit if it falls outside of our *regulatory position statement for de-watering discharges*. Consideration should be made as to whether the discharge will be made to the same source of supply as demonstrating non-consumptive use will increase the likelihood of a licence being granted.

WFD (Hydrological Regime Assessment)

The project description describes the Western watercourse as the diversion of the Cow Common Brook and Portobello Ditch and a number of drains to the West of the site. The Eastern watercourse is described as the Mere Dyke system comprising the drains which exist to the east of the site and to the west of Drayton and the A34. The current Cow Common Brook and Portobello Ditch WFD waterbody includes both of the proposed eastern and western proposed watercourses catchments. As such, the hydrological regime element is assessed at one location at the bottom of the waterbody after the input from the Mere Dyke drain system and before the confluence with the River Ock.

It is unclear from the report how the assessment of the new watercourses will be configured. This will have implications for WFD status since the western watercourse now outfalls further upstream to the Childrey brook waterbody, the eastern watercourse falls to the River Ock further downstream than previously, and it appears that the old assessment point will no longer exist.

We expect that the modelling described in Chapter 6 to evaluate the effect of any changes to the hydrology of the catchment draining to the Childrey brook, the current outfall of the Cow Common Brook and Portobello Ditch; and the new outfall of the new eastern watercourse and we would like to see the implications represented in the WFD assessment for the hydrological regime supporting element.

It is recognised that the new courses of the waterbody are intended to be of higher environmental value than the existing the Cow Common Brook and Portobello Ditch waterbody, and that improvements to WFD element statuses are expected as a result of the enhancement of their form and function. We would expect the WFD assessment to fully evaluate the risk of deterioration also.

We would also expect ongoing engagement with the Environment Agency on any proposed new WFD waterbodies; changes to existing WFD waterbody boundaries; characteristics and assessment points affecting individual element assessments and metrics. Despite some clearly straightened sections, the Cow Common Brook and Portobello Ditch is not currently designated as heavily modified. This means that the waterbody objectives are to achieve Good Ecological Status (GES). It is not yet established if the watercourses being created to replace the Cow Common Brook and Portobello Ditch will need to be designated as artificial or heavily modified if GES is no longer achievable through naturally sustained processes.

Impoundments

Newly created outfalls to the Childrey Brook and River Ock pose uncertainties around how the upper catchment may discharge to the rivers. How the outfalls are managed may depend on the flow regime or levels needing to be achieved in the upstream waterbodies. Given that the new watercourses create entirely new conditions and flow regimes, this may not yet be known. If structures are required to regulate flows at the confluences, it should be considered that they will need to be passable to fish and eels and may require impoundment licences.

River Control

The River Thames at this location is artificially controlled to balance the needs of navigation, ecology and water abstraction. It is imperative that this is considered within the ES and ensured that any impacts on this are fully understood and mitigated.

Downstream Conveyance

Paragraph 2.4.6 discusses how SESRO is designed to convey raw water to and from the River Thames and to allow abstraction of water from the River Thames further downstream, however there doesn't appear to be any discussion of the practicality of conveyance downstream for onward abstraction. Consideration is needed of the operating ranges of the river sections, and the assumptions about gate movements to ensure that water is not 'held up' in river sections before reaching Datchet and Affinity's abstractions.

Impact on Weirs

The ES should consider what would be the control on water levels for operating the pump(s) relating to the intake/outfall structure. Assessment should be given to proximity and impact on locks and weirs, in terms of operation and navigation. The day-to-day operation of the weirs should be considered, with the range of operation under different weather conditions being included within the assessment to identify what might be the best and worst-case scenarios, and requirements for any mitigation.

Table 6-13 looks at mitigation measures, and it is stated that changes in water levels along the River Thames during periods of augmentation and abstraction would be mitigated through operation of existing level management structures. It is unclear how Hands-Off Flows and an abstraction/release regime are listed in the table, however it is unclear what role they may play as there is no tick against them. The scheme should consider frequency with which additional movements are needed to inform on lock and weir operational requirements and to prevent water being ‘held up’ before reaching the Lower Thames.

Spatial Scope

The spatial scope (5.5.8) should be made clear with regards to the extent of pipelines for the associated water infrastructure projects, in addition to the downstream impacts associated with water levels, operation of locks, weirs and navigation.

Study Area

The study area has been sub-divided into a number of study reaches shown spatially in Figure 6.1. Clarification should be provided as to the justification of the reaches, with Reach 6 (d/s confluence with R Thame to Cookham / Windsor) being particularly extensive. Consideration should be given as to how this will be represented in any modelling or assessment of impacts, and how the reaches align and reflect WFD.

Impact on Levels

It is understood that hydrological assessments are to be focussed on a review of the flow regime (6.5.9) of surface water catchments. We would look for this to include an assessment on levels as well as flows. Levels are important on the River Thames and are managed for navigation as well as preventing flooding. The hydraulics of the intake / offtake should be adequately represented to ascertain impact on levels, particularly at Culham.

It should be made clear what the impacts are in terms of water levels (primarily head levels) in the reaches between Abingdon and Windsor. There does not appear to be any consideration of impacts on Windsor Park gauging station. This is the ‘receiving’ gauging station for the augmentation water and the ‘control’ for the Jubilee River and the monitoring location for Lower Thames abstractions, so is of key importance. There also does not appear to be any consideration of the impacts on Kingston flows in relation to the Teddington Target Flow which is key.

Although the intention is for the water to be abstracted by the Lower Thames abstractions, consideration should be given as to the risks and impacts associated with this this abstraction not being able to occur as expected.

Use of Gauging Data

It is stated in 6.5.15 that all gauging stations have been considered for the build of the hydrological and hydraulic models. Clarity should be provided regarding whether there should be a gap of the baseline and how this has been filled. Consideration should be given to whether any of the gauging stations will need to be realigned to support this work.

Hydrological Modelling

6.5.67 It is understood that amendments to the Probability Distributed Model (PDM) and InfoWorks ICM models have been made, but details should be provided as to which catchments these relate to. These are not the same as those referenced in 6.5.3, so clarification should be provided as to whether they are EA models or developed specifically for the project.

We may need to review the detail of this work to check it has been undertaken appropriately.

Downstream Abstractions

Paragraphs 6.6.28-30 discuss how the discharge from SESRO will link into downstream reservoir storage within the London Water Resource Zone, the change in the abstraction regime at intervening licensed abstraction points, and the affect this will have on existing river level management protocol for the River Thames. These downstream impacts should all be considered within the EIA to inform decisions under the Thames Intake Project under the Lower Thames Operating Agreement.

Climate Change

Paragraph 16.1.2 looks at climate but seems to focus solely on the area of construction. Full consideration should be given to the risks and issues linked to water availability in the river in dry years, with a focus on the lower Thames where the augmentation water is anticipated to be re-abstracted. SESRO should consider the catchment as a holistic system in terms of the 'hotter drier summers' and impacts on both flows and levels.

Cumulative Impacts

We welcome the consideration of other strategic reservoir proposals such as T2ST and SWOX 20.7.13. We also recommend consideration is given to the links with current Environment Agency flood alleviation projects on the Thames, such as the Oxford Flood Alleviation Scheme and the River Thames Scheme DCO.

As discussed above, in combination effects could occur when considering current operational activities such as weir and lock operation.

Whilst the CAMS Hands off flow (HoF) adheres to the abstraction licensing strategy and protects ecological impact and cumulative impacts of abstraction, the impacts to the way the weirs and locks operate should be fully addressed within the ES.

Waste

The following should all be scoped into the EIA: waste sites, waste exemptions and landfills (historic, closed and active) within the draft Order Limits.

The Environment Agency has information on the following landfill sites:

- Sutton Wick closed landfill site (operated by Cemex) which is located partly within the proposed site boundary. It should be noted that this site is based around hydraulic containment and the groundwater level must exceed leachate

levels and therefore be maintained. Any impact on groundwater levels could impact on leachate containment at the site.

- Tuckwells deposit for recovery site. This is an engineered deposit for recovery site built with a clay base and side walls to keep groundwater out. Infilling at this site is ongoing and it should be noted that water levels are very high in this area.
- Sutton Courtenay active landfill site which is located East of the proposed site boundary. It is worth noting that the site has ongoing odour issues and a high level of public engagement.

Navigation

Flow Rate
As mentioned above under water control, confirmation needs to be provided that the minimum flow rate for abstraction will not detrimentally impact navigation.

River Ock
Consideration should be given to the impact of SESRO on ecology and structures in the River Ock. We would also expect an assessment to be made as to whether abstraction could drain the lower end of the River Ock.

Appendix 2

Licensing Requirements

A number of permits and licenses will be required to facilitate this scheme.

Should you wish to disapply any element of these proposals and bring within the scope of the DCO details of this should be provided to the Environment Agency a minimum of 6 months prior to DCO submission.

We will require a Consenting Strategy document is submitted in support of the proposals which outlines a programme of managing the various consents and permits, and confirmation of whether this will be subsumed within the DCO process or as stand alone permits.

We recommend early engagement with our National Permitting Service and full use of their enhanced pre-application advice service to ensure the permitting requirements and implications are fully understood and addressed in good time to inform PINS decision making process. Twin tracking is recommended for those applications considered fundamental to the DCO.

Please refer to PINS Annex D advice note for further information on how the Environment Agency's planning and permitting process can be best aligned within DCOs.

The scheme could potentially require one or more water discharge activity permits. In particular, the applicant will need to provide clear justification for whether they believe the re-entry of reservoir water back into the River Thames will constitute a water discharge activity. If the water re-entering the Thames is shown to deteriorate water quality, then it could be considered poisonous, noxious or polluting matter, and therefore require a water discharge activity permit. We encourage the applicant to continue to engage with us on this matter. Discharges of trade effluent from the water treatment works will also likely require a water discharge activity permit.

We note the options appraisal for the location of intake/outfall structures presented in Section 3.3.5 and Table 3-1. The applicant has acknowledged that the preference for Option B will require the final effluent outfall from Abingdon STW to be moved downstream of the reservoir intake structure. This will require an application to vary the existing environmental permit for the site. As such we would encourage the applicant to engage with our permitting pre-application advice service to discuss this matter further.

Consents for temporary maintenance discharges, for activities such as flushing scour valves, may be required under Section 166 of the Water Industry Act 1991.

An abstraction license may potentially be required to facilitate the proposed groundwater drain. More information is needed about how this will operate and whether an abstraction licence will be required, or whether it will be exempt/small scale.

Any remediation of land contamination may require site permits and mobile treatment licence, but further advice in relation to this will be provided in due course.

The EIA may determine that changes in flow/level resulting from the scheme will have an impact on fish passes in the Thames. Any mitigation that would require changes to

the fish pass design in order to maintain functionality may require fish pass approval from the National Fish Pass Panel.

Given the site's location within the floodplain and on the banks of Main Rivers, it is likely multiple Flood Risk Activity Permits will be required in addition to the above.

If any of the works are likely to require a Flood Risk Activity Permit (FRAP) under the Environmental Permitting Regulations, we recommend that the applicant informs the Environment Agency whether they are seeking disapplication at the earliest opportunity.

The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- On or within 8 metres of a main river (16 metres if tidal).
- On or within 8 metres of a flood defence structure or culvert (16 metres if tidal).
- On or within 16 metres of a sea defence.
- Involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert.
- In a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission.

For further guidance please visit https://www.gov.uk/guidance/flood-risk-activities-environmental-permits or contact our National Customer Contact Centre on 03702 422 549.

The applicant should not assume that a permit will automatically be forthcoming once a DCO has been granted, and we advise them to consult us at the earliest opportunity.

Pre application advice - Get advice before you apply for an environmental permit - GOV.UK

A waste carrier licence is required if the applicant wishes to remove waste off site. Further details on waste carrier licenses can be found here: Register or renew as a waste carrier, broker or dealer - GOV.UK

Compliance with Duty of Care is required. Therefore, any sites which receive waste because of the infrastructure project should be checked that they have permits with the appropriate waste types. Further details can be found here: Waste duty of care code of practice - GOV.UK

Historic England

[redacted]
The Planning Inspectorate
By email only

Our ref: PL00796667
Your ref: WA010005

Telephone 07764-561602

23 September 2024

Dear [redacted]

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11 Application by Thames Water Utilities Limited (the Applicant) for an Order granting Development Consent for the South East Strategic Reservoir Option (SESRO) (the Proposed Development)

Thank you for consulting Historic England on the Scoping Report for the South East Strategic Reservoir Option. We have the following comments to make.

In section 10.4 of the Scoping Report it is stated that historic environment data has been acquired for an area which includes a 2km buffer beyond the scoping boundary. It is not clear if this then forms the area within which impacts upon heritage assets will be addressed. If so, this would exclude, for example, impacts within the setting of the scheduled monuments along the Ridgeway to the south, from which the new reservoir is likely to be visible. We suggest that it would be more appropriate to consider the impact upon designated assets that fall within the Zone of Theoretical Visibility identified in figure 9.3.

We note that the historic landscape has been ascribed low value in section 10.5.9 of the Scoping Report. It should be noted that the area of the development contains at least one feature which is referred to in an Anglo-Saxon charter boundary, the Mere Dike, which still exists on the ground today (Gelling, *Place-Names of Berkshire*, pt.3, 712-3), and lidar evidence suggests at least traces of a fairly extensive pattern of former open fields. On that basis it may be appropriate to reconsider the value ascribed to the historic landscape.

In Appendix H there appear to be a number of errors. For example, the Sutton Wick settlement site is given the correct reference number, but is not stated to be a scheduled

monument. Similarly, the Settlement north of Cow Lane is not listed as a scheduled monument. There is no reference to Ock Bridge or Abingdon Bridge, both scheduled monuments, although they are shown on fig. 10.1 and listed buildings on Abingdon Bridge are included. Site of Grange of Abingdon Abbey at Barton Court Farm appears twice, once with the correct reference number (1006310) and again as 1006309 (which is the reference for Abingdon Abbey itself).

I can confirm that we are content that operational effects on scheduled monuments can be scoped out, as indicated in table 0-1 (Scoping Summary).

Yours sincerely

[redacted]
Inspector of Ancient Monuments
E-mail: [redacted]

Health and Safety Executive

CEMHD Policy - Land Use Planning,
NSIP Consultations,
Building 1.2,
Redgrave Court,
Merton Road,
Bootle, Merseyside
L20 7HS.

HSE email: NSIP.applications@hse.gov.uk

By email only – SESRO@planninginspectorate.gov.uk

Dear [redacted] (Senior EIA Advisor)

Date: 13 September 2024

PROPOSED SOUTH EAST STRATEGIC RESERVOIR OPTION (the project)
PROPOSAL BY THAMES WATER UTILITIES LTD (the applicant)
INFRASTRUCTURE PLANNING (ENVIROMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as amended) REGULATIONS 10 and 11

Thank you for your letter of 28 August 2024 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records the proposed project area for this Nationally Significant Infrastructure Project, shown as the purple 'EIA Scoping Boundary' in Figure 1.2 EIA Scoping Boundary on page 4 of the EIA Scoping Report, is not within any consultation zones of major accident hazard sites or major accident hazard pipelines.

HSE's Land Use Planning advice is dependent on the location of areas where people may be present [HSE: Land use planning - HSE's land use planning methodology]. Based on the information in the Summary Brochure dated June 2024 it is unlikely that HSE would advise against the development. Please note that the advice is based on HSE's existing policy for providing land-use planning advice and the information which has been provided. HSE's advice in response to a subsequent planning application may differ should HSE's policy or the scope of the development change by the time the Development Consent Order application is submitted.

Hazardous Substance Consent

Hazard classification is relevant to the potential for accidents. Hazardous substances planning consent is required to store or use any of the Categories of Substances or Named Hazardous Substances set out in Schedule 1 of The Planning (Hazardous Substances) Regulations 2015 as amended, if those hazardous substances will be present on, over or under the land at or above the controlled quantities. There is an "addition rule" in Paragraph 5 Part 4 of Schedule 1 for below-threshold substances.

Based on the information provided on page 8 of the Summary Brochure dated June 2024 and the separate document, J696-DN-A01A-ZZZZ-RP-ZD-100007, Thames to Southern Transfer SRO, WTW Site Identification Report dated May 2024, it is clear that the proposal includes options for a new water treatment works. From the documentation provided, it is not clear whether the applicant has considered the hazard classification of any chemicals that are

proposed to be present at the development. Figures 3.5 and 3.6 on pages 39 and 40 of the WTW Site Identification Report show that 'Ozone Generation' 'Chlorine Contact Tank' and 'Chemical Storage' areas make up part of an indicative water treatment works layout, however no specific details are given. Depending on the specifics, the water treatment works may fall into scope of requiring hazardous substances consent (e.g. depending on its concentration and quantity). It is recommended to confirm if any hazardous substances present may fall into the categories in Schedule 1 and whether the quantities are sufficient to require consent (including after the use of the "addition rule" should it be needed).

Explosives sites

HSE has no comment to make as there are no licensed explosives sites in the vicinity.

Electrical Safety

No comment from a planning perspective.

At this time, please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at nsip.applications@hse.gov.uk . We are currently unable to accept hard copies, as our offices have limited access.

Yours sincerely

[redacted]

[redacted]
CEMHD4 NSIP Consultation Team

Marcham Parish Council

[redacted]

Orchard House,
90 Howard Cornish Road,
Marcham, Abingdon,
Oxfordshire OX13 6PU

The Planning Inspectorate,
Environmental Services,
Operations Group 3,
Temple Quay House,
2 The Square,
Bristol.
BS1 6PN

24th September, 2024

Dear Sirs,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11 Application by Thames Water Utilities Limited (the Applicant) for an Order granting Development Consent for the South East Strategic Reservoir Option (SESRO) (the Proposed Development)

Marcham Parish Council would ask for specific items which would affect the parish, to be included in the Environmental Impact Assessment reports.

Marcham parish is a receptor to the north of the proposed site. It has the A415 road passing through the village. This is extremely narrow in places with pinch points and sharp bends. It is also an Air Quality Management Area. Marcham Parish Council would like the transport assessment to fully assess all mitigation measures for the village, and in particular to by passing Marcham completely. Reports stating that public transport is to be prioritised, are insufficient. This comment is not only relevant to any final operation of the site, should consent be given, but also to any construction phase.

In the emerging Local Plan of the Vale of White Horse District Council, there is a proposal for housing development to take place on the site of Dalton Barracks, just to the north of the proposed reservoir site. Transport assessments and road planning should take this garden village housing site into account, as both developments (substantial housing and reservoir) will have significant impacts on the local road network.

Marcham Parish Council has concerns regarding the severing of existing water courses and the loss of the existing flood plain. Full justification as to the adequacy of the flood plan needs to be explained, as does an assessment of a breach of dam walls. Flood storage needs to be more than adequate to prevent impact on receptor areas, given that when full, there is the potential that rainfall could cause it to overflow. Any overflow will need to account for extreme rainfall events and emergency draw down operations.

The effects of microclimate changes owing to the presence and influence of a large water body on receptors and local ecosystems should be thoroughly investigated, given the number of existing houses to the north and elsewhere, plus the proposed numbers of housing referred to the emerging Local Plan. (Currently 1200, but increasing should revised proposals be adopted).

It is hoped that these items can be explored in great details within the EIA.

Yours faithfully,

[redacted]

[redacted]
Clerk Marcham Parish Council

Defence Infrastructure Organisation

Wendy Talbot
Ministry of Defence
Safeguarding Department
St George's House
DIO Headquarters
DMS Whittington
Lichfield
Staffordshire
WS14 9PY

MoD Telephone: 07977410762
E-mail: DIO-safeguarding-statutory@mod.gov.uk

Your Reference: WA010005

Our Reference: DIO10062865

[redacted]
The Planning Inspectorate
Environmental Services
Operations Group 3
Temple Quay House
2 The Square
BRISTOL
BS1 6PN

3 September 2024

Dear [redacted]

MOD Safeguarding – RAF Benson

Proposal: Reservoir exceeding 30 million cubic metres of water storage, together with associated development required for the construction and operation of the project including, but not limited to, water transfer tunnel/pipelines; water inlet and outlet structures; pumping stations; watercourse diversions; new access roads; temporary railways sidings for material handling; parking, wildlife and environmental areas; leisure and recreation and education facilities.

Location: Land between the A34 to the east, the Great Western Main Line railway (London to Bristol) to the south, the A338 to the west, and the River Ock to the north

Grid Ref:			
	North west	Easting: 443313	Northing: 194673
	North east	Easting: 446581	Northing: 194091
	South east	Easting: 445986	Northing: 191881
	South west	Easting: 442433	Northing: 191974
	Link to River Thames	Easting: 449485	Northing: 195029

Thank you for consulting the Ministry of Defence (MOD) on the above proposed development which was received by this office.

The Defence Infrastructure Organisation (DIO) Safeguarding Team represents the Ministry of Defence (MOD) as a consultee in UK planning and energy consenting systems to ensure that development does not compromise or degrade the operation of defence sites such as aerodromes, explosives storage sites, air weapon ranges, and technical sites or training resources such as the Military Low Flying System.

The application is an EIA Scoping Opinion request for the creation of a reservoir with a capacity exceeding 30 million cubic metres of water storage and associated development to support water supply along with wildlife and environmental areas, leisure, recreation and education facilities. The northeastern most point is to allow for a conveyance link to the River Thames via an underground conveyance tunnel.

The application site occupies the statutory safeguarding zone surrounding RAF Benson. In particular, the height safeguarding zone surrounding the aerodrome, and it is approximately 12.8km from the aerodrome boundary.

Aerodrome height safeguarding zone

The aerodrome height safeguarding zone define areas around aerodromes to regulate the height of structures to prevent the obstruction of the critical air space above and surrounding the aerodrome in which the principal take-off, landing and circuiting procedures are contained.

In this context, tall structures (in excess of 3 storeys) are of particular concerns of the MOD and any tall structure will require a full safeguarding assessment.

At this consultation stage for a scoping opinion request, where the details for the design or maximum height of the proposed development are yet to be determined, MOD representations are limited to the principle of the development only. Having reviewed the proposals, I can confirm the MOD has no concerns in principle with regard to the scale and massing of the proposed development indicated on the submitted plans, but should be consulted at all future stages for this proposed development to complete a full detailed safeguarding assessment.

The MOD must emphasise that the advice provided within this letter is in response to the data and information detailed in the developer's documents titled "EIA Scoping Report" dated August 2024. Any variation of the parameters (which include the location, dimensions, form, and finishing materials) detailed may significantly alter how the development relates to MOD safeguarding requirements and cause adverse impacts to safeguarded defence assets or capabilities. In the event that any amendment, whether considered material or not by the determining authority, is submitted for approval, the MOD should be consulted and provided with adequate time to carry out assessments and provide a formal response.

I trust this is clear however should you have any questions please do not hesitate to contact me.

Yours sincerely

[redacted]

[redacted]
Assistant Safeguarding Manager
DIO Safeguarding

National Grid House
Warwick Technology Park
Gallows Hill, Warwick
CV34 6DA

[redacted]
Development Liaison Officer
UK Land and Property
[redacted]

www.nationalgrid.com

SUBMITTED ELECTRONICALLY:
sesro@planninginspectorate.gov.uk

23 September 2024

Dear Sir/Madam

APPLICATION BY THAMES WATER UTILITIES LTD (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE SOUTH EAST STRATEGIC RESERVOIR OPTION (SESRO), (THE PROPOSED DEVELOPMENT)

SCOPING CONSULTATION RESPONSE

I refer to your letter dated 28th August 2024 in relation to the above proposed application. This is a response on behalf of National Grid Electricity Transmission PLC (NGET).

Having reviewed the scoping report, I would like to make the following comments regarding NGET existing or future infrastructure within or in close proximity to the current red line boundary.

NGET has high voltage electricity underground cables within the scoping area. The cables forms an essential part of the electricity transmission network in England and Wales.

Existing Infrastructure

Cable Apparatus

- DIDCOT/DRAYTON 1 CABLE 132 kV. 70_3704_27-29

I enclose a plan showing the location of NGET's apparatus in the scoping area.

New infrastructure

Please refer to the Holistic Network Design (HND) and the National Grid ESO website to view the strategic vision for the UK's ever growing electricity transmission network. https://www.nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design/hnd'

National Grid House
Warwick Technology Park
Gallows Hill, Warwick
CV34 6DA

NGET requests that all existing and future assets are given due consideration given their criticality to distribution of energy across the UK. We remain committed to working with the promoter in a proactive manner, enabling both parties to deliver successful projects wherever reasonably possible. As such we encourage that ongoing discussion and consultation between both parties is maintained on interactions with existing or future assets, land interests, connections or consents and any other NGET interests which have the potential to be impacted prior to submission of the Proposed DCO.

The Great Grid Upgrade is the largest overhaul of the electricity grid in generations, we are in the middle of a transformation, with the energy we use increasingly coming from cleaner greener sources. Our infrastructure projects across England and Wales are helping to connect more renewable energy to homes and businesses. To find out more about our current projects please refer to our network and infrastructure webpage. https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects. Where it has been identified that your project interacts with or is in close proximity to one of NGET's infrastructure projects, we would welcome further discussion at the earliest opportunity.

These projects are all essential to increase the overall network capability to connect the numerous new offshore wind farms that are being developed, and transport new clean green energy to the homes and businesses where it is needed.

National Grid House
Warwick Technology Park
Gallows Hill, Warwick
CV34 6DA

Specific Comments – Electricity Infrastructure:

- NGET's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset

- Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. NGET recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for "overhead line clearances Issue 3 (2004)".

- If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances.

- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's (www.hse.gov.uk) Guidance Note GS 6 "Avoidance of Danger from Overhead Electric Lines" and all relevant site staff should make sure that they are both aware of and understand this guidance.

- Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum "sag" and "swing" and overhead line profile (maximum "sag" and "swing") drawings should be obtained using the contact details above.

- If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.

- Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or "pillars of support" of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation ("pillar of support") drawings can be obtained using the contact details above.

- NGET high voltage underground cables are protected by a Deed of Grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. These provisions provide NGET full right of access to retain, maintain, repair and inspect our assets. Hence we require that no permanent / temporary structures are to be built over our cables or within the easement strip. Any such proposals should be discussed and agreed with NGET prior to any works taking place.

- Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network and requires consultation with National Grid prior to any such changes in both level and construction being implemented.

National Grid House
Warwick Technology Park
Gallows Hill, Warwick
CV34 6DA

To download a copy of the HSE Guidance HS(G)47, please use the following link:
http://www.hse.gov.uk/pubns/books/hsg47.htm

Further Advice

We would request that the potential impact of the proposed scheme on NGET's existing and future assets as set out above and including any proposed diversions is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.

Where any diversion of apparatus may be required to facilitate a scheme, NGET is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by NGET. Further information relating to this can be obtained by contacting the email address below.

Where the promoter intends to acquire land, extinguish rights, or interfere with any of NGET apparatus, protective provisions will be required in a form acceptable to it to be included within the DCO.

NGET requests to be consulted at the earliest stages to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All consultations should be sent to the following email address: **box.landandacquisitions@nationalgrid.com**

I hope the above information is useful. If you require any further information, please do not hesitate to contact me.

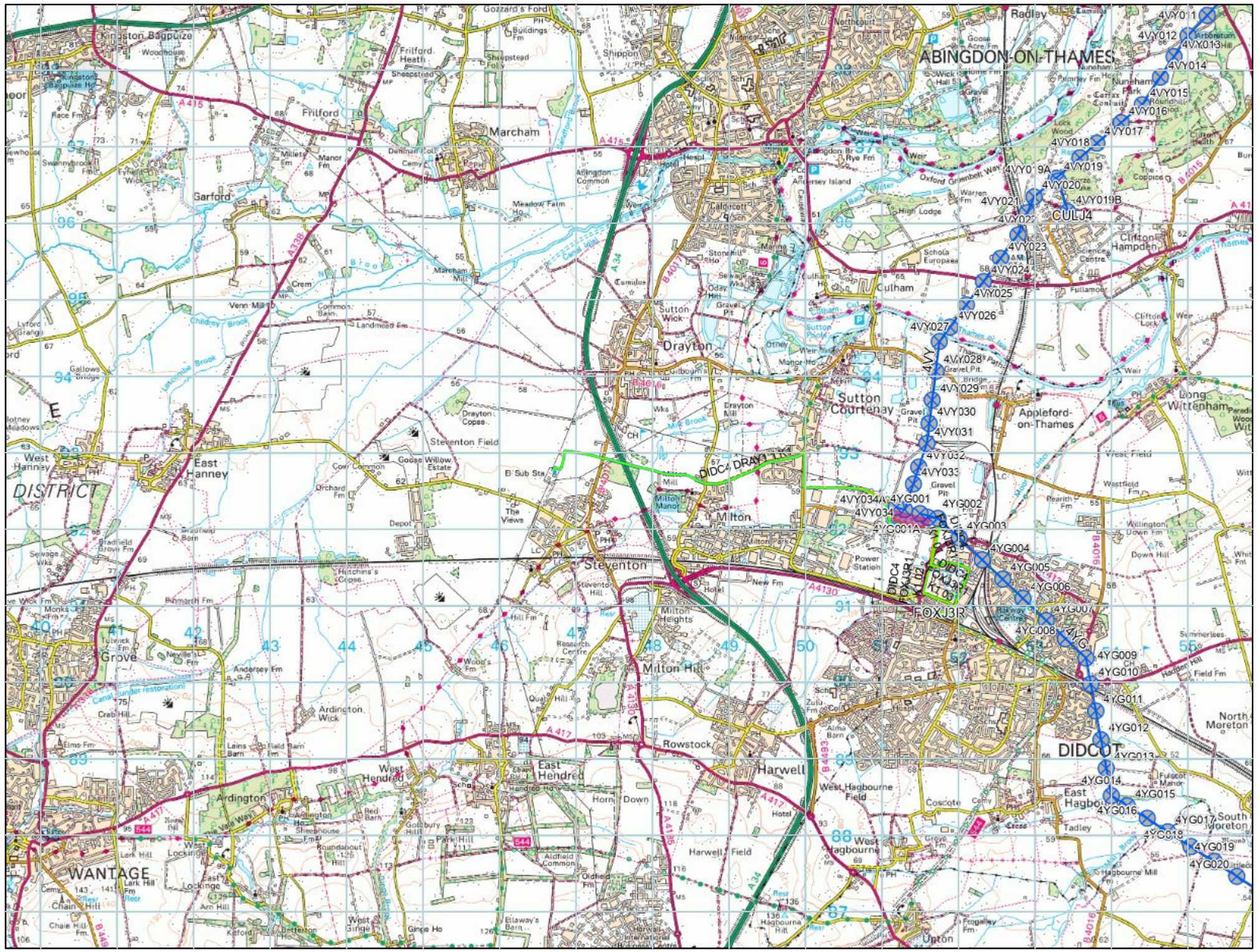
The information in this letter is provided not withstanding any discussions taking place in relation to connections with electricity customer services.

Yours faithfully

[redacted]

[redacted]
Development Liaison Officer
Commercial and Customer Connections
UK Electricity Transmission Land and Property

nationalgrid | National Grid Web Map



Legend

Cable Accessories
- Pilot Cable

Fibre Cable
- Fibre Cable Commissioned

Buried Cable
- Buried Cable Commissioned

Towers
- Towers Commissioned

OHL 400Kv
- OHL 400Kv Commissioned

Substations
- Substations Commissioned

Notes

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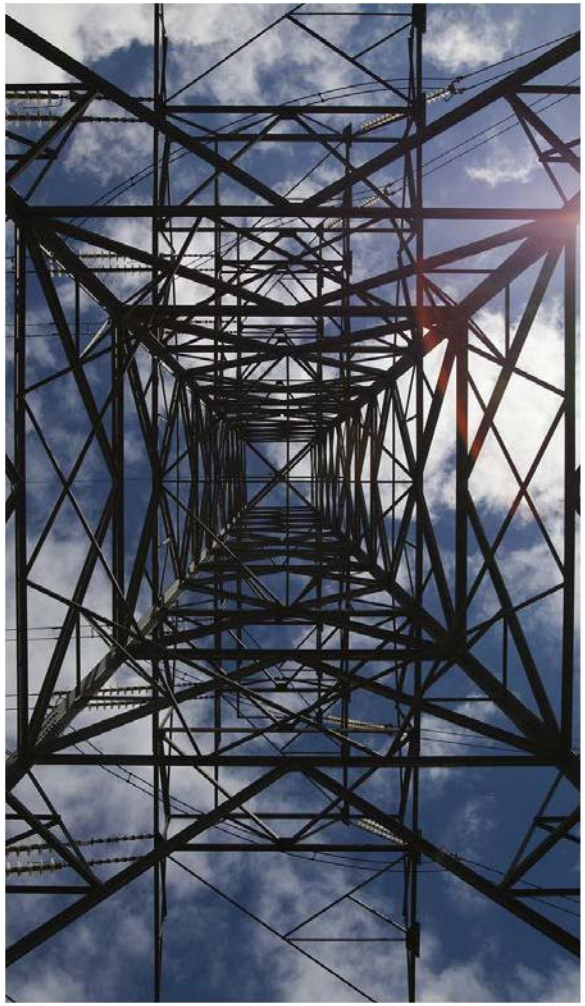
Technical Guidance Note 287

Third-party guidance for working near National Grid Electricity Transmission equipment



Purpose and scope

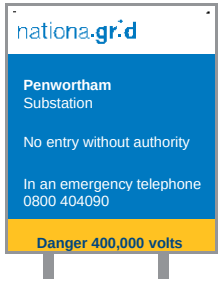
The purpose of this document is to give guidance and information to third parties who are proposing, scheduling or designing developments close to National Grid Electricity Transmission assets.

The scope of the report covers information on basic safety and the location of our assets – and also highlights key issues around particular types of development and risk areas.

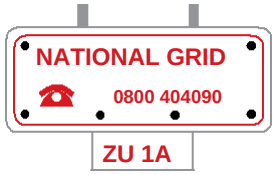
In the case of electrical assets, National Grid does not authorise or agree safe systems of work with developers and contractors. However, we will advise on issues such as electrical safety clearances and the location of towers and cables. We also work with developers to minimise the impact of any National Grid assets that are nearby.

How to identify specific National Grid sites

Substations
The name of the Substation and emergency contact number will be on the site sign.



Overhead Lines
The reference number of the tower and the emergency contact number will be on this type of sign.



Contact National Grid

Plant protection

For routine enquiries regarding planned or scheduled works, contact the Asset Protection team online, by email or phone.

www.lsbud.co.uk

Email: assetprotection@nationalgrid.com

Phone: 0800 001 4282

Emergencies

In the event of occurrences such as a cable strike, coming into contact with an overhead line conductor or identifying any hazards or problems with National Grid's equipment, phone our emergency number 0800 404 090 (option 1).

If you have apparatus within 30m of a National Grid asset, please ensure that the emergency number is included in your site's emergency procedures.

Consider safety

Consider the hazards identified in this document when working near electrical equipment

Part 1

Electricity transmission infrastructure

National Grid owns and maintains the high-voltage electricity transmission network in England and Wales (Scotland has its own networks). It's responsible for balancing supply with demand on a minute-by-minute basis across the network.

Overhead lines

Overhead lines consist of two main parts – pylons (also called towers) and conductors (or wires). Pylons are typically steel lattice structures mounted on concrete foundations. A pylon's design can vary due to factors such as voltage, conductor type and the strength of structure required.

Conductors, which are the 'live' part of the overhead line, hang from pylons on insulators. Conductors come in several different designs depending on the amount of power that is transmitted on the circuit.

In addition to the two main components, some Overhead Line Routes carry a Fibre Optic cable between the towers with an final underground connection to the Substations.

In most cases, National Grid's overhead lines operate at 275kV or 400kV.

Underground cables

Underground cables are a growing feature of National Grid's network. They consist of a conducting core surrounded by layers of insulation and armour. Cables can be laid in the road, across open land or in tunnels. They operate at a range of voltages, up to 400kV.

Substations

Substations are found at points on the network where circuits come together or where a rise or fall in voltage is required. Transmission substations tend to be large facilities containing equipment such as power transformers, circuit breakers, reactors and capacitors. In addition Diesel generators and compressed air systems can be located there.

Part 2

Statutory requirements for working near high-voltage electricity

The legal framework that regulates electrical safety in the UK is *The Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002*. This also details the minimum electrical safety clearances, which are used as a basis for the Energy Networks Association (ENA) TS 43-8. These standards have been agreed by CENELEC (European Committee for Electrotechnical Standardisation) and also form part of the *British Standard BS EN 50341-1:2012 Overhead Electrical Lines exceeding AC 1kV*. All electricity companies are bound by these rules, standards and technical specifications. They are required to uphold them by their operator's licence.

Electrical safety clearances

It is essential that a safe distance is kept between the exposed conductors and people and objects when working near National Grid's electrical assets. A person does not have to touch an exposed conductor to get a life-threatening electric shock. At the voltages National Grid operates at, it is possible for electricity to jump up to several metres from an exposed conductor and kill or cause serious injury to anyone who is nearby. For this reason, there are several legal requirements and safety standards that must be met.

Any breach of legal safety clearances will be enforced in the courts. This can and has resulted in the removal of an infringement, which is normally at the cost of the developer or whoever caused it to be there. Breaching safety clearances, even temporarily, risks a serious incident that could cause serious injury or death.

National Grid will, on request, advise planning authorities, developers or third parties on any safety clearances and associated issues. We can supply detailed drawings of all our overhead line assets marked up with relevant safe areas.

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Your Responsibilities - Overhead lines

Work which takes place near overhead power lines carries a significant risk of coming into proximity with the wires. If any person, object or material gets too close to the wires, electricity could ‘flashover’ and be conducted to earth, causing death or serious injury. You do not need to touch the wires for this to happen. The law requires that work is carried out in close proximity to live overhead power lines only when there is no alternative, and only when the risks are acceptable and can be properly controlled. Statutory clearances exist which must be maintained, as prescribed by the Electricity Safety, Quality and Continuity Regulations 2002.

Under the Health and Safety at Work etc. Act 1974 and Management of Health and Safety at Work Regulations 1999, you are responsible for preparing a suitable and sufficient risk assessment and safe systems of work, to ensure that risks are managed properly and the safety of your workforce and others is maintained. Your risk assessment must consider and manage all of the significant risks and put in place suitable precautions/controls in order to manage the work safely. You are also responsible for ensuring that the precautions identified are properly implemented and stay in place throughout the work.

Work near overhead power lines must always be conducted in accordance with GS6, ‘avoiding danger from overhead power lines’, and any legislation which is relevant to the work you are completing.

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What National Grid will provide

National Grid can supply profile drawings in PDF and CAD format showing tower locations and relevant clearances to assist you in the risk assessment process.

What National Grid will not provide

National Grid will not approve safe systems of work or approve design proposals

Part 3

What National Grid will do for you and your development

Provision of information

National Grid should be notified during the planning stage of any works or developments taking place near our electrical assets, ideally a minimum notification period of 8 weeks to allow National Grid to provide the following services:

Drawings

National Grid will provide relevant drawings of overhead lines or underground cables to make sure the presence and location of our services are known. Once a third party or developer has contacted us, we will supply the drawings for free.

Risk or impact identification

National Grid can help identify any hazards or risks that the presence of our assets might bring to any works or developments. This includes both the risk to safety from high-voltage electricity and longer-term issues, such as induced currents, noise and maintenance access that may affect the outcome of the development. National Grid will not authorise specific working procedures, but we can provide advice on best practice.

400kV

The maximum nominal voltage of the underground cables in National Grid's network

Risks or hazards to be aware of

This section includes a brief description of some of the hazards and issues that a third party or developer might face when working or developing close to our electrical infrastructure.

Land and access

National Grid has land rights in place with landowners and occupiers, which cover our existing overhead lines and underground cable network. These agreements, together with legislation set out under the *Electricity Act 1989*, allow us to access our assets to maintain, repair and renew them. The agreements also lay down restrictions and covenants to protect the integrity of our assets and meet safety regulations. Anyone proposing a development close to our assets should carefully examine these agreements.

Our agreements often affect land both inside and outside the immediate vicinity of an asset. Rights will include the provision of access, along with restrictions that ban the development of land through building, changing levels, planting and other operations. Anyone looking to develop close to our assets must consult with National Grid first.

For further information, contact Asset Protection:

Email: assetprotection@nationalgrid.com
Phone: 0800 001 4282

Electrical clearance from overhead lines

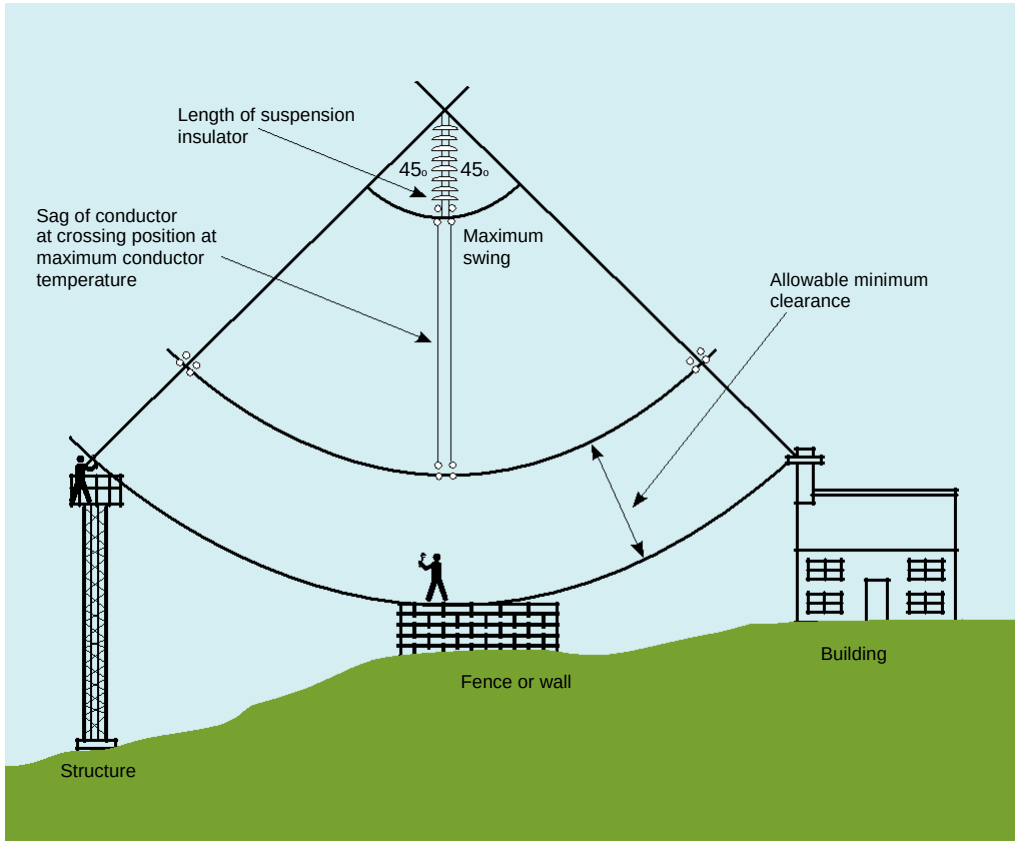
The clearance distances referred to in this section are specific to 400kV overhead lines. National Grid can advise on the distances required around different voltages i.e. 132kV and 275kV.

As we explained earlier, *Electrical Networks Association TS 43-8* details the legal clearances to our overhead lines. The minimum clearance between the conductors of an overhead line and the ground is 7.3m at maximum sag. The sag is the vertical distance between the wire's highest and lowest point. Certain conditions, such as power flow, wind speed and air temperature can cause conductors to move and allowances should be made for this.

The required clearance from the point where a person can stand to the conductors is 5.3m. To be clear, this means there should be at least 5.3m from where someone could stand on any structure (i.e. mobile and construction equipment) to the conductors. Available clearances will be assessed by National Grid on an individual basis.

National Grid expects third parties to implement a safe system of work whenever they are near Overhead Lines.

Diagram not to scale



There should be at least 5.3m between the conductors and any structure someone could stand on

We recommend that guidance such as *HSE Guidance Note GS6 (Avoiding Danger from Overhead Power Lines)* is followed, which provides advice on how to avoid danger from all overhead lines, at all voltages. If you are carrying out work near overhead lines you must contact National Grid, who will provide the relevant profile drawings.

7.3m

The required minimum clearance between the conductors of an overhead line, at maximum sag, and the ground

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The undergrounding of electricity cables at Ross-on-Wye

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Underground cables Underground cables operating at up to 400kV are a significant part of the National Grid Electricity Transmission network. When your works will involve any ground disturbance it is expected that a safe system of work is put in place and that you follow guidance such as *HSG 47 (Avoiding Danger from Underground Services)*.

You must contact National Grid to find out if there are any underground cables near your proposed works. If there are, we will provide cable profiles and location drawings and, if required, on-site supervision of the works. Cables can be laid under roads or across industrial or agricultural land. They can even be layed in canal towpaths and other areas that you would not expect.

Cables crossing any National Grid high-voltage (HV) cables directly buried in the ground are required to maintain a minimum seperation that will be determined by National Grid on a case-by-case basis. National Grid will need to do a rating study on the existing cable to work out if there are any adverse effects on either cable rating. We will only allow a cable to cross such an area once we know the results of the re-rating. As a result, the clearance distance may need to be increased or alternative methods of crossing found.

For other cables and services crossing the path of our HV cables, National Grid will need confirmation that published standards and clearances are met.

Impressed voltage

Any conducting materials installed near high-voltage equipment could be raised to an elevated voltage compared to the local earth, even when there is no direct contact with the high-voltage equipment. These impressed voltages are caused by inductive or capacitive coupling between the high-voltage equipment and nearby conducting materials and can occur at distances of several metres away from the equipment. Impressed voltages may damage your equipment and could potentially injure people and animals, depending on their severity. Third parties should take impressed voltages into account during the early stages and initial design of any development, ensuring that all structures and equipment are adequately earthed at all times.

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Earth potential rise

Under certain system fault conditions – and during lightning storms – a rise in the earth potential from the base of an overhead line tower or substation is possible. This is a rare phenomenon that occurs when large amounts of electricity enter the earth. This can pose a serious hazard to people or equipment that are close by.

We advise that developments and works are not carried out close to our tower bases, particularly during lightning storms.

Noise

Noise is a by-product of National Grid's operations and is carefully assessed during the planning and construction of any of our equipment. Developers should consider the noise emitted from National Grid's sites or overhead lines when planning any developments, particularly housing. Low-frequency hum from substations can, in some circumstances, be heard up to 1km or more from the site, so it is essential that developers find adequate solutions for this in their design. Further information about likely noise levels can be provided by National Grid.

Maintenance access

National Grid needs to have safe access for vehicles around its assets and work that restricts this will not be allowed.
In terms of our overhead lines, we wouldn't want to see any excavations made, or permanent structures built, that might affect the foundations of our towers. The size of the foundations around a tower base depends on the type of tower that is built there. If you wish to carry out works within 30m of the tower base, contact National Grid for more information. Our business has to maintain access routes to tower bases with land owners. For that reason, a route wide enough for an HGV must be permanently available. We may need to access our sites, towers, conductors and underground cables at short notice.

30m

If you wish to carry out work within this distance of the tower base, you must contact National Grid for more information

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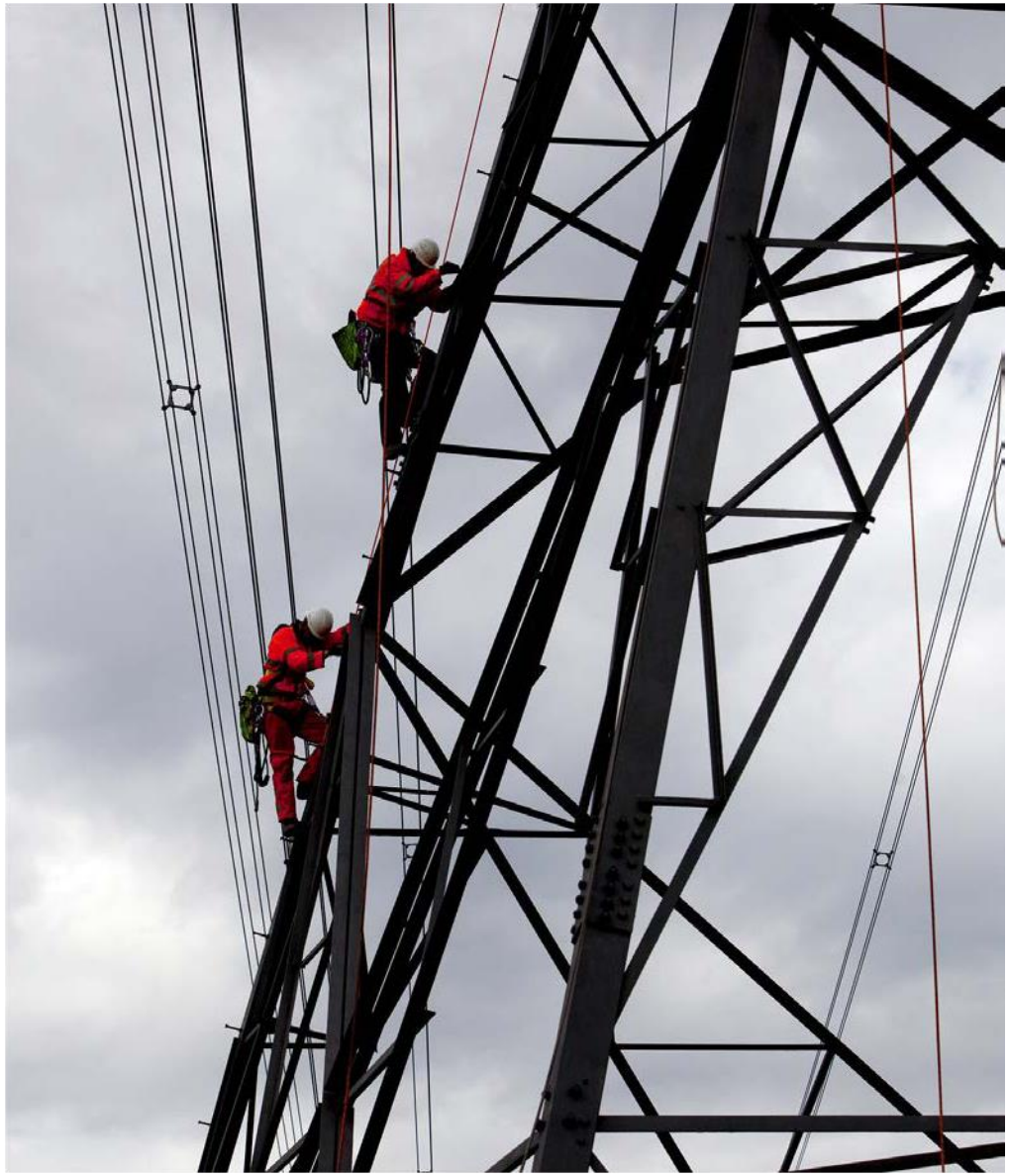

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Fires and firefighting

National Grid does not recommend that any type of flammable material is stored under overhead lines. Developers should be aware that in certain cases the local fire authority will not use water hoses to put out a fire if there are live, high-voltage conductors within 30m of the seat of the fire *(as outlined in ENA TS 43-8)*.

In these situations, National Grid would have to be notified and reconfigure the system – to allow staff to switch out the overhead line – before any firefighting could take place. This could take several hours.

We recommend that any site which has a specific hazard relating to fire or flammable material should include National Grid's emergency contact details (found at the beginning and end of this document) in its fire plan information, so any incidents can be reported.

Developers should also make sure their insurance cover takes into account the challenge of putting out fires near our overhead lines.

Excavations, piling or tunnelling

You must inform National Grid of any works that have the potential to disturb the foundations of our substations or overhead line towers. This will have to be assessed by National Grid engineers before any work begins.

BS ISO 4866:2010 states that a minimum distance of 200m should be maintained when carrying out quarry blasting near our assets. However, this can be reduced with specific site surveys and changes to the maximum instantaneous charge (the amount of explosive detonated at a particular time).

All activities should observe guidance layed out in *BS 5228-2:2009*.

Microshocks

High-voltage overhead power lines produce an electric field. Any person or object inside this field that isn't earthed picks up an electrical charge. When two conducting objects – one that is grounded and one that isn't – touch, the charge can equalise and cause a small shock, known as a microshock. While they are not harmful, they can be disturbing for the person or animal that suffers the shock.

For these reasons, metal-framed and metal-clad buildings which are close to existing overhead lines should be earthed to minimise the risk of microshocks. Anything that isn't earthed, is conductive and sits close to the lines is likely to pick up a charge. Items such as deer fences, metal palisade fencing, chain-link fences and metal gates underneath overhead lines all need to be earthed.

For further information on microshocks please visit **www.emfs.info.**

200m

The minimum distance that should be maintained from National Grid assets when quarry blasting

Specific development guidance

Wind farms

National Grid's policy towards wind farm development is closely connected to the *Electricity Networks Association Engineering Recommendation L44 Separation between Wind Turbines and Overhead Lines, Principles of Good Practice.* The advice is based on national guidelines and global research. It may be adjusted to suit specific local applications.

There are two main criteria in the document:

(i) The turbine shall be far enough away to avoid the possibility of toppling onto the overhead line

(ii) The turbine shall be far enough away to avoid damage to the overhead line from downward wake effects, also known as turbulence

The toppling distance is the minimum horizontal distance between the worst-case pivot point of the wind turbine and the conductors hanging in still air. It is the greater of:

- the tip height of the turbine plus 10%
- or, the tip height of the turbine plus the electrical safety distance that applies to the voltage of the overhead line.

To minimise the downward wake effect on an overhead line, the wind turbine should be three times the rotor distance away from the centre of the overhead line.

Wake effects can prematurely age conductors and fittings, significantly reducing the life of the asset. For that reason, careful consideration should be taken if a wind turbine needs to be sited within the above limits. Agreement from National Grid will be required.

Commercial and housing developments

National Grid has developed a document called *Design guidelines for development near pylons and HVO power lines*, which gives advice to anyone involved in planning or designing large-scale developments that are crossed by, or close to, overhead lines.

The document focuses on existing 275kV and 400kV overhead lines on steel lattice towers, but can equally apply to 132kV and below. The document explains how to design large-scale developments close to high-voltage lines, while respecting clearances and the development's visual and environmental impact.

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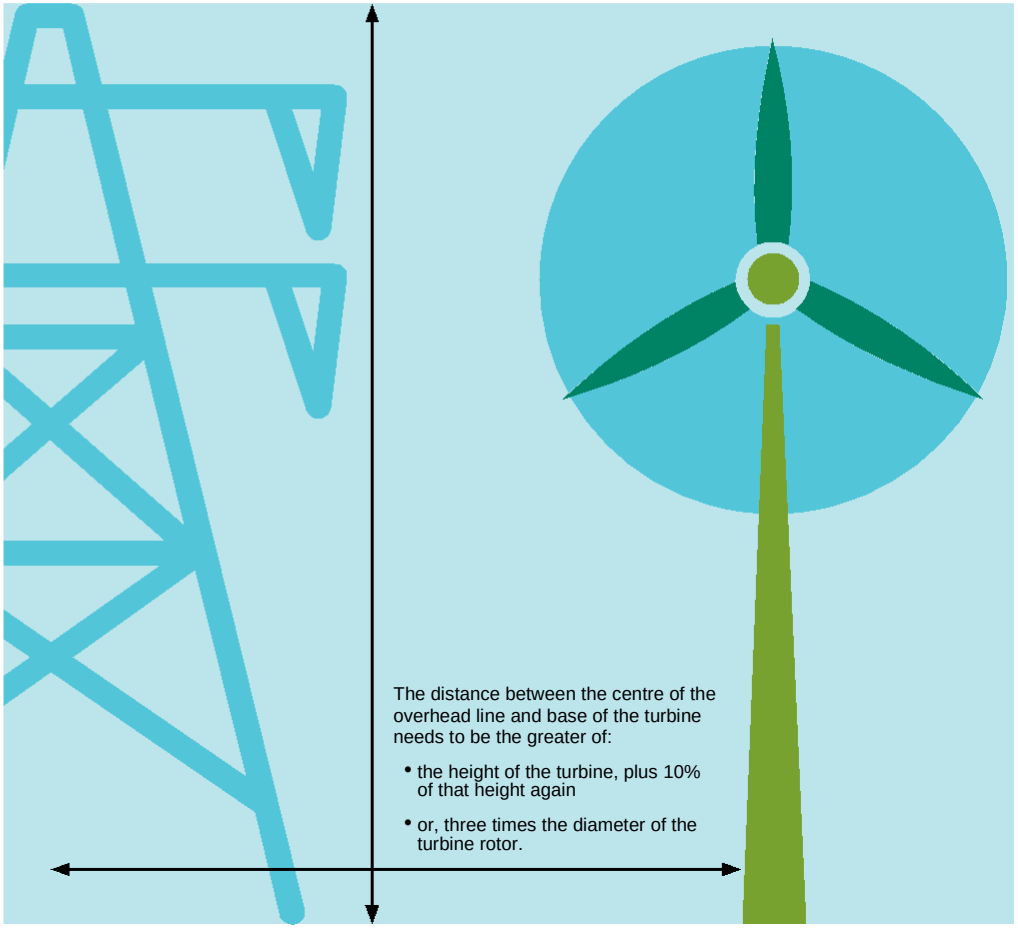
Diagram not to scale



Turbines should be far enough away to avoid the possibility of toppling onto the overhead line

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The advice is intended for developers, designers, landowners, local authorities and communities, but is not limited to those organisations.

Overall, developers should be aware of all the hazards and issues relating to the electrical equipment that we have discussed when designing new housing.

As we explored earlier, National Grid's assets have the potential to create noise. This can be low frequency and tonal, which makes it quite noticeable. It is the responsibility of developers to take this into account during the design stage and find an appropriate solution.

Solar farms

While there is limited research and recommendations available, there are several key factors to consider when designing Solar Farms in the vicinity of Overhead Power Lines.

Developers may be looking to build on arable land close to National Grid's assets. In keeping with the safety clearance limits that we outlined earlier for solar panels directly underneath overhead line conductors, the highest point on the solar panels must be no more than 5.3m from the lowest conductors.

This means that the maximum height of any structure will need to be determined to make sure safety clearance limits aren't breached. This could be as low as 2m. National Grid will supply profile drawings to aid the planning of solar farms and determine the maximum height of panels and equipment.

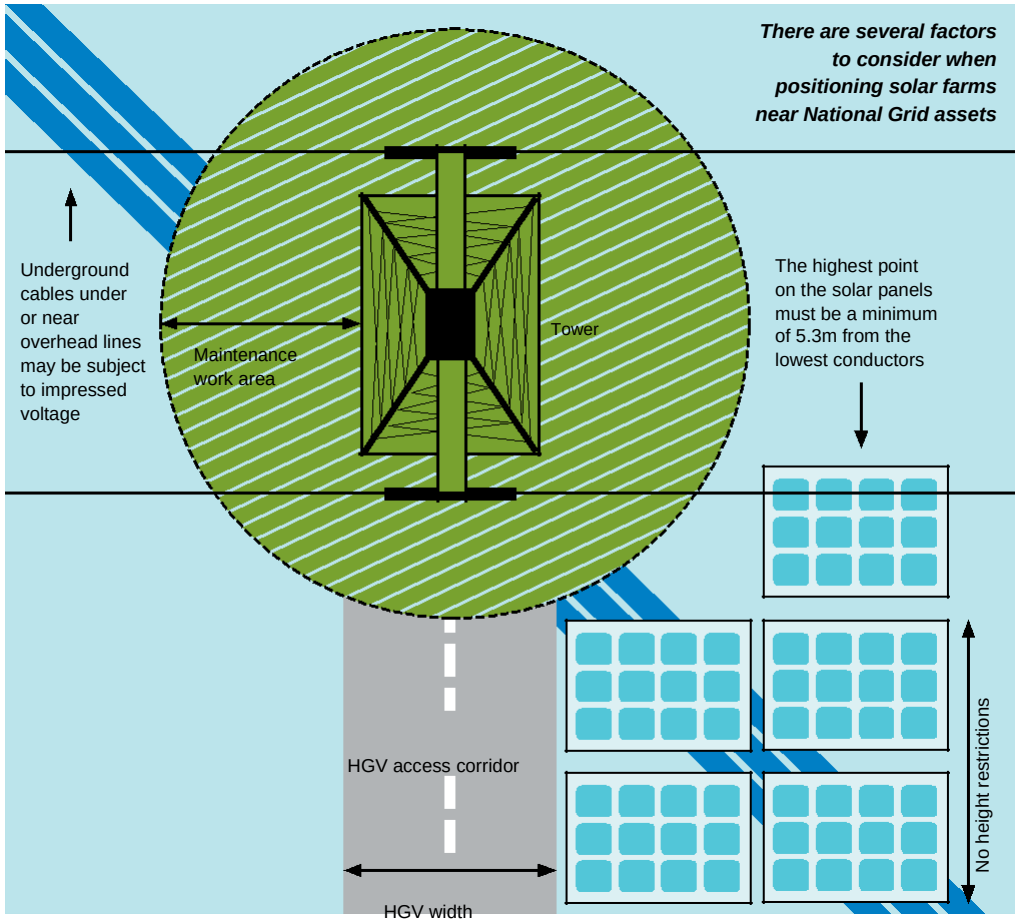
Solar panels that are directly underneath power lines risk being damaged on the rare occasion that a conductor or fitting falls to the ground. A more likely risk is ice falling from conductors or towers in winter and damaging solar panels.

There is also a risk of damage during adverse weather conditions, such as lightning storms, and system faults. As all our towers are earthed, a weather event such as lightning can cause a rise in the earth potential around the base of a tower. Solar panel support structures and supply cables should be adequately earthed and bonded together to minimise the effects of this temporary rise in earth potential.

Any metallic fencing that is located under an overhead line will pick up an electrical charge. For this reason, it will need to be adequately earthed to minimise microshocks to the public.

For normal, routine maintenance and in an emergency National Grid requires unrestricted access to its assets. So if a tower is enclosed in a solar farm compound, we will need full access for our vehicles, including access through any compound gates. During maintenance – and especially re-conductoring – National Grid would need enough space near our towers for winches and cable drums. If enough space is not available, we would require solar panels to be temporarily removed.

Diagram not to scale



Asset protection agreements

In some cases, where there is a risk that development will impact on National Grid's assets, we will insist on an asset protection agreement being put in place. The cost of this will be the responsibility of the developer or third party.

Contact details

Emergency situations

If you spot a potential hazard on or near an overhead electricity line, do not approach it, even at ground level. Keep as far away as possible and follow the six steps below:

- Warn anyone close by to evacuate the area
- Call our 24-hour electricity emergency number: 0800 404 090 (Option 1)[1]
- Give your name and contact phone number
- Explain the nature of the issue or hazard
- Give as much information as possible so we can identify the location – i.e. the name of the town or village, numbers of nearby roads, postcode and (ONLY if it can be observed without putting you or others in danger) the tower number of an adjacent pylon
- Await further contact from a National Grid engineer

[1] It is critically important that you don't use this phone number for any other purpose. If you need to contact National Grid for another reason please use our Contact Centre at www2.nationalgrid.com/contact-us to find the appropriate information or call 0800 0014282.

Routine enquiries

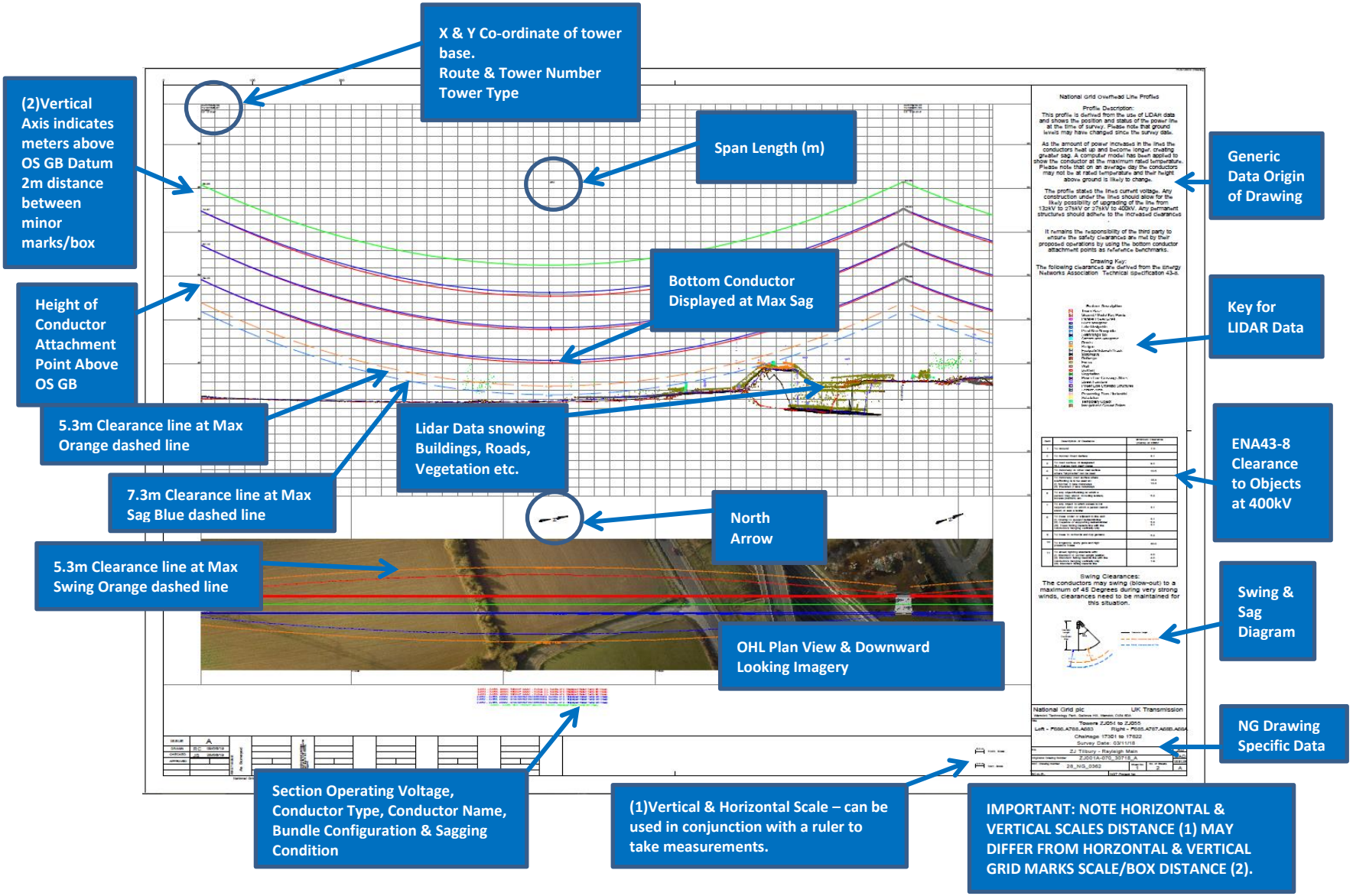
Email:
assetprotection@nationalgrid.com

Call Asset Protection on:
0800 0014282

Opening hours:
Monday to Friday 08:00-16:00

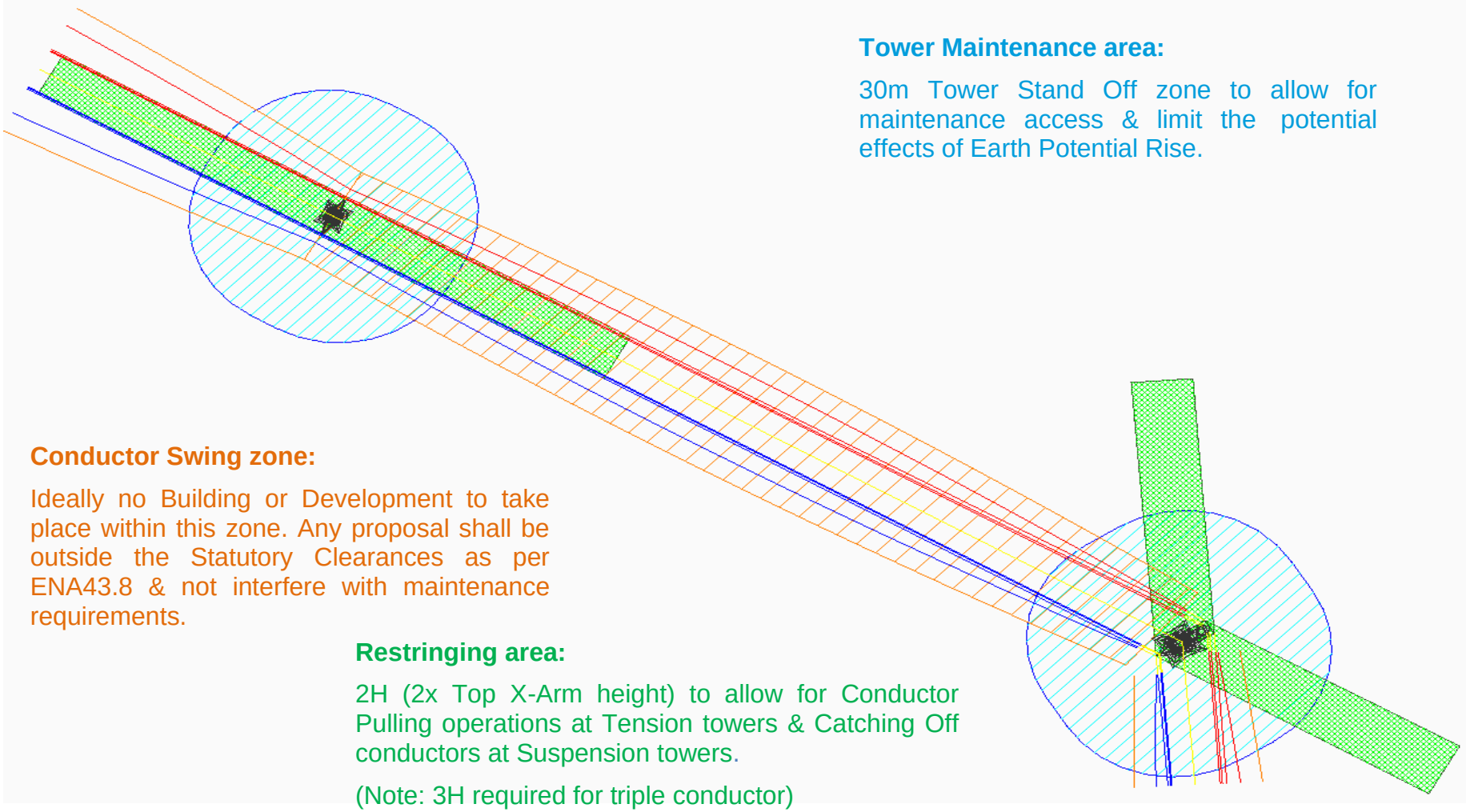
14 APPENDIX A

OHL Profile Drawing Guide



15 APPENDIX B

OHL Tower Stand Off & Reconductoring Area



Tower Maintenance area:

30m Tower Stand Off zone to allow for maintenance access & limit the potential effects of Earth Potential Rise.

Conductor Swing zone:

Ideally no Building or Development to take place within this zone. Any proposal shall be outside the Statutory Clearances as per ENA43.8 & not interfere with maintenance requirements.

Restringing area:

2H (2x Top X-Arm height) to allow for Conductor Pulling operations at Tension towers & Catching Off conductors at Suspension towers.

(Note: 3H required for triple conductor)

From: [redacted]
To: Southeast Strategic Reservoir Option
Cc: [redacted]
Subject: NH/24/07711 WA010005 South East Strategic Reservoir Option (SESRO) - The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11 (scoping)
Date: 24 September 2024 14:41:33

You don't often get email from [redacted] Learn why this is important

Dear Sir/Madam

Thank you for consulting National Highways on the proposed application for a Development Consent Order for the South East Strategic Reservoir Option (SESRO), the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11 scoping consultation.

National Highways has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and as such National Highways works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity. In the case of this development proposal, our interest is in the safe and efficient operation of the M40 and A34.

We have reviewed the available consultation documentation and offer the following comments:

We have been engaged with the applicant to scope out what needs to be considered as proposals for SESRO are developed. Due to the size, scale and proximity of proposals to the A34, early engagement with National Highways is essential to understand assessments required to demonstrate that proposals are deliverable. Of particular importance are the following (but not limited to):

- Geotechnical risks assessments in accordance with CD622 to understand geotechnical risks to the SRN and its assets
- Designs in accordance with Design Manual for Roads and Bridges (DMRB) for potential realignment of the A34
- Designs and assessments to understand and demonstrate deliverability of any crossings (over and under) any part of the SRN. We would strongly advise that geotechnical risk assessments in accordance with CD622 are carried out to inform options/locations for routing of the pipeline/tunnelling where it could pass under any part of the SRN. Further it is likely that geotechnical certification from National Highways will be required to facilitate this therefore we recommend early engagement with our geotechnical specialists.
- Designs and assessments of any SRN related drainage proposals
- Risk assessments in accordance with CD622 to demonstrate how risks to

the SRN can be managed from any proposed environmental bunds facing the SRN
- Agree preliminary design of access into the site. It is anticipated construction vehicles would enter and exit the SESRO site via the proposed main site entrance situated on the A415 (Marcham Road). Construction traffic would be routed from the A34 Marcham Interchange.
- Potential micro-climate assessments be undertaken to provide sufficient evidence of whether fog or ice may represent a material risk to safety on the A34

We would welcome further engagement on the use of this site to enable us to understand the potential risks to the safe and efficient operation of the A34 and its users. Consideration will need to be given to the potential impacts to SRN assets such as landscaping and drainage. We would anticipate the development of construction methodology statements for proposals at this site adjacent to the A34.

Construction Traffic

The majority of construction traffic movements will impact the SRN at some point, therefore it is essential that a cumulative assessment of the impacts from construction traffic is undertaken by the applicant at junctions along the A34 as well as junctions on the M40 and M4. We look forward to working with the applicant and Oxfordshire County Council to develop and consider option of managing construction traffic to minimise impacts during peak periods on both the local and strategic road networks.

Outline Construction Environmental Management Plan

We welcome the development of a Construction Environmental Management Plan (CEMP) to support the proposals. We would expect the following to be considered/included in the development of the CEMP in particular in relation to the SESRO site:

- The proposed construction traffic routes to the site, to be identified on a plan;
- Construction Traffic Management (to include the co-ordination of deliveries and plant and materials and the disposing of waste resulting from demolition and/or construction so as to avoid undue interference with the operation of the public highway, particularly during the Monday-Friday AM Peak (0730-0900) and PM Peak (1630-1800) periods);
- an estimate of the daily movement of the construction traffic, profiled for each construction phase, identifying the peak level of vehicle movements for each day;
- details of, and agreement to, any traffic management proposals on the SRN;
- the hours of construction work and deliveries;
- area(s) for the parking of vehicles of site operatives and visitors;
- area(s) for the loading and unloading of plant and materials;
- area(s) for the storage of plant and materials used in constructing the development;

- details of wheel washing facilities;
- the mitigation measures in respect of noise and disturbance during the construction phase including vibration and noise limits, monitoring methodology, screening, a detailed specification of plant and equipment to be used and construction traffic routes;
- a scheme to minimise dust emissions arising from construction activities on the site. The scheme shall include details of all dust suppression measures and the methods to monitor emissions of dust arising from the development;
- details of waste management arrangements;
- the storage of materials and construction waste, including waste recycling where possible;
- the storage and dispensing of fuels, chemicals, oils and any hazardous materials (including hazardous soils);
- the proposed maintenance and aftercare of the site;
- measures to avoid impacts on the non-statutory designated sites and retained habitats;
- details of drainage arrangements during the construction phase identifying how surface water run-off will be dealt with so as not to increase the risk of flooding to downstream areas as a result of the construction programme;
- protection measures for hedgerows and grasslands;
- Risk Assessments and Method Statements for the works;
- contact details of personnel responsible for the construction works; and
- soil movement, methods of tracking soil movement and details for demonstrating soil will be suitable for use.

We welcome continued engagement with the applicant as proposals are developed for the SESRO Project. With reference to our work with the applicant on this scheme, as you may already be aware, National Highways was granted new powers to recover costs incurred in responding to third party DCOs, effective from 1 April 2024. This is further to amendments to Section 54A of the Planning Act 2008 and regulation 12A of The Infrastructure Planning (Fees) Regulations 2010, brought in under the Levelling up and Regeneration Act 2023. The regulations and supporting guidance are published on the DLUHC website and further information on how we will apply these powers can be found on the National Highways website: https://nationalhighways.co.uk/our-roads/planning-and-the-strategic-road-network-in-england/

We will contact the applicant in due course to discuss the scope of services and next steps, including an estimate and a date for when we intend to begin recovering costs for our work on the SESRO Project.

I hope this is helpful.

Kind Regards

[redacted], **Area 3 Spatial Planner**
National Highways | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ

[redacted]
Web: http://www.highways.gov.uk
GTN: 0300 470 1043

National Highways Limited | General enquiries: 0300 123 5000 |National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park, Birmingham B32 1AF | https://nationalhighways.co.uk | info@nationalhighways.co.uk

Registered in England and Wales no 9346363 | Registered Office: Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ

Dear Sirs,

NATS operates no infrastructure within 10km of the proposal's site. Accordingly, it anticipates no impact from the development and has no comments to make on the Application.

Regards

[redacted]

NATS Safeguarding Office

NATS

[redacted]i

ATC Systems Safeguarding Engineer

D: [redacted]

E: [redacted]

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

Date: 25 September 2024
Our ref: 486620
Your ref: WA010005

sesro@planninginspectorate.gov.uk
BY EMAIL ONLY

Consultations
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ
T 0300 060 900

Dear Planning Inspectorate,

Environmental Impact Assessment Scoping consultation (Regulation 15 (4) of the Town and Country Planning EIA Regulations 2017): Application by Thames Water Utilities Limited (the Applicant) for an Order granting Development Consent for the South East Strategic Reservoir Option (SESRO) (the Proposed Development)

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in the consultation dated 28 August 2024**.**

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

A robust assessment of environmental impacts and opportunities based on relevant and up to date environmental information should be undertaken prior to a decision on whether to grant planning permission. We provide detailed advice relating to impacts on Landscape below, and Annex A to this letter provides Natural England's further advice on the scope of the Environmental Impact Assessment (EIA) for the proposed development.

Landscape

Nationally Designated Landscapes

The development may impact on the North Wessex Downs National Landscape (Area of Outstanding Natural Beauty). The NPPF (paragraph 182) provides the highest level of planning protection for these nationally designated landscapes. The National Policy Statement for Water Resources, April 2023 provides ;planning guidance for applicants of nationally important infrastructure projects for water resources, and will be used by the Examining Authority during the examination and Secretary of State in their decision-making.

Public bodies have a duty to seek to further the statutory purposes of designation in carrying out their functions (under section 245 of the Levelling Up and Regeneration Act 2023). This duty also applies to proposals outside the designated area but impacting on its natural beauty.

Consideration should be given to the direct and indirect effects on this designated landscape and in particular the effect upon its purpose for designation. The management plan for the designated landscape may also have relevant information that should be considered in the EIA.

Landscape and visual impacts

The environmental assessment should refer to the relevant National Character Area profiles (NCAs). NCA profiles set out descriptions of each landscape area, including analysis of the

landscape attributes and opportunities, landscape change, and statements of environmental opportunity. The detail contained in the NCA profiles is of particular relevance to SESRO given the scale of the landscape change that would result if it were implemented.

The ES should include a full assessment of the potential impacts of the development on local landscape character, including the North Wessex Downs Landscape Character Assessment. We encourage the use of Landscape Character Assessment (LCA) and the use of the Natural England guidance on the methodology for character assessment (Landscape character assessments: identify and describe landscape types - GOV.UK (www.gov.uk)). LCA provides a sound basis for guiding, informing, and understanding the ability of any location to accommodate change. A project level LCA, drawing from the published character assessments, but specific to the site and its wider landscape, is an essential part of the design process to make positive proposals for conserving, enhancing or regenerating character of the site within its wider landscape. The scope of the project level LCA should encompass the landscape likely to be influenced by the development, and be of sufficient scale to consider the site and the wider landscape.

A landscape and visual impact assessment (LVIA) should be carried out for the proposed development and surrounding area. Natural England recommends use of the methodology set out in *Guidelines for Landscape and Visual Impact Assessment (GLVIA) 2013 (*(3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management. We advise that the assessment also includes a separate section on the effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status.

The assessment should include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage. This assessment should be made in alignment with the GLVIA.

To ensure high quality development that responds to local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials drawing on the relevant published and project level LCAs for information. Account should also be taken of local design policies, design codes and guides, including the North Wessex Downs National Landscape guidance and resources. The National Design Guide and National Model Design Codes, and the NIC Project Level Design Principles and the All Company Working Group's Water Resources: Design Principles & User Guidance should also be consulted. The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a justification of the selected option in terms of landscape impact and benefit.

Further guidance is set out in Planning Practice Guidance on environmental assessment, natural environment and climate change. Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again. Please note that Natural England must be consulted on Environmental Statements.

Please send any new consultations or further information on this consultation to consultations@naturalengland.org.uk.

Yours faithfully

[redacted]
Senior Officer
Thames Solent Area Team

Annex A – Natural England Advice on EIA Scoping

General Principles

Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, sets out the information that should be included in an Environmental Statement (ES) to assess impacts on the natural environment. This includes:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation etc.) resulting from the operation of the proposed development
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen
- A description of the aspects of the environment likely to be significantly affected by the development including biodiversity (for example fauna and flora), land, including land take, soil, water, air, climate (for example greenhouse gas emissions, impacts relevant to adaptation, cultural heritage and landscape and the interrelationship between the above factors
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium, and long term, permanent and temporary, positive, and negative effects. Effects should relate to the existence of the development, the use of natural resources (in particular land, soil, water and biodiversity) and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment
- A non-technical summary of the information
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information

Further guidance is set out in Planning Practice Guidance on environmental assessment and natural environment.

Cumulative and in-combination effects

The ES should fully consider the implications of the whole development proposal. This should include an assessment of all supporting infrastructure.

An impact assessment should identify, describe, and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment (subject to available information):

a. existing completed projects;
b. approved but uncompleted projects;
c. ongoing activities;
d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Environmental data

Natural England is required to make available information it holds where requested to do so. National datasets held by Natural England are available at http://www.naturalengland.org.uk/publications/data/default.aspx.

Detailed information on the natural environment is available at www.magic.gov.uk.

Natural England's SSSI Impact Risk Zones are a GIS dataset which can be used to help identify the potential for the development to impact on a SSSI. The dataset and user guidance can be accessed from the Natural England Open Data Geoportal.

Natural England does not hold local information on local sites, local landscape character, priority habitats and species or protected species. Local environmental data should be obtained from the appropriate local bodies. This may include the local environmental records centre, the local wildlife trust, local geo-conservation group or other recording society.

Biodiversity and Geodiversity

General principles

The National Planning Policy Framework (paragraphs180-181 and 185-188) sets out how to take account of biodiversity and geodiversity interests in planning decisions. Further guidance is set out in Planning Practice Guidance on the natural environment.

The potential impact of the proposal upon sites and features of nature conservation interest and opportunities for nature recovery and biodiversity net gain should be included in the assessment.

Ecological Impact Assessment (EcIA) is the process of identifying, quantifying, and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal. Guidelines have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM).

Local planning authorities have a duty to conserve and enhance biodiversity as part of their decision making. Conserving biodiversity can include habitat restoration or enhancement. Further information is available here.

International and European sites

The development site is within or may impact on the following **European/internationally designated nature conservation site(s):**

- Cothill Fen SAC

European site conservation objectives are available at http://publications.naturalengland.org.uk/category/6490068894089216

The ES should thoroughly assess the potential for the proposal to affect nationally and internationally designated sites of nature conservation importance, including marine sites where relevant. European sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'). In addition paragraph 187 of the National Planning Policy Framework (NPPF) requires that potential SPAs, possible SAC, listed or proposed Ramsar sites, and any site identified or required as compensatory measures for adverse effects on habitat (European) sites, potential SPAs, possible SACs and listed or proposed Ramsar sites have the same protection as classified sites (NB. sites falling within the scope of regulation 8 of the Conservation of Habitats and Species Regulations 2017 are defined as 'habitats sites' in the NPPF). Under Regulation 63 of the Habitats

Regulations, an appropriate assessment must be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site. The consideration of likely significant effects should include any functionally linked land outside the designated site. These areas may provide important habitat for mobile species populations that are qualifying features of the site, for example birds and bats. This can also include areas which have a critical function to a habitat feature within a designated site, for example by being linked hydrologically or geomorphologically.

Should a likely significant effect on a European/Internationally designated site be identified (either alone or in-combination) or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an appropriate assessment in addition to the consideration of impacts through the EIA process. Further guidance is set out in Planning Practice Guidance on appropriate assessment
https://www.gov.uk/guidance/appropriate-assessment

This should also take into account any agreed strategic mitigation solution that may be being developed or implemented in the area to address recreational disturbance, nutrients, or other impacts.

Nationally designated sites
The development site is within or may impact on the following **Site of Special Scientific Interest:**

- Cothill Fen SSSI
- Frilford Heath, Ponds and Fens SSSI
- Barrow Farm Fen SSSI
- Dry Sandford Pit SSSI

Sites of Special Scientific Interest are protected under the Wildlife and Countryside Act 1981 and paragraph 186 of the NPPF. Further information on the SSSI and its special interest features can be found at www.magic.gov .

Natural England's SSSI Impact Risk Zones can be used to help identify the potential for the development to impact on a SSSI. The dataset and user guidance can be accessed from the Natural England Open Data Geoportal.

The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within the SSSI and identify appropriate mitigation measures to avoid, minimise or reduce any adverse significant effects. The consideration of likely significant effects should include any functionally linked land outside the designated site. These areas may provide important habitat for mobile species populations that are interest features of the SSSI, for example birds and bats. This can also include areas which have a critical function to a habitat feature within a site, for example by being linked hydrologically or geomorphologically.

Regionally and Locally Important Sites

The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. Local Sites are identified by the local wildlife trust, geoconservation group or other local group and protected under the NPPF (paragraph 180 and 181). The ES should set out proposals for mitigation of any impacts and if appropriate, compensation measures and opportunities for enhancement and improving connectivity with wider ecological networks. Contact the relevant local body for further information.

Protected Species

The conservation of species protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017

is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*.

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law. Records of protected species should be obtained from appropriate local biological record centres, nature conservation organisations and local groups. Consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area.

The area likely to be affected by the development should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and, where necessary, licensed, consultants.

Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures . A separate protected species licence from Natural England or Defra may also be required.

District Level Licensing for Great Crested Newts

District level licensing (DLL) is a type of strategic mitigation licence for great crested newts (GCN) granted in certain areas at a local authority or wider scale. A DLL scheme for GCN may be in place at the location of the development site. If a DLL scheme is in place, developers can make a financial contribution to strategic, off-site habitat compensation instead of applying for a separate licence or carrying out individual detailed surveys. By demonstrating that DLL will be used, impacts on GCN can be scoped out of detailed assessment in the Environmental Statement.

Priority Habitats and Species

Priority Habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. Lists of priority habitats and species can be found here. Natural England does not routinely hold species data. Such data should be collected when impacts on priority habitats or species are considered likely.

Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. Sites can be checked against the (draft) national Open Mosaic Habitat (OMH) inventory published by Natural England and freely available to download. Further information is also available here.

An appropriate level habitat survey should be carried out on the site, to identify any important habitats present. In addition, ornithological, botanical, and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present.

The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys)
- Additional surveys carried out as part of this proposal
- The habitats and species present
- The status of these habitats and species (e.g. whether priority species or habitat)
- The direct and indirect effects of the development upon those habitats and species
- Full details of any mitigation or compensation measures
- Opportunities for biodiversity net gain or other environmental enhancement

Ancient Woodland, ancient and veteran trees

Ancient woodland is an irreplaceable habitat of great importance for its wildlife, its history, and the contribution it makes to our diverse landscapes. Paragraph 186 of the NPPF sets out the highest level of protection for irreplaceable habitats and development should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland. The wood pasture and parkland inventory sets out information on wood pasture and parkland.

The ancient tree inventory provides information on the location of ancient and veteran trees.

Natural England and the Forestry Commission have prepared standing advice on ancient woodland, ancient and veteran trees.

The ES should assess the impacts of the proposal on any ancient woodland and any ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement.

The ES should assess the impacts of the proposal on any ancient woodland, ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement.

Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland. The wood pasture and parkland inventory sets out information on wood pasture and parkland.

The ancient tree inventory provides information on the location of ancient and veteran trees.

Natural England and the Forestry Commission have prepared standing advice on ancient woodland, ancient and veteran trees.

Biodiversity net gain

Paragraph 180 of the NPPF states that decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Biodiversity Net Gain is additional to statutory requirements relating to designated nature conservation sites and protected species.

Proposals for mandatory biodiversity net gain should be in line with the Environment Act 2021 and supporting regulations. Further information on biodiversity net gain, including draft Planning Practice Guidance, can be found here.

The statutory biodiversity metric, together with ecological advice, should be used to calculate the change in biodiversity resulting from proposed development and demonstrate how proposals can achieve a net gain.
The metric should be used to:
• assess or audit the biodiversity unit value of land within the application area
• calculate the losses and gains in biodiversity unit value resulting from proposed development
• demonstrate that the required percentage biodiversity net gain will be achieved

Biodiversity Net Gain outcomes can be achieved on site, off-site or through a combination of both.

On-site provision should be considered first. Delivery should create or enhance habitats of equal or higher value. When delivering net gain, opportunities should be sought to link delivery to relevant plans or strategies e.g. Green Infrastructure Strategies or Local Nature Recovery Strategies.

Opportunities for wider environmental gains should also be considered.

Heritage Landscapes

The ES should include an assessment of the impacts on any land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific, or historic interest. An up-to-date list is available at www.hmrc.gov.uk/heritage/lbsearch.htm.

Connecting People with nature

The ES should consider potential impacts on access land, common land, public rights of way and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 104. It should assess the scope to mitigate for any adverse impacts. Rights of Way Improvement Plans (ROWIP) can be used to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

Measures to help people to better access the countryside for quiet enjoyment and opportunities to connect with nature should be considered. Such measures could include reinstating existing footpaths or the creation of new footpaths, cycleways, and bridleways. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Access to nature within the development site should also be considered, including the role that natural links have in connecting habitats and providing potential pathways for movements of species.

Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

Soils and Agricultural Land Quality

Soils are a valuable, finite natural resource and should also be considered for the ecosystem services they provide, including for food production, water storage and flood mitigation, as a carbon store, reservoir of biodiversity and buffer against pollution. It is therefore important that the soil resources are protected and sustainably managed. Impacts from the development on soils and best and most versatile (BMV) agricultural land should be considered in line with paragraphs 180 and 181 of the NPPF. Further guidance is set out in the Natural England Guide to assessing development proposals on agricultural land.

As set out in paragraph 217 of the NPPF, new sites or extensions to sites for peat extraction should not be granted planning permission.

The following issues should be considered and, where appropriate, included as part of the Environmental Statement (ES):

- The degree to which soils would be disturbed or damaged as part of the development
- The extent to which agricultural land would be disturbed or lost as part of this development, including whether any best and most versatile (BMV) agricultural land would be impacted.

This may require a detailed Agricultural Land Classification (ALC) survey if one is not already available. For information on the availability of existing ALC information see www.magic.gov.uk.

- Where an ALC and soil survey of the land is required, this should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. The survey data can inform suitable soil handling methods and appropriate reuse of the soil resource where required (e.g. agricultural reinstatement, habitat creation, landscaping, allotments and public open space).

- The ES should set out details of how any adverse impacts on BMV agricultural land can be minimised through site design/masterplan.

- The ES should set out details of how any adverse impacts on soils can be avoided or minimised and demonstrate how soils will be sustainably used and managed, including consideration in site design and master planning, and areas for green infrastructure or biodiversity net gain. The aim will be to minimise soil handling and maximise the sustainable use and management of the available soil to achieve successful after-uses and minimise off-site impacts.

Further information is available in the Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites and the British Society of Soil Science Guidance Note Benefitting from Soil Management in Development and Construction.

Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue. For example, approximately 85% of protected nature conservation sites are currently in exceedance of nitrogen levels where harm is expected (critical load) and approximately 87% of sites exceed the level of ammonia where harm is expected for lower plants (critical level of 1µg) [1].A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The Government's Clean Air Strategy also has a number of targets to reduce emissions including to reduce damaging deposition of reactive forms of nitrogen by 17% over England's protected priority sensitive habitats by 2030, to reduce emissions of ammonia against the 2005 baseline by 16% by 2030 and to reduce emissions of NOx and SO_2 against a 2005 baseline of 73% and 88% respectively by 2030. Shared Nitrogen Action Plans (SNAPs) have also been identified as a tool to reduce environmental damage from air pollution.

The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly, or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The ES should take account of the risks of air pollution and how these can be managed or reduced. This should include taking account of any strategic solutions or SNAPs, which may be being developed or implemented to mitigate the impacts on air quality. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk).

Information on air pollution modelling, screening and assessment can be found on the following websites:

- SCAIL Combustion and SCAIL Agriculture - http://www.scail.ceh.ac.uk/
- Ammonia assessment for agricultural development https://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit
- Environment Agency Screening Tool for industrial emissions https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit
- Defra Local Air Quality Management Area Tool (Industrial Emission Screening Tool) – England http://www.airqualityengland.co.uk/laqm

[1] Report: Trends Report 2020: Trends in critical load and critical level exceedances in the UK - Defra, UK

Water Quality

The planning system plays a key role in determining the location of developments which may give rise to water pollution, and hence planning decisions can have a significant impact on water quality, and land. The assessment should take account of the risks of water pollution and how these can be managed or reduced. A number of water dependent protected nature conservation sites have been identified as failing condition due to elevated nutrient levels and nutrient neutrality is consequently required to enable development to proceed without causing further damage to these sites. The ES needs to take account of any strategic solutions for nutrient neutrality or Diffuse Water Pollution Plans, which may be being developed or implemented to mitigate and address the impacts of elevated nutrient levels. Further information can be obtained from the Local Planning Authority.

Climate Change

The ES should identify how the development affects the ability of the natural environment (including habitats, species, and natural processes) to adapt to climate change, including its ability to provide adaptation for people. This should include impacts on the vulnerability or resilience of a natural feature (i.e. what's already there and affected) as well as impacts on how the environment can accommodate change for both nature and people, for example whether the development affects species ability to move and adapt. Nature-based solutions, such as providing green infrastructure on-site and in the surrounding area (e.g. to adapt to flooding, drought and heatwave events), habitat creation and peatland restoration, should be considered. The ES should set out the measures that will be adopted to address impacts.

Further information is available from the Committee on Climate Change's (CCC) Independent Assessment of UK Climate Risk, the National Adaptation Programme (NAP), the Climate Change Impacts Report Cards (biodiversity, infrastructure, water etc.) and the UKCP18 climate projections.

The Natural England and RSPB Climate Change Adaptation Manual (2020) provides extensive information on climate change impacts and adaptation for the natural environment and adaptation focussed nature-based solutions for people. It includes the Landscape Scale Climate Change Assessment Method that can help assess impacts and vulnerabilities on natural environment features and identify adaptation actions. Natural England's Nature Networks Evidence Handbook (2020) also provides extensive information on planning and delivering nature networks for people and biodiversity.

The ES should also identify how the development impacts the natural environment's ability to store and sequester greenhouse gases, in relation to climate change mitigation and the natural environment's contribution to achieving net zero by 2050. Natural England's Carbon Storage and Sequestration by Habitat report (2021) and the British Ecological Society's nature-based solutions report (2021) provide further information.

Contribution to local environmental initiatives and priorities

The ES should consider the contribution the development could make to relevant local environmental initiatives and priorities to enhance the environmental quality of the development and deliver wider environmental gains. This should include considering proposals set out in relevant local strategies or supplementary planning documents including landscape strategies, green infrastructure strategies, tree and woodland strategies, biodiversity strategies or biodiversity opportunity areas.

From: [redacted]
To: [redacted] Southeast Strategic Reservoir Option
Subject: Re: WA010005 – South East Strategic Reservoir Option (SESRO) – EIA Scoping and Consultation and Regulation 11 Notification
Date: 23 September 2024 13:55:26
Attachments: Outlook-opurmvk1.png
Outlook-3i014qxd.png
Outlook-Logo, comp.png
Outlook-Icon Desc.png
Outlook-Icon Desc.png
Outlook-mmo3evev.png
Outlook-koukpdqn.png
Outlook-Twitter_bi.png

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OFFICIAL

Dear Sir/Madam,

FAO – Planning Inspectorate
Ref – WA010005
Proposal – South East Strategic Reservoir Option (SESRO) DCO
Locations – Abingdon-on-Thames and Oxford Fringe Sub-Area

Thank you for your letter dated 28/08/2024 providing Network Rail with an opportunity to comment on the abovementioned Scoping Opinion.

In reference to the protection of the railway, the Environmental Statement (ES) should consider any impact of the scheme upon the railway infrastructure and operational railway safety. In particular, if deemed relevant for operational railway safety, the ES should include a Glint and Glare Study assessing the impact of the scheme upon train drivers (including, distraction from glare and potential for conflict with railway signals). We note that this is referenced in the scoping document. The ES should also include a Transport Assessment to identify any HGV traffic/haulage routes associated with the construction and operation of the developer's site that may utilise railway assets, such as bridges and level crossings, during the construction and operation phases of the development.

Please note that if the intention is to install cabling under, through or above railway land, the developer will need an easement from Network Rail, and in turn, we would recommend that the developer engages with us early in the planning of their scheme to discuss and agree this particular element of the proposal.

Regards,

[redacted]

Surveyor – Property Services
Land & Property (Eastern)
M: [redacted]
W: www.networkrail.co.uk/property
E: [redacted]
Follow us on Twitter: @NetworkRail

Diversity and Inclusion Champion
Property Digital Ninja

Without Prejudice and Subject to Contract

From: [redacted] <[redacted]>
Sent: Wednesday, August 28, 2024 17:11
To: DCO/CPO <DCO_CPO@networkrail.co.uk>
Cc: [redacted]>
Subject: WA010005 – South East Strategic Reservoir Option (SESRO) – EIA Scoping and Consultation and Regulation 11 Notification

Some people who received this message don't often get email from [redacted]. Learn why this is important

Dear Sir/Madam,

Please see attached correspondence on the proposed South East Strategic Reservoir Option (SESRO).

The Applicant for the Proposed Development intends to make an application for Development Consent under the Planning Act 2008. The Applicant has sought a Scoping Opinion from the Planning Inspectorate, on behalf of the Secretary of State, as to the scope and level of detail of the information to be provided within the Environmental Statement that will accompany its future application.

The Planning Inspectorate has identified you as a consultation body to inform the Scoping Opinion and is therefore inviting you

to submit comments by **25 September 2024**. The deadline is a statutory requirement that cannot be extended.

Further information is included within the attached letter.

Kind regards,

[redacted]

The Planning Inspectorate

[redacted] | **Senior EIA Advisor (PIEMA)**
National Infrastructure & NSIP Reform
The Planning Inspectorate
T [redacted]

@PINSgov The Planning Inspectorate planninginspectorate.gov.uk

Ensuring fairness, openness and impartiality across all our services

[redacted]
on behalf of the Secretary of State
Environmental Services Operations Group 3
Planning Inspectorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

By email only -
sesro@planninginspectorate.gov.uk

County Hall
New Road
Oxford
OX1 1ND

[redacted]
Director of Economy and Place

25 September 2024

Dear [redacted]

Environmental Impact Assessment (EIA) Scoping Consultation
South East Strategic Reservoir Option (SESRO)
Consultation closing date: 25 September 2024

Please find attached Oxfordshire County Council's technical comments on this EIA scoping consultation for a South East Strategic Reservoir. Thames Water is the applicant in respect of this proposed Nationally Significant Infrastructure Project (NSIP) and the Planning Inspectorate is undertaking the consultation with documents held on the website: Documents | South East Strategic Reservoir Option (SESRO) (planninginspectorate.gov.uk).

Oxfordshire County Council also endorses the comments of Vale of White Horse District Council which address a wider range of issues than the County Council can cover.

The County Council is attaching comments in relation to specific functions as follows:

a) Strategic Planning
b) Lead Local Flood Authority
c) Ecology – Please see Ecology and Tree Service comments
d) Landscape
e) Archaeology
f) Highways Authority – Please see Transport Policy, Place Planning and Coordination, Transport Development Management and Countryside Access Strategy comments
g) Minerals & Waste
h) Climate Action
i) Public Health
j) Emergency Planning – Please see Joint Oxfordshire Resilience Team comments

A summary of EIA scoping points made in the above responses is also provided.

Oxfordshire County Council recently responded to Thames Water's public consultation on SESRO. We would refer you to those comments which are available online at https://www.oxfordshire.gov.uk/residents/environment-and-planning/planning/council-planning-responses. Oxfordshire County Council has also responded to earlier consultations setting out reasons why it considers that other options for addressing future

water supply should be pursued rather than the SESRO. Those other options include a greater focus on fixing leaks, reducing water use, recycling water, and transferring water. Concerns about the SESRO proposal include its overly large size, potential to be ineffective, the huge cost, and the environmental effects both during construction and operation. Further details of the Council's resolutions in opposition to the SESRO are also publicly available and can be provided on request.

Yours sincerely

[redacted]
Head of Strategic Planning

PlanningInOxfordshire@oxfordshire.gov.uk
www.oxfordshire.gov.uk

Copy to: info.SESRO@thameswater.co.uk

Oxfordshire County Council
Summary Points on EIA Scoping Inclusions and Exclusions

The following highlights some of the issues raised in the following responses in the order of the scoping summary in Table 0-1 of the EIA Scoping report. The full responses attached should be reviewed in addition to this summary.

Water Environment

- All sources of flooding should be assessed and mitigated for.

Aquatic Ecology and Terrestrial Ecology

- Up to date data should be used and ecological survey information used.
- Reference should be made to the emerging Local Nature Recovery Strategy.
- Whether Hutchin's Copse Local Wildlife Site, which is within the scoping boundary, is an ancient woodland should be established.
- The study area for emissions from road traffic should be reviewed and expanded where necessary.
- The environmental assessment will need to distinguish between habitats created to provide compensation for impacts and those providing biodiversity net gain which should be counted separately in part in accordance with government guidance.

Landscape and Visual Effects

- The impacts on night sky and on residential amenity need to be included in their own right.
- Indirect effects also need to be assessed such as re-provision of solar farms.
- Reference should be made to additional national and local landscape advice documents.
- In addition to adverse effects on the North Wessex Downs National Landscape, benefits for the area need to be identified.
- A project-level landscape character assessment is needed to inform the design. Additional viewpoints and visualisations than those provided at this stage will likely be needed.

Historic Environment

- Adverse impacts on heritage assets should be avoided where the significance of the asset requires this in accordance with national and local policy.
- The environmental statement should not imply that the ability to record archaeological features is a factor in determining whether such loss is acceptable.
- Proposals to mitigate the loss of heritage assets such as interpretation boards and public talks should be addressed.

Traffic and Movement

- The environmental statement must consider relevant transport policy and advice at a national level as well as local level.
- Off-site connectivity improvements should be provided for.
- The environmental statement should address how the reservoir proposals facilitate a Wantage and Grove railway station.
- The study area for transport effects will need to be addressed through further work.

- Aims to reduce congestion, noise and air quality impact should be made clear in the environmental statement.
- How to assess the cumulative impacts of construction traffic requires further consideration.
- The environmental statement should not simply address the impacts of temporarily closing various transport routes, but also address how such closures will be minimised, and alternative provisions made.
- The proposal only to assess effects on highway links where traffic flows will increase by certain percentages should be revised.
- The environmental statement should address all options for environmental net gain in relation to traffic and movement.
- As the scoping boundary contains stretches of the highway network, it will be necessary to agree works on the highway land with the County Council as the Local Highway Authority or National Highways in the case of the A34.
- As the scoping boundary contains a stretch of the railway mainline, it will be necessary to agree works on the railway with Network Rail.
- The potential to construct the rail siding earlier should be addressed to minimise disruption on the highway network.
- The potential reduction in traffic effects from building a Wantage and Grove railway station should be addressed.
- The environmental statement should include a transport assessment based on robust and up to date trip assessments, rather than the 2021 consultant report that the County Council previously advised is not robust.
- Additional junctions will need to be included in the transport assessment.
- More locations will need to be included in the list of sensitive receptor locations.
- Baseline surveys of countryside access networks and use patterns inside and outside of the site to a 10km buffer radius are needed.
- Utility journeys of public rights of way and other paths need to be included in the environmental assessment, not just recreational journeys.

Noise and Vibration; Air Quality; Geology and Soils

- Most of these matters are not addressed by Oxfordshire County Council except where they appear under other headings.
- In addition to the noise and vibration effects from construction noted, such effects on users of the public rights of way network should be included.
- Additional effects on air quality may need to be scoped in.

Materials and Waste

- If the construction of the reservoir site sterilises minerals set out in the Mineral Safeguarding Area of the current Minerals and Waste Local Plan, the impact of that needs to be assessed, having regard to the volume of mineral lost.
- The environmental effects of transporting minerals to the site should be included, as well as the effect on local mineral supply.
- Mineral safeguarding sites should be scoped in.

Carbon and Climate Change

- ‘Vulnerability to climate change - projected changes in wind speed’ and Micro-climate - potential changes to local temperatures and winds’ should be scoped in to the operational period.

- We acknowledge that microclimate changes such as frost and fog caused by a reservoir are scoped in.
- Reference should be made to the Climate Action Framework and the Pathways to a Zero Carbon Oxfordshire route map and action plan.
- Proposals to mitigate the removal of solar farms and the carbon released through the disturbance of soils should be addressed.

Communities and Human Health

- The health assessment will need to include detailed lower layer super output areas as part of the demographic data in order to mitigate local health inequalities.

Major Accidents and Disasters

- A reservoir dam breach or collapse should be scoped in as there would be a significant impact if such occurred.
- The potential for a terrorist attack on the reservoir infrastructure should be considered.

Cumulative Effects

- The environmental statement should address the reservoir proposal in the context of other ways of dealing with water supply such as fixing leaks, replacing old pipes, recycling water, and transferring water by pipelines.
- More land should be included in the scoping boundary to reflect options for the replacement road and the potential for building a Wantage and Grove railway station.
- The effects of different timeframes for developing the reservoir in relation to other known proposals coming forward in the vicinity should be addressed.
- The effects of smaller reservoir sizes should be addressed.
- The effects of constructing the Wilts and Berks canal within the site should be addressed.

Alternatives to the Reservoir Project

Oxfordshire County Council has advised throughout various consultations that there are reasonable alternative ways of providing for sufficient water supply into the future instead of building a reservoir in this location. The Environmental Statement for any DCO application should not ignore these alternatives, but instead explain how the water companies are addressing the need to reduce existing pipe leakage, undertake water recycling projects, provide for water transfers and undertake other works.

Scoping Boundary

It is noted that 2.2.2 says the boundary is defined as land 'to potentially be required either temporarily or permanently for the construction and operation of the Project'.

2.2.4 says 'the EIA Scoping Boundary does not represent the boundary within which environmental effects are to be assessed.' We appreciate that the environmental effects over a much wider area will need to be assessed.

The boundary does not include much land to the south of the railway even though the recent public consultation included an option of constructing a road further south. This is explained in the document as being because constructing a road in that location is not likely, implying that it is no longer an option but not actually saying so. If options involving other land have been discounted, then that needs to be clearly stated.

The boundary should include land options for a Wantage and Grove railway station as that may be needed as part of this project.

The boundary includes parts of roads such as the A34, A338, A415, and Marcham Road, as well as the road that is proposed to be removed and replaced between East Hanney and Steventon.

We appreciate that the proposed boundary extends to the eastern side of the River Thames at Culham as it may be that land could be required either temporarily or permanently there.

The boundary should include all land that might potentially be required.

Size of Reservoir

The EIA should address potential smaller reservoir sizes. Options of smaller reservoir sizes have been put forward by Thames Water and the Planning Inspectorate will need to consider as part of any Development Consent Order application, whether the smaller size options overcome some issues.

Timing in relation to other developments

The EIA should recognise other proposals in the vicinity such as the allocation of land at Dalton Barracks and address minimising environmental effects in different scenarios involving the various developments being constructed at the same time or sequentially.

Wastewater pipe connection to Abingdon STW

The need for a buried wastewater pipeline connection between the proposed new Water Treatment Works on the reservoir site and the Abingdon Sewage Treatment Works (STW) was not apparent from the recent SESRO public consultation and therefore we did not respond on this point. It is not clear if this buried wastewater pipeline would involve another set of construction works in addition to the proposals which include the pipeline between the River Thames and the reservoir.

Thames Water's website advises that 'An upgrade is planned for Abingdon STW. This will improve its ability to treat the volumes of incoming sewage, reducing the need for untreated discharges in wet weather. The scheme, which is still being designed, is due to complete in 2027. We expect this location to meet all government targets for storm overflows by 2030 - 2035.'

We appreciate that the pipeline works are scoped into the environmental assessment and the Abingdon STW is located within the scoping boundary.

Constructing the Wilts and Berks Canal

The EIA should address the effects of constructing the Wilts and Berks canal within the scoping boundary as it may be necessary to construct it as part of this reservoir project.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: LLFA
Officer's Title: Operational Manager Flood Risk Management
Date: 06/09/2024

General Comments

For this application we would expect to see a flood risk assessment and drainage strategy to be produced for the scheme/proposals. There are many elements such as changes to roads, buildings and the reservoir itself that may have an effect on the surface water drainage of the area and therefore these assessments are likely to need to be detailed and cover the wider proposals other than the construction of the reservoir to address any local issues or impacts.

Requirements for surface water drainage are included in our Local Standards and should be reviewed when considering how the area will drain.

It will be important to assess the impacts of the proposals during construction, this would need to include water management during construction, de-watering, water quality, temp connections etc.

Comments on individual sections

6.5 Some of the modelling seems to be relatively old such as the River Ock dated 2017, has there been a review of the modelling generally and what is or is not most appropriate to use. There is also no definitive information on the interconnectivity of the different models, there is separate groundwater and fluvial models, that may be appropriate but within this section it does not discuss how the modelling for the baseline takes this into account and hence how the potential impacts and mitigation can be assessed. It is not clear whether these models are suitable for this proposal as they were produced previously for other specific purposes.

There seems to be a lot of information, data and modelling required to be gathered or prepared to support the baseline assessment. It is important that an understanding of the combination of effects in relation to water environment including flooding and water quality is concerned at the baseline assessment point, before testing of options are continued.

6.5.65 It appears odd that there is a conclusion on mitigation for the increase in groundwater levels in the bullet point 3 and 4 in this paragraph when the proceeding sections discuss that there is insufficient information including data to be able to assess the baseline itself. It is not appropriate to determine the increased in groundwater to be 'low' at this point in a scoping assessment, when there is no evidence that has been completed to support this.

6.5.66 If baseline surveys are 'insufficiently complete' then moving to stating that with mitigation that the effect is low is somewhat premature.

6.5.68 It would be useful to have sight of this model and the outputs and inputs that have been used – including the confidence in the datasets used to inform this modelling approach.

6.6.18 Agree that the groundwater flood risk has to be scoped into the EIA, we would also be expecting to see a flood risk assessment in relation to SESRO.

6.6.21 it is not clear why the flood risk from the embankment failure has been scoped out of the EIA as would suggest failure of infrastructure is scoped in. It is not clear if surface water flooding is scoped in or not? We would expect to see all sources of flooding assessed and mitigated for.

6.6.19 Any areas of flooding whether in the 'flood zones' or not and the risk associated with construction should be scoped in as this will be a long time period for build out and can contribute to increases in flood risk over a considerable time period. This should include what effects from runoff from compounds and restrictions to the floodplain.

6.7.4 Are there any sensitivities associated with the changes in groundwater level changes that are used for assessing the significance effect, that are specific to groundwater and not included in this section.

Table 6-9 How does this relate to groundwater levels and assessment it is not included in this table. The examples in the table do not quantify changes in flood levels for example, so it remains very subjective in relation to the measure for minor, moderate etc. For example, defining something as 'extensive changes' is not a measure as what does extensive mean e.g. 0.5m, 2m, 1m.

Mapping

Figure 6.2 does not include the existing surface water flood risk on the map so is this not deemed to be a constraint and if not why has this been excluded?

Figure 6.7 Highways and roads are not indicated as a flood risk receptor and in terms of assessing the impact of the effects these are important to consider. Designated and ecologically valuable sites may also be sensitive to changes in flood/water levels and these are also not include within this figure.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Environment and Circular Economy – Ecology comments
Officer's Title: Landscape and Nature Recovery Team Leader
Date: 16/09/24

Comments refer to Section 7 (Terrestrial Ecology) and Section 8 (Aquatic Ecology), cross referencing Section 6 (Water Environment) and Section 13 (Air Quality).

Legislation, policy, standards, and guidance

Regional Policy: alongside the existing BAP/Conservation Target Areas, reference should also be made to the emerging Local Nature Recovery Strategy which is due for public consultation later this year and publication in 2025 (see Oxfordshire's Local Nature Recovery Strategy (LNRS) | Oxfordshire County Council).

The Oxford Core Strategy and Oxford Local Plan apply only to Oxford City and should therefore be listed as local policies rather than regional policies (although the development does not fall within the Oxford City administrative area). Reference could be made to the Oxfordshire Minerals and Waste Local Plan (policies C7 and M10), although these policies are specific to minerals and waste development.

Local Policy: We suggest reference is made to relevant policies in Neighbourhood Plans (both those made and emerging, including Steventon and East Hanney), which include biodiversity policies, as well as the Ock Catchment Plan.

We support use of the CIEEM guidelines on Ecological Impact Assessment in development of the EIA.

Existing Environment and Baseline Conditions

We would expect the data available from the Thames Valley Environmental Records Centre, which it would appear was last requested in 2014, to be updated to ensure the EIA is informed by up-to-date environmental information.

It is noted that detailed surveys are being conducted in 2024/25 to complete the baseline assessment. It is concerning that many of these surveys seem to be restricted by a lack of land access, as reported in Appendix C. It is unclear how ecological survey information can be collected in appropriate seasons and be available in time to inform decisions and project design in line with the Project timeline. It is essential that ecological survey information is available to inform design of the scheme to allow the mitigation hierarchy to be followed and ensure BNG is delivered in such a way that it contributes to local nature recovery.

Whilst we agree that the Ancient Woodland Inventory does not include any ancient woodland within the EIA scoping boundary, Hutchin's Copse is described as ancient woodland in the Local Wildlife Site citation for the Cuttings and Hutchin's Copse LWS; the EIA should establish whether the site should be considered an ancient woodland, including reference to historic maps and survey for ancient woodland indicator species.

Sensitive Receptors and Potential Environmental Effects

We consider that potential impacts from changes to air quality on ecological receptors should be assessed in terms not only of dust deposition, but also in relation to potential increases in pollutants from traffic emissions. The study area for emissions from road traffic (Chapter 13 Air Quality) should be reviewed and expanded where necessary to include where construction or operation activities would lead to a change in traffic flows on the road network, that exceed the relevant thresholds set out in Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001):

- The change in light duty vehicles (LDV) flows of more than 1000 annual average daily traffic (AADT) within 200m of a designated site
- The change in heavy duty vehicles (HDV) flows of more than 200 AADT within 200m of a designated site.

Assessment Methodology

In assessing the importance of ecological features at a County-wide scale, we suggest reference to the biodiversity and species priorities in the emerging Oxfordshire Local Nature Recovery Strategy would be advisable (a draft is due to be out to public consultation in the autumn). We also advise reference to the Local Wildlife Site Selection Criteria for Berks, Bucks and Oxon Local wildlife sites selection criteria (tverc.org).

Compensation and Biodiversity Net Gain

Government guidance is that EIA compensation can only count in-part towards BNG for a development; 10% of the total (110%) BNG should come from measures which are not providing EIA compensation. The EIA will therefore need to distinguish between any habitats created through the scheme to provide compensation for impacts, as opposed to those providing BNG.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Countryside and Tree Service
Officer's Title: Senior Tree Officer
Date: 19/09/24

Arboricultural comments

The following information will be required:

- A tree survey and arboricultural impact assessment (AIA) in accordance with BS 5837:2012

- The tree survey should include all individual trees, including ancient and veteran trees, groups of trees and woodlands and be based on an accurately measured topographical survey. The tree survey should include all trees included in the topographical survey, as well as any that might have been missed.

- The arboricultural impact assessment should accurately evaluate the direct and indirect effects of the proposed design and where necessary recommend mitigation.

- The arboricultural impact assessment should assess the impact on trees and woodlands of all the works required for the project.

These reports should be completed by a competent arboricultural consultant.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Environment and Circular Economy – Landscape comments
Officer's Title: Technical Lead Landscape and Green Infrastructure
Date: 20th September 2024

Comments refer to Section 9 (Landscape and Visual Effects), Appendix G (Landscape & Visual Assessment Methodology), Figure 3.8 Interim Master Plan

Engagement on landscape and visual matters has taken place through the Technical & Visual Technical Liaison Group (TLG) meetings, which consists of the local authorities, Natural England and the North Wessex Downs National Landscape (NWDNL). These have proven useful, and we welcome that these are proposed to continue (para 9.9.4).

Landscape & Visual Assessment (LVIA)

We agree that the LVIA should be carried out in accordance with the guidelines for landscape and visual impact assessment, 3rd edition (GLVIA 3) and the technical guidance listed in paragraph G 2.2. of appendix G (landscape & visual methodology).

With many details of the development still being developed we also agree that the scoping will need to make allowance for changes in the scope (para 9.1.5).

Appendix G (para G5.3) and chapter 9 state that the ES will not consider impacts on the night sky and lighting in their own right, but only as part of the LVIA. With much of the detail regarding construction, operation and recreational use still in development, it is difficult to judge its potential impact at this stage. The reservoir is within the setting of the North Wessex Downs National Landscape (NWDNL), the special qualities of which include dark sky and tranquillity. Notwithstanding the lack of detail at this stage we believe it necessary that dark sky/ lighting is scoped in to ensure that the impacts on the NWDNL and the surrounding rural landscape areas are adequately assessed.

Paragraph G.7.2 states that no residential amenity assessment or assessments of impacts on private properties will be carried out in their own right. The need for such assessments should be informed by the LVIA. Whilst the main focus of landscape and visual assessments are publicly available views, we consider it important that judgements on impacts on settlements and residential properties are adequately assessed.

It is important that the LVIA does not only assess direct effects on landscape and views but also indirect and cumulative effects. Indirect effects could for example comprise impacts caused by the diversion of utilities, potential re-provisioning of affected renewable energy provision (i.e. existing solar farms), other water and non-water infrastructure projects, or displaced traffic and its impacts on tranquillity. All of these have the potential to adversely affect landscape character and views.

Legislation, policy, standards and guidance

Table 9.1 in the Landscape and Visual chapter lists relevant legislation, policy, standards and guidance. This list should also include a reference to the National Planning Policy Framework (NPPF).

Reference is made to the VoWH emerging Joint Local Plan and the update to the District's Landscape Character Assessment. However, the District Council is also preparing a Landscape Sensitivity Assessment, a Tranquillity Assessment, a Valued Landscape Assessment, a Renewable Energy Assessment and an update to the existing Green Infrastructure strategy, all of which should also be taken into account when designing the reservoir and preparing the LVIA.

We agree that the ES will need to take account of the NWDNL Management Plan, position statements, guidance and emerging strategies listed in the chapter. It should also take account of the NWDNL Nature Recovery Plan and the emerging Oxfordshire Local Nature Recovery Strategy when designing the scheme.

North Wessex Downs National Landscape (NWDNL)

The proposed reservoir is of an unprecedented scale and is located within the setting of the NWDNL. Great weight is given in the NPPF to conserving and enhancing National Landscapes. In addition, the recently passed Levelling Up and Regeneration Act 2023 (LURA) has placed a strengthened 'duty to further' the statutory purposes of the National Landscapes.

This strengthened duty requires developments to align and help deliver the aims and objectives of the designated landscape's statutory management plan. This is an active duty rather than a passive one, and requires developments within the NL or its setting not only to avoid and mitigate effects but to explore what can be done in addition, to further the purposes and special qualities of the National Landscape. The applicant should therefore liaise with the NWDNL and explore how its special qualities could be furthered.

Assessment Methodology

A draft version of the methodology was discussed within the Landscape & Visual TLG meetings. We have the following additional observations on the proposed methodology (in appendix G):

Project-level landscape character assessment (LCA):
Para G.4.3 makes reference to a project level landscape character assessment, and that this is proposed to be defined as part of the LVIA. The need for a project-level LCA was identified and agreed with the Landscape & Visual TLG to adequately address the unprecedented size of the proposed development within the setting of the NWDNL and to inform project design, masterplan and phasing. It is concerning that this baseline information is not yet available to view and that it might not be available prior to the ES being finalised.

It is important this project-level LCA is prepared and shared for comment with the TLG at the earliest opportunity, and that the findings of this assessment inform the design including the relationship with the surrounding landscape.

North Wessex Downs National Landscape (NWDNL):
Para G.4.4 states that consideration will be given to effects on the special qualities of the North Wessex Downs NL within the study area. In line with the recently strengthened duty to further the special qualities of the NWDNL (Levelling Up and Regeneration Act), the

design and assessment should not only give consideration to the special qualities but actively explore how the proposal can deliver benefits for the NL. This will require consideration to be given to the wider landscape.

Viewpoints:
Viewpoint locations have been previously shared and discussed in the TLG meetings. Additional viewpoints might be required as a result of changes to the scope and design, or if particularly areas of concern are identified during the assessment or next stages of the project when more detail has become available.

Visualisations:
Figure 9.3 shows the proposed viewpoint locations and Table 10 in appendix G identifies for which one of these photomontages are proposed. This suggests only six locations for photomontages. The level of visualisation for the other viewpoints is not stated and this information should be provided. Visualisations should be in accordance with TN06/19, and it is important that the number and level of visualisations is agreed with the TLG prior to the LVIA being prepared.

For a development of this scale and magnitude, we would expect an extensive number of visualisations such as wireframe images or photomontages to be prepared for most viewpoints. Details of the visualisation methodology are also required.

Mitigation

The landscape chapter outlines mitigation proposal for the different phases (chapter 9.8). We strongly encourage the need for early programming of landscape works including advance planting to mitigate adverse effects. Early consideration should also be given to the ongoing management of different areas.

Design development and Masterplan

GLVIA3 requires that the LVIA and the design development are an iterative process and it is important that the scheme design is informed by the findings of the ES.

An Interim Masterplan has been submitted with the Scoping information, but it is important that the design of the reservoir and its relation to the surrounding landscape is informed by the project-level LCA (yet to be prepared) and the findings of the LVIA. It is concerning that decisions on design and preferred options are being made without being informed by assessment findings, not only in relation to landscape and visual matters but also other related topics. It is important that the design process remains sufficiently flexible to respond to the findings of the ES.

A landscape-led approach to the development is required as discussed and agreed with the TLG. The scoping boundary and interim masterplan predominantly focus on the reservoir and associated infrastructure, but it is important that the design also considers the relationship of the reservoir with the wider surrounding countryside. More work is required on how the reservoir responds and links with the surrounding landscape (views, public rights of way, biodiversity and green infrastructure etc).

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Archaeology
Officer's Title: Archaeological Team Leader
Date: 11/09/2024

Archaeology comments

The applicant's documentation, chapter 10, sets out the current archaeological background and proposals for what will be included in the EIA. This baseline however has been derived from a high-level assessment only and a detailed desk-based assessment will need to be produced to inform the baseline of the cultural heritage section of the EIA as set out in the National Policy Statement on Water Resources Infrastructure (NPSWRI 2023, paragraph 4.8.8). This desk-based assessment should also incorporate the results of the geophysical survey and trenched evaluation currently being undertaken across the proposed site along with the geoarchaeological assessment and the detailed aerial photographic survey highlighted in this chapter of the scoping report.

This desk-based assessment should be undertaken in line with the Chartered Institute for Archaeology standards and guidance including the submission of a written scheme of investigation to ensure that the scope of the assessment has been agreed.

A programme of archaeological investigation will need to be undertaken ahead of the determination of any planning application for the site (NPSWRI 2023, paragraph 4.8.8). This will need to include a geophysical survey as well as a trenched evaluation. This chapter highlights that this is currently underway and geophysical survey of some parcels within the site have been completed. This survey and the programme of trenched evaluation will need to be completed and the results incorporated into the desk-based assessment used to inform the cultural heritage chapter of the EIA in order to provide a sufficient baseline and data on the survival, date and nature of any archaeological deposits surviving on the site so that the significance of any heritage assets affected can be appropriately understood in advance of a decision being made on this proposal.

Paragraph 10.5.10 states that a preliminary archaeological deposit model has been produced to determine area of archaeological potential. We do not agree that this statement is appropriate, however. This model has been produced from existing geotechnical data only and there is nothing to suggest that historic environment data has been used to inform this deposit model. Elsewhere in this document this model is referred to as providing information on areas of geoarchaeological potential, which is a more valid proposal.

A geological deposit model on its own would not be suitable for determining areas of archaeological potential and such determination would need to be based on the results of the geophysical survey and trenched evaluation along with the existing archaeological baseline.

Paragraph 10.9.1 proposes to avoid adverse impacts on historic environment assets where practicable. In line with the NPSWRI the scheme should seek to avoid adverse impacts where the significance of the heritage asset requires this, partially for heritage assets of high significance equivalent to a scheduled monument rather than what is required for the

scheme. There is the potential for archaeological sites of such significance to be present within the scheme and where these are identified they would need to be considered in line with the policies for designated sites (NPSWRI 2023, paragraph 4.8.5). Substantial harm, which this proposal would constitute to such assets should be wholly exceptional (NPSWRI 2023, paragraph 4.8.21).

Paragraph 10.9.3 does highlight that a programme of excavation and recording of any archaeological features can be undertaken as mitigation to reserve them by record but should highlight that the ability to record such assets should not be factor in determining whether such loss is acceptable (NPSWRI 2023, paragraph 4.8.11).

The scoping report does highlight that the results of any investigation would be made public through a published monograph but does not include any consideration of wider areas of public benefit from the scheme to mitigate the loss of heritage assets such as interpretation boards, public talks and lectures. This would need to be considered within the environmental statement.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Transport Policy (Strategic Transport)
Officer's Title: Strategic Transport Manager
Date: 12/09/24

General Transport Policy comments

Detailed discussions with transport officers and other technical disciplines from Oxfordshire County Council will need to be undertaken through an agreed, payable process. These comments are provided primarily for consideration in relation to Traffic and Movement.

The development must consider relevant transport policy at a national level, including but not exclusively Decarbonising Transport and Inclusive Mobility, as well as at a local level with Oxfordshire's Local Transport and Connectivity Plan /daughter documents and District Local Plan policies/growth through allocated housing and employment in the area. Area transport strategies and corridor strategies were detailed with the Local Transport Plan 4. As noted below, we are working to update these policies, but until that time these policies remain adopted – specific policies for this area can be found between pages 35-75.

Emerging Area Travel Plans and the Strategic Active Travel Network being developed by Oxfordshire County Council also form part of this. Off-site connectivity improvements with the site should be explored further, in addition to those on site. It is worth noting, it is anticipated an Area Travel Plan for this area is expected to be developed by the end of next year (2025). There is also a Local Cycling and Walking Infrastructure Plan (LCWIP) being developed for the area.

Greater consideration needs to be given to the transport network to minimise congestion, noise and air quality impact and make full use of mitigation opportunities for better integration with and improvement to the sustainable transport network, including active travel, public transport and land use locations, as well as Mobility Hub principles. Any ongoing implications for the transport network and highway safety will be a key part of this, as well as clear assessment of transport impact. The proposed Water Treatment Works are significant structures and further information is required, for example, how these would work operationally.

Further assessment of public transport connectivity and use of walking/cycling routes will be very important, including maximising on sustainable transport integration for any necessary road diversion or access road. All walking and cycling facilities must comply with current walking and cycling standards/guidelines (such as LTN 1/20). Note also that possible routes are safeguarded in the current Local Plan for potential movement corridors along the A415 to the south of Marcham and to the south of Abingdon.

Oxfordshire County Council should be party to further discussions with National Highways and other transport bodies. For example, these discussions will need to include the proposed access road and options such as the auxiliary drawdown channel/emergency discharge. Any impacts and constraints resulting from these on the transport network, either through construction or once in place, would need to be given further consideration also.

Rail comments

It is recognised that the rail sidings are proposed as temporary and for demolition at the end of construction. Little consideration appears to have been given to interdependencies and complimentary benefits with a potential future railway station at Wantage and Grove.

The South East Strategic Reservoir Option (SESRO) rail interventions will be significant and given their proximity and the timescales over which they will be in use, consideration must be given to their impact and how they might support the railway station proposal through their lifespan and beyond. The sidings must not hinder the potential future development of a railway station at Wantage and Grove and should make efforts to provide infrastructure to support it.

The infrastructure requirement to support a Wantage and Grove Railway Station was set out in the Oxfordshire Rail Corridor Study in 2020. Paragraph 7.3.10. (summarised below) sets out the proposed location for the new station (between Steventon and Uffington, near the site of the former Wantage Road Station) and the interventions required for a new station. It is anticipated to have hourly services between Cambridge and Bristol.

The proposal is to develop the station on a four-mile section of the four-track. This is the only four track section in the 20 miles between Steventon and Highworth Junction. This would mean new platforms at Grove could be built on the Relief Lines and would not disrupt main line services – an essential requirement.

Notwithstanding this, the Relief Line preforms a key strategic function, as loops for freight services which need to be preserved. At a minimum, the station would require intervention to lengthen the Relief Line, providing the ability to retain the current capability to loop freight and the required capacity to stop at the station with impacting the Main Line.

It is anticipated the loops will be extended eastwards (approx. 1km) allowing for the majority of the deceleration/acceleration of freight and passenger trains. This would allow hourly calls at Grove in Cambridge Bristol services, with only some retiming of Great Western fast services.

It should be noted the train plan set out in the study in this area is very close to maximum capacity utilisation with many services at minimum headway. Interventions may therefore be required to shorten the two-track section between Highworth Junction and Challow. The study concluded further development should focus on understanding this requirement – and the same for the two-track section between Wantage Road and Steventon – alongside the strategic case.

The study found two interventions were required: the new railway station at Grove and a loop extension and additional crossovers at Grove.

Since then there has been a Statement of Opinion on Wantage and Grove Railway Station and England's Economic Heartland have undertaken a Swindon Didcot Oxford Connectivity Study. There is also an emerging Oxfordshire Rail Strategy in the pipeline. The current Vale of White Horse Local Plan identifies land safeguarded for a Wantage and Grove Railway Station.

Oxfordshire County Council is progressing a Strategic Outline Business Case for the railway station. Any Business Case for the station will need to be supported by enabling infrastructure.

The South and Vale draft Joint Local Plan consultation earlier in 2024 included policy that the design of the rail sidings should seek to facilitate a permanent rail station at Wantage and Grove, for example, see policy IN3 - Transport Infrastructure and Safeguarding and Policy IN7 – South East Strategic Reservoir Option (SESRO) safeguarding. Policy IN7 states: '*provide new rail infrastructure to minimise construction traffic on the highway network by including measures to ensure construction materials reach the site via new rail sidings, the design of which should seek to facilitate a permanent rail station at Wantage and Grove'.*

A firm commitment to work with Network Rail, Oxfordshire County Council and Vale of White Horse District Council to develop plans for a railway station in the vicinity is expected. We would expect bus, walking and cycling connectivity from the station to the leisure facilities to be part of this and abundant secure cycle parking at the station.

The comments of Network Rail will be important in understanding the acceptability of the design and signalling arrangements.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Place Planning & Co-Ordination Team
Officers' Titles: Team Leader Place and Planning (Vale), Technical Lead (Transport Planning), Transport Planner
Date: 13/09/2024

General Place Making comments

All of the parameters and details set out in this EIA Scoping Report that will also form the basis for the subsequent Transport Assessment will need to be comprehensively scoped and agreed with Oxfordshire County Council (OCC) through a formal process.

The assessment and resultant package of mitigation will need to take due account of OCC's Local Transport and Connectivity Plan, Implementing Decide and Provide: Requirements for Transport Assessments, and Parking Standards for New Developments documents.

Paragraph 11.4.2 states that:

> At this early stage there is no information regarding where the construction and operational workers will live, therefore, there is no information on the generation and distribution of such traffic and other transport modes travelling to the SESRO Project. The study area for this scoping exercise has therefore been defined based on the anticipated routes that both construction and operational traffic are likely to use to access SESRO. These assumptions are based on professional judgement and will develop as the design of SESRO evolves.

Whilst this might be considered appropriate for the purpose of an EIA, for the purpose of a Transport Assessment, using professional judgement is not considered an adequate means of identifying the study area. Further work will be expected to be undertaken in order to more robustly inform this scoping process. Where appropriate, this will need to draw on comparable examples of other reservoirs both in respect of construction and operational use.

Of particular concern is the construction worker catchment area shown in Figure 11.1. Further evidence will be required to establish whether this is a realistic catchment and thus in turn inform the appropriate study area for the impacts of construction traffic generated by the site.

As such, the study area will need to be comprehensively reviewed and expanded, through discussion and agreement with OCC. This will need to include (but not limited to) key routes such as the A415 through Abingdon to the A4074, the A338 to the A420 (north of Frilford), the B4015 and A329 to the M40. Many other local roads in the vicinity will also need to be assessed including (but not limited to) those within various towns and villages, including: Kingston Bagpuize, Marcham, Abingdon, Wantage, Steventon, Drayton, East Hanney, and Rowstock.

Figure 11.1 also shows several major roads and market towns shown inside the study area are not currently being considered as part of the application. As impacts are expected within the study area, it will be important to assess all the major roads and towns contained within it in order to appropriately assess the stress development here will put on the network.

It will also be important to include a detailed methodology detailing why the route being assessed were chosen so this can be reviewed.

Paragraph 11.5.11 states that TEMPro, NTEM, and RTF will be used to inform the traffic growth forecasts. As stated in paragraph 11.5.12 this, along with accounting for Local Plan growth, will need to be agreed with OCC and VoWHDC. The assessment of the cumulative impacts of construction traffic associated with other development will also need to be discussed and agreed with OCC, which will need to consider construction traffic associated with any highway schemes in the area.

Paragraph 11.5.20 mentions the Abingdon LCWIP, which is welcomed. Assessment of the impacts on the walking and cycling networks will also need to take account of OCC's Strategic Active Travel Network and the emerging Wantage and Grove LCWIP. Opportunities to connect into these networks and improve them will need to be explored and delivered as part of this proposal.

Paragraph 11.5.35 states:

> Surveys for the assessment of the construction phase are likely to focus on weekdays, possibly with consideration of Saturdays, whereas for the operational phase assessment, surveys are likely to focus on weekends and possibly weekdays, subject to agreement with OCC. Surveys will be conducted during these time periods because that is when SESRO traffic is likely to be at its highest volumes.

As acknowledged, this will need to be discussed and agreed with OCC, and we will be expecting the assessment for operational use to include both weekends and weekdays to ensure that all impacts are adequately assessed.

Paragraph 11.5.39 states:

> The data gathering exercise will also seek to make use of publicly available data sources for obtaining traffic data, as described below:
>
> - WebTris – National Highways owned database containing monitored vehicle speeds and flows of traffic on National Highways maintained roads (e.g. A34)
> - DfT road traffic statistics – Provides an estimate of the vehicle flows on a limited section of 'A' roads and motorways

It should be noted that caution will need to be taken when using DfT statistics. As acknowledged, these are estimates often based on very old data, which is of very limited use and thus will not be considered a suitable substitute for collecting new data.

The list of sensitive receptor locations set out in paragraph 11.6.6 appears to omit many locations in the vicinity of the reservoir and this will need to be reviewed comprehensively to ensure that it captures locations that have been missed.

Paragraph 11.6.11 identifies the potential severance effects of the construction phase. It states:

> …there are likely to be alterations to footways, cycleways, equestrian routes, and PRoW, including temporary diversions or permanently diverted routes reinstated elsewhere to remain consistent with the existing PRoWs. These changes may temporarily affect walkers, cyclists and horse riders (WCH) due to the severance of PRoW and local roads. Furthermore, traffic management measures, such as temporary road closures, may affect severance for communities and the emergency services.

Although described as temporary, some of these closures may be in effect for many years. As such, these impacts will need to be minimised where possible and where unavoidable, the acceptability of these impacts will need to be considered and alternative provisions will need to be made where appropriate.

Paragraph 11.7.2 states that:

> The following key guidance relevant to traffic and movement will be considered within the assessment process:
>
> - Environmental Assessment of Traffic and Movement (IEMA, 2023)

…it then states in paragraph 11.7.4 that:

> Based on the IEMA guidance (IEMA, 2023), the following two criteria will be used to assist in identifying the extent of the assessment:
>
> - Highway links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%)
> - Highway links of high sensitivity where traffic flows increase by 10% or more

This is not agreed with OCC and will need to be reviewed and agreed for the purposes of the Transport Assessment. The status of the IEMA guidance is not clear but it does not appear to be endorsed by any applicable central government department and thus should be considered as guidance only and thus not prescriptive of the acceptable thresholds for the Transport Assessment.

Indeed, paragraphs 1.22 and 1.23 of the IEMA guidance makes it clear that there are significant distinctions between what is appropriate for an EIA and what is appropriate for a Transport Assessment, lending further weight to the inappropriateness of this guidance for determining the scope of the Transport Assessment. The latter paragraph states that, "…the nature and depth of assessment undertaken within a Transport Assessment is incompatible for the purposes of an EIA or non-statutory environmental assessment."

Paragraph 11.7.6 states that, "A spreadsheet-based traffic model will be developed for the purpose of assessing both construction and operational traffic." However, this is considered an insufficient means of adequately assessing the interrelationship of impacts on the network and thus a bespoke traffic model will need to be built.

Section 11.8 sets out the kinds of mitigation that may be required to mitigate the impacts of the reservoir proposal. It is important to note that some mitigation measures such as 'improving/widening of off-site junctions' and 'carriageway widening' that might be required to accommodate traffic during the construction phase may be very different to what is required to enable suitable connectivity for walking, cycling, and public transport for the operational phase of the project. As such, it may be the case that there are some locations where mitigation designed for the former will then need to be redesigned and replaced with a different facility once the reservoir is complete.

Paragraph 11.8.3 mentions some of the secondary measures that may be required, including:

> During the operational phase a Travel Plan will be implemented which will set out clear targets and measures focused on reducing private car trips on the highway network, relating to both visitors and operational / maintenance staff. This could involve methods such as a website to guide visitors on how to reach SESRO, prioritising public transport, cycling, and walking for locals and placing car trips last or as the least preferred option. Restricting parking or providing designated parking away from sensitive receptors and allocating family or car sharing spaces only could also be considered along with shuttle bus services from nearby stations.

This will of course need to include significant improvements to existing infrastructure or the provision of entirely new and high-quality facilities to enable walking, cycling, and wheeling. It will also require improvements to existing bus services and the potential provision of new services and the accompanying infrastructure (bus stops, bus priority measures, etc.), this

should include the consideration of provision of bus shuttle services specifically for construction staff. It will also need to include the consideration of new rail services and the potential delivery of the proposed Wantage and Grove Station.

Paragraph 11.8.7 states:

> The traffic generating nature of the construction phase means opportunities for environmental net gain in relation to traffic and movement are limited. Whilst efforts to promote sustainable travel by visitors during operation will be made, there is a high likelihood of a large proportion of visitor trips being made by private car.

No justification for this pessimistic view has been offered and it is considered unacceptable to apparently concede defeat before any attempts to ensure that private vehicle trips during construction and operational phases are minimised. This is antithetical to OCC's Local Transport and Connectivity Plan and entirely at odds with the National Policy Statement for Water Resources Infrastructure (Defra, April 2023), which states:

> The applicant should prepare a construction management plan for construction stages and a travel plan for the operational stage of the infrastructure. Both should include demand management and monitoring measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by walking, wheeling, cycling, public and shared transport to:
>
> - reduce the need for parking associated with the proposal
> - contribute to decarbonisation of the transport network
> - reduce the need to travel
> - secure behavioural change and modal shift through an offer of genuine modal choice and to mitigate transport impacts.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Transport Development Management
Officer's Title: Technical Lead for Strategic Sites (South)
Date: 12/09/24

Transport Development Management comments

1. The Scoping Summary Table 0.1 on page 20 is agreed with, except for the Chapter 16 section. OCC require that both the '*vulnerability to climate change - projected changes in wind speed*' and '*micro-climate - potential changes to local temperatures and winds*' should be scoped into the operational period of the EIA.

2. Figure 1.2 illustrates the EIA Scoping Boundary. It is noted in paragraph 2.2.2 that the boundary is defined as land '*to potentially be required either temporarily or permanently for the construction and operation of the Project*'. This boundary contains stretches of the highway network, such as the B4017, A338 and the Marcham Interchange. As the Local Highway Authority, we have an interest in the highway that we control and manage as well as a legal obligation to ensure that the highway operates efficiently and safely. As such, any works and impacts from the construction and operation of this project, must be agreed by OCC or, where applicable, National Highways.

Indicative Construction Schedule

3. In section 2.6, the indicative construction schedule is detailed. It is noted that road and rail diversions are to occur in the first two years of construction, however, nothing is mentioned about the Public Right of Way (PRoW) network, which is also required to be considered at this early stage.

4. Early construction of the rail siding should be considered further, to minimise the disruption on the highway network from HGV movements. Such a siding and any associated infrastructure may be able to play a part in the wider off-site S278 works as well as the wider reservoir project. OCC expect a full commitment from Thames Water (TW), to engage and work with OCC, VOWDC and Network Rail to bring about a Wantage and Grove Station.

5. The opportunities for reducing car trips on the network as a result of a railway station, in line with the reduction targets in the Local Transport and Connectivity Plan (LTCP), are significant, especially, as the reservoir is likely to be a large visitor attractor over a wide area. The creation of a station would also allow increased connectivity opportunities for walking and cycling, facilitating and enhancing our strategic active travel network in line with Policy 4 of the LTCP.

Options Appraisals

6. Paragraph 3.3.3 discusses the range of options appraisals for infrastructure required for SESRO that have been undertaken.

7. OCC provided a response to the Non-Statutory Consultation in August 2024, which included Highway comments on the preferred options identified for Infrastructure,

including for intake/outfall locations, emergency drawdown, access roads, road diversions, rail sidings and Water Treatment Works (WTW) locations. These comments are reiterated below for clarification.

Intake/Outfall locations

8. All of the options shown in Figure 3.3, will involve a separate construction access to that of the main SESRO construction access road, given their distance from the reservoir. Early engagement with OCC is required, to ascertain where construction traffic would be routed and how the impacts will be mitigated. Lambrick Way and Preston Road are the obvious choices, but these are part of the urban area of Abingdon and have residential and recreational land uses.

9. A number of the options, including the preferred option B will disrupt the National Cycle Route (NCR5) during construction. This is an important off-road route between Abingdon and Didcot, via Sutton Courtenay. If provision for cyclists is made at all times during construction, this need not impact the choice of options, but the treatment of NCR5 should be discussed with OCC early on.

Emergency Drawdown

10. Providing a canal instead of a tunnel, could afford opportunities for creating a new active travel route along this corridor. Developing these opportunities would involve a lot of key stakeholders and needs much further investigation.

11. Figure 3.3 shows the options for the emergency drawdown tunnel. The preferred Option C could carry 75m3/s of water in an emergency. A tunnel of this size will have significant engineering and earthmoving implications. The traffic management implications and wider impacts on the highway network from constructing a tunnel, need to be further understood and discussions should be had with OCC officers in the Highways teams.

12. National Highways must also be involved in all these discussions, as the A34 will be impacted by the construction of the tunnel.

Main Access Road Options

13. Figure 3.4 shows the options for the main access road into the site, from the A415.

14. Without an agreed transport modelling scope, in accordance with our '*Implementing 'Decide & Provide': Requirements for Transport Assessments'* guidance and agreed construction, employee and visitor trip rates and distribution, OCC are not able to fully commit to any option for the access road from the A415.

15. As stated in the 'SESRO Access and Diversion Roads Options Appraisal Report' on page 11 and 12, OCC welcome TW's commitment to keeping abreast of the progress of key external partnership schemes in the vicinity of the reservoir project area, which may impact the alignment and positioning of any access road and junction. These include:
    - The allocation of the Dalton Barracks site for residential development.

- The identified area for a potential Flood Storage Reservoir (FSR) for Abingdon, which could be developed by the Environment Agency.
- The identified area for a possible future South Marcham Bypass (also known as the Marcham Movement Corridor), proposed by the VOWHDC, SODC and OCC.
- The identified area for a possible future South Abingdon-on-Thames Bypass (also known as the Southern Abingdon Movement Corridor), proposed by the VOWHDC, SODC and OCC.
- The identified areas for a potential Wantage and Grove Station for passenger rail travel, proposed by the VOWHDC, SODC and OCC.

16. It is intended that the access road from the A415 would be required in two phases – the first, as a construction access road for materials and the workforce and the second, as a permanent access for the workforce associated with the operation, maintenance and other auxiliary uses, as well as visitors to the reservoir.

17. Option B is the closest to the Marcham Interchange roundabout junction with the A34, being just 440m west of it, and therefore has the biggest potential to impact upon the capacity and operation of this junction. Depending on the new junction requirements, any revised road layout in this location, may conflict with the existing layout of the Marcham Interchange and not be deliverable to DMRB standards. A commitment to engage and involve National Highways, in liaison with OCC, in the evolvement of any junction design and layout, will be required by TW.

18. OCC advise that TW fully engage with the Dalton Barracks development, given they are required to make improvements to the existing A415 / Gozzards Ford priority T-junction, as part of their mitigation works. At this stage, OCC are unable to say whether a roundabout or a signalised junction would be more appropriate, but any junction will have to accord with DMRB standards (although not to the detriment of LTN 1/20 and our LTCP) and will be subject to all the required Road Safety Audits. OCC will require that any permanent junction arrangement, provides excellent provision for walking and cycling, in accordance with any current guidance, namely LTN 1/20.

19. Whilst the intent to provide active travel along the access road is welcomed, OCC will also require TW to investigate pedestrian and cycle routes to further destinations, such as Marcham and Abingdon. The existing cycle path along the A415 is in poor condition and provides a good opportunity for upgrade improvements as part of this project. Equally, the cyclist/pedestrian provision through the Marcham Interchange should be explored, as this will offer a very direct route for many to the reservoir access.

20. All access arrangements will be subject to speed surveys, which will inform acceptable safety requirements and geometry, as specified in DMRB and other relevant standards/guidance. It proposed speed limits are unlikely to be stuck to, traffic calming will be required to enforce the speed limit.

21. Departures away from standards should be avoided, but if applicable, a relaxation/ departures report will be required. In terms of any conflict between the standard, when looking for a resolution, LTN 1/20 is to take precedence and ensure amplified

active travel. Application of DMRB and resolution of any conflicts in standards must be resolved in collaboration with OCC. OCC will work with TW to ensure LTCP policies are implemented through the design and delivery of the access infrastructure; this in relation to engineering design, ensuring accordance with our policies, particularly those relating to active travel, trees, street lighting, energy and the environment.

22. There are laybys on either side of the A415 just to the west of the Marcham Interchange, which would be impacted with any large-scale junction redesign for the access to SESRO. OCC will need to investigate the operational use of these before determining if they are to remain/be relocated or can be removed. OCC advise that camera surveys be conducted on both laybys to establish the use level. There is also the Driver and Vehicle Standards Agency (DVSA) Enforcement Site on the northern side of the A415, which has its exit approximately 290m from the Gozzards Ford junction, which will need consideration in terms of DMRB requirements for any new junction arrangement.

23. TW must be aware that to offer any areas for adoption/dedication, they require full paper title, without restrictions on the land. TW is advised to undertake a full investigation over land titles and highway extents earlier rather than later, to avoid undeliverable works and hold ups with obtaining s278 approval, which may impact upon the overall SESRO project timeline.

24. For OCC to adopt the access road under a S38 agreement, there must be a public benefit and it must meet adoptable criteria. If OCC do adopt it, then TW should note that the road being adopted will be fully accessible by the public without restriction.

25. The requirement, where necessary, for Traffic Regulation Orders (TRO) (temporary or permanent), notices and consultations or just consultations for any of the SESRO general arrangements, will also have to be factored into any off-site works. These statutory processes all have their own timelines for application and implementation and may have to be deferred to OCC's democratic process for a decision.

26. OCC has not seen the latest estimations for visitor numbers to the site and remain concerned over the significant increase in traffic movements the reservoir could bring to the surrounding network. The A415 through Marcham contains a pinch point, which constrains traffic flow through the village and is not suitable for a substantial increase in trips. TW must investigate the option of fully constructing a Marcham Bypass, as part of the mitigation package to address the impacts of the reservoir.

27. To discourage journeys by private car, OCC will expect excellent connections to the reservoir by public transport. Locations for bus stop infrastructure and potential services serving the site will need to be established in discussion with OCC and the network operators, at an early stage of the design process and also in collaboration with the Dalton Barracks site, to ensure these important elements can be brought forward.

28. It is not clear from the Masterplan shown in Figure 3.8, whether there is the intention to provide a mobility hub/public transport infrastructure within the site, which would need to be constructed to specific standards in liaison with both OCC and the VOWHDC/local parish. If none are to be provided on site, provision must be provided

for pedestrians all the way along the access road, including over any structures, to the required safety standards. Crossing facilities in accordance with current standards, will also have to be included in any junction arrangement from the A415, so access to and from bus stops (and the wider Dalton Barracks site) is catered for.

29. OCC would recommend the access road be designed for a 20mph limit, however, the alignment of option B is fairly straight and TW will need to consider how they keep speeds down by delivering horizontal or vertical traffic calming along its length.

30. OCC will expect the impact from construction traffic to be monitored once known, and roads that will be subject to construction traffic may require improvement or mitigation works and/or a monetary value secured by OCC for the degradation of highway asset(s). This applies to all construction traffic and is not solely focussed on S278 works. This item will require further discussion and negotiation through the planning and obligation process.

31. There may be the requirement for OCC's Cabinet to approve the design of any off-site highway works, for transparency purposes; OCC can confirm this as the mitigation package evolves, but TW are to prepare for this being a possibility and should consider this in their programme.

32. It is noted that Option B routes over the River Ock and other smaller watercourses, which will all require appropriate structures to span them. All these structures will require approval from the Environment Agency (EA) and must be DMRB compliant (CD529 in particular).

33. The final treatment of the canal and Auxiliary Drawdown Channel (ADC) must be a consideration, as this will impact upon the acceptability of any structure across this facility.

34. Where the access road goes over structures, the cross section must safely accommodate all users, considering the extra width required for vehicle restraint systems (VRS) and effective usable space for active travel users of the bridge. Parapets will also require raised or wider verges.

35. All structures will require a minimum head room to allow for ongoing maintenance and inspection and should also have space nearby for maintenance and inspection vehicles.

36. Allowance should be for SV80/ SV100 vehicles, however, there may also be the requirement for abnormal loads, given this will be the construction route and therefore, this must be a consideration.

37. Easement specifics are very dependent on the structure, location and its surroundings and further clarity on easements required can be given when the design has progressed.

38. If OCC are adopting the access road and therefore the structures, there are no particular types of structures deemed unacceptable, rather OCCs major focus will be compliance to standards and there being the minimum amount of maintenance.

39. TW are reminded that OCC will require Agreements in Principle (AIP) and the Road Restraint Risk Assessment Process (RRRAP) undertaken and agreed, for each of the structures, to go through planning.

40. It is not clear from the Masterplan shown in Figure 3.8, how the access road will continue around the reservoir to reach the proposed rail sidings at the southwestern side of the site. The Interim Landscape and Environmental Masterplan points to the end of the access road, saying there is the potential to link to an alternative sports centre locations, as well as showing an alternative operational access road running along the top of the embankment.

41. By continuing these roads southwards to reach the rail sidings, they would have to route through a thin corridor constrained by the reservoir edge and the diverted Hanney to Steventon Road, where there will be gradients associated with the embankment, watercourses to span, including the canal and Public Rights of Way (PRoW) to cross. Further details are required regarding the proposed construction haul routes through the site and how these will treat the various constraints through the site.

East Hanney to Steventon Road Diversion

42. TW have said that they prefer option A, as shown in Figure 3.5. OCC cannot provide opinion on a preferred option at this stage, without access to agreed transport modelling outputs. We must be able to review modelling for all options, to ascertain what the impacts will be on the surrounding highway network, taking into account other infrastructure schemes in the local area, such as Relief to Rowstock. Whilst options A and B offer the shortest routes and mirror more closely to the existing road, the benefits of option C still need to be investigated further.

43. Options B and C will remove through traffic from Steventon village, relieving pressure on the priority T-junction where Hanney Road meets the B4017 and the Steventon Bridge, however, option C will place more pressure on the existing Steventon Lights junction, although will offer a more direct route to the A34, via the Milton Interchange or Chilton Slips.

44. At the eastern end of the road diversion, as shown on the Masterplan in Figure 3.8, just before it connects into the existing Hanney Road, the two bends look to be quite tight and further information is sought about the proposals for speed limits in this location. DMRB standards will confirm the geometry of this section and all safety issues highlighted in any RSA will have to be resolved at planning.

45. It is not clear from Figure 3.8, what the intended speed limit of the road is, however, OCC recommend a design speed of 50mph, appropriately reducing to the current speed limit at either end. The extremely straight alignment along the southern side of the reservoir will require some sort of speed enforcement measure(s) to ensure speed limits are enforced and/or a slight amendment to the alignment to make it less straight.

46. Transport modelling work will determine the junction requirements at the western end of the road where it joins the A338. The plans indicate a roundabout, which will likely offer the best arrangement, as opposed to a T-junction. Any new junction will be

constructed according to DMRB and should be LTN 1/20 compliant. TW are required to explore, in liaison with OCC, the opportunity for linking the cycling provision at this junction to the wider areas of Grove and a new Wantage and Grove Station, to enhance and provide a strategically joined up active travel network. This is fundamental to encourage journeys to the reservoir by active travel and reducing car trips in line with the LTCP.

47. Constructing a new road affords the opportunity to provide excellent active travel routes and OCC welcome the provision of these. Cycle provision in accordance with LTN 1/20 along the entire length of the route will be required. The current Hanney to Steventon Road is not a safe and attractive route for most cyclists, given the lack of cycle infrastructure and high speeds of vehicles. By constructing a segregated cycle route along the diverted road, would provide a much-needed cyclist route linking Wantage and Grove in the west, to Abingdon and Didcot in the east. Careful consideration should be given as to how the new active travel links connect into existing highway and what other improvements will be required to ensure these routes are not isolated and severed, rendering them underproductive in their use.

48. Bus route and infrastructure requirements will need to be reviewed and proposals put forward considering existing and future stops and services. Where appropriate, OCC will require further details, which show how safe active travel routes will be provided to the SESRO site from any bus stops along the new road, especially in the vicinity of the PRoW, which transect option A.

49. It is noted here are several PRoWs affected along the diverted Hanney to Steventon Road. 108/3/10 is Ardington Lane bridleway, however there are also 108/1/20 and 198/15/20 footpaths further to west. TW are required to fully detail and justify how these intersections are to be treated to allow for the safe movement of walkers and cyclists, so as not to impede access. The treatment of these may be subject to separate legal agreements for diverting or stopping up, which must be factored into the programme.

50. OCC require further information on construction access to the rail sidings, to ensure that the diverted road is not impacted upon. It is intended that the haul road will bridge over the diverted road, however, this will involve a large amount of earthworks and engineering works to create such a structure. TW must demonstrate the deliverability of any access across the new road, within all the constraints along the corridor running along the southern side of the reservoir. The legacy of any bridge will also need further clarification, once the reservoir is fully operational.

51. On the Indicative Masterplan in Figure 3.8, there is a ‘minor car park’ shown on the southeastern side of the reservoir, which has an access from the diverted Hanney to Steventon Road. It is shown to have ‘restricted access’ and OCC require further clarification as to the intended use of this car park and how the access to it will be managed. If it is to be gated, OCC will require an acceptable amount of space in front of the gate to allow for the largest vehicles using the access to be able to pull in off the highway, so as not to cause an obstruction and a collision risk. The access is also on the bend, which may inhibit forward visibility of vehicles, especially ones approaching from the west.

52. Once OCC understand more about the intended use of this car park, the junction arrangement can be progressed in line with DMRB, which may require a ghosted right turn, or relocating slightly.

53. Along the diverted road, the bridge crossing the safeguarded area for the canal diversion will have to accommodate the future aspirations of this corridor. The same comments regarding the requirements for structures as detailed in the 'Main Access Road' section above, should be considered.

54. It is advised that early engagement is undertaken with OCC, as the Local Highway Authority (LHA) and the Lead Local Flood Authority (LLFA) and the EA (where necessary) to establish what drainage requirements will be needed and how this can be delivered in the design.

55. Drainage of the highway will have to be SUDS compliant and be designed to current standards. Constructed drainage ditches to drain the highway will need to be adopted as highway asset (so long as they do not also drain the land). If they do drain the land, we will not adopt them and will only discharge our water into them.

56. Given the number of watercourses and potential attenuation/swales required adjacent to the road, there may be the requirement for VRS along the length of the road, which will bring with it, requirements for working widths and allowance in the cross section to account for vertical upstands of such systems.

57. TW will be required to show through flood modelling and mitigation that the road will not be subject to water inundation and closure.

58. OCC will require that the new East Hanney to Steventon Road is fully constructed to adoptable standard and has its Practical Completion/Certificate of Completion so it can be open for public use, prior to the existing road being closed. The new road will subject to a maintenance/defects period, in which time, any issues identified, will have to be rectified by TW.

Alternative Rail Sidings

59. It is anticipated that the use of rail for delivery of bulk materials would help to reduce the volume of road traffic required to construct the reservoir. The '*Rail Siding and Materials Handling Area Options Appraisal Report'* states that the rail siding would then be demolished and landscaped or returned to agriculture when construction of the reservoir is complete. This contradicts the '*Legacy brochure*', which indicates there '*may be opportunity to repurpose the temporary siding into a permanent railway station*', on page 12.

60. OCC support option 5, as this location presents the best opportunity for utilising the siding for a new Wantage and Grove Station, given the proximity to the A338 and the surrounding urban area to the southwest.

61. TW should consider whether construction of the siding can be brought forward, to minimise the disruption on the highway network from the HGV movements. It may be able to play a part in the wider off-site S278 works as well as the wider reservoir project. TW have informed OCC they have a construction advisor looking at all routes

and options and we will expect a full commitment from TW, to engage and work with OCC, VOWDC and Network Rail to bring about a Wantage and Grove Station.

62. The opportunities for reducing car trips on the network, in line with the reduction targets in the LTCP, are significant, especially, as the reservoir is likely to be a large visitor attractor. The creation of a station would also allow increased connectivity opportunities for walking and cycling, facilitating and enhancing our strategic active travel network in line with Policy 4 of the LTCP.

63. TW will have to actively engage with OCC to establish the means of access to any siding, to ensure the junction layout is acceptable for HGV movements. Access is currently anticipated from the A415, along a haul road within the site. OCC will have an interest in any road that could potentially form part of the access into a new Wantage and Grove Station, to ensure that the construction is to adoptable standard and any structures over watercourses that may be adopted, are also built to an acceptable standard. The anticipated construction trips will have to be factored into any access design, to ensure the appropriate DMRB standards are met, however, there may be a requirement to amend the layout post construction.

64. OCC will require more details around the requirements by Network Rail for emergency access to any siding, as this will involve our highway and further S278 works.

Water Treatment Works

65. The options for the Water Treatment Works (WTW) are shown in Figure 3.7. TW has indicated a preference for locating the WTW either as shown in Option 2 or Option 4. Both of these options are close to the proposed access road and therefore reduce the need for additional construction roads to be routed through the site.

66. Whilst OCC assume that the operational transport impact of the WTW would not be significant once up and running, there may still be small HGV or LGV movements associated with it and these manoeuvres will have to be accommodated safely. Option 2 is closer to the proposed location for the visitor centre, café and main car park, which will mean a higher proportion of pedestrians and cyclists in the vicinity. This is not necessarily an issue, as long as there is a large enough area for vehicles manoeuvring and safe crossing points and signage for active travel users.

Interim Masterplan and Design Principles

67. In light of the various points raised in relation to the infrastructure options, OCC welcomes the wording in paragraph 3.3.23, stating:

> *'Design alternatives will continue to be considered as the project progresses. The Interim Master Plan will be updated at key milestones in the design development as the Project progresses towards the DCO application submission'.*

68. The Design Vision and Draft Design Principles for SESRO, are set out in document J696-AA-ZZZZ-ZZZZ-RP-ZD-100001 (Thames Water, 2024).

69. In order to accord appropriately with various policies within OCC's LTCP, the previously referenced National Policy Statement for Water Resources Infrastructure

(paragraphs 4.14.7 and 4.14.9), and the aims set out in the 'Climate, People, Places, Value: Design Principles for National Infrastructure (National Infrastructure Commission), 'Encouraging active travel and use of public transport' is considered insufficient. Instead, this should be replaced by 'Facilitating active travel and use of public transport as the natural first choice.'

70. Further to this, 'Aiming to reduce construction impacts on local communities and transport network through design', should be replaced with 'Minimising construction impacts on local communities and the transport network through design and use of rail'.

Access, recreation and education

71. It is noted in paragraph 3.2.28 that TW say, '*Alternatives for some recreational facilities are indicated and further work is required to determine the preferred options for these'*. TW are required to fully engage with OCC in determining these requirements, given the implications that such facilities may have on the highway network and existing active travel routes/PRoW. The estimated trip generation of such facilities will have to be considered, when determining the access arrangements and as such, the earlier estimated visitor numbers can be agreed with OCC, these 'alternative' locations for recreational facilities can be finalised in the masterplan.

Landscapes, habitats and Watercourse

72. Paragraph 3.3.31 discusses the need for permanent environmental bunding with planting, as indicated on the Interim Master Plan in Figure 3.8. This is shown in locations along the Steventon to East Hanney road diversion, west of the A34 and to the north-west of Steventon. Any earthworks required to create these bunds, in the vicinity of the highway and or existing PRoWs will have to be considered by OCC, to not only ensure the appropriate structural safety standards are met and works can all be undertaken within the red line boundary of the project, but that any impacts on the highway or PRoW network are minimised.

Traffic and Movement - Chapter 11

73. The potential impacts and effects of traffic and movement that will result from the construction and operation of SESRO are noted in paragraph 11.1.2. These should all be considered and assessed, not only as individual elements, but as possible 'receptors' experiencing repeat impacts, in accordance with DMRB LA112. This should take account of issues such as multiple closures of a PRoW or the traffic management required to temporarily close a road to move bulky material for example. If these events happen in isolation, the impact may be small, however, if receptors are impacted more than once, the cumulative impacts on the highway network for all users will need to be considered.

74. The National Policy Statement (NPS) for Water Resources Infrastructure (Department for Environment, Food and Rural Affairs (Defra), 2023) guidelines for assessing the effects from Traffic and Movement are detailed in paragraph 11.2.3. OCC welcomes these guidelines and will require the applicant to accord with the relevant local, regional and national legislation, policy, standards and guidance, as detailed in Table 11.1.

75. OCC wish to draw attention to Policy 36 of the LTCP, which specifies that all highway impacts should be assessed using a Decide and Provide approach. Whilst, this is more applicable for the emerging Transport Assessment, when it comes forward for the planning submission, it is important to identify it in this response.

76. The applicant has listed the *'South Oxfordshire Local Plan 2011-2035 (South Oxfordshire District Council (SODC), 2020)'* and the *'Local Transport and Connectivity Plan (Oxfordshire County Council (OCC), 2022)'* under *'Regional Policy'*, however, these documents would be more appropriate slotted under the 'Local Policy', alongside the Vale of White Horse Local Plan 2031, Parts 1 and 2.

77. Whilst it is accepted that there is currently no information regarding the origin of the construction and operational workers to inform the generation and distribution of traffic flows, OCC do not fully accept the assumptions that have been made in paragraph 11.4.3 and will require further evidence and clarification to support these claims.

78. The traffic and movement study area is shown in Figure 11.1 and has been identified using five main arterial routes around Oxfordshire that form the key existing road connections (and their respective road junctions) to the indicative location for SESRO. Paragraph 11.4.4 indicates that these routes are the anticipated access routes will serve as the primary routes for construction and operational traffic, contingent upon the origin of the journey.

79. The five key arterial road routes that approach the SESRO site are as follows:
    - A34/ M40 from J10 (i.e. from the north)
    - A40 from M40 J7 (i.e. from the east)
    - A34 south from M4 J13 (i.e. from the south)
    - A419 from M4 J15 (i.e. from the south-west)
    - A415 from the A415/A40 junction (i.e. from the north-west)

80. Additionally, the following road links are within the anticipated study area:
    - A338 west of SESRO between Wantage and East Hanney
    - A412 north of SESRO connecting to the A40 to the east and the A34 to the south
    - A415 north-west of SESRO connecting to the A420 and A338 to the north and A34 to the south
    - A417 south of SESRO between Wantage and Rostock
    - Steventon Road / Hanney Road between East Hanney and Steventon
    - B4017 Drayton Road / Stonehill Lane / unnamed road (potential route to Abingdon Sewage Treatment Works (STW)

81. The entire length of the A420 from the eastern edge of Swindon to the A34 has been included as an arterial route, however, any construction vehicles routing from the south should utilises the A34 and the appropriate junctions (Chilton, Milton or Marcham Interchanges).

82. Using junction 15 of the M4 to route construction traffic from the west, would mean HGVs routing through the Frilford junction (congested in the peak hours) and

Marcham village (has a pinch point and is an air quality management area (AQMA)), which is not acceptable to OCC. This would also be the case for the arterial route shown from the A40 at Witney, to the north-west, whereby HGVs would still have to route through this sensitive junction and village centre.

83. Where the A415 crosses the River Thames at Newbridge, whilst on a classified 'A' road, it is a pinch point and utilises a 13th century weak bridge with an 18-tonne weight restriction and therefore also not acceptable for large volumes of construction movements.

84. It is unclear why the section of the B4017 Steventon Road between the A34 and Steventon Lights junction is identified, as it does not provide access to the A34. Furthermore, the routes shown to pass through Abingdon (a town with an AQMA), Drayton, Steventon, East Hendred, Wantage and Grove are unacceptable for large volumes of construction traffic.

85. The green line on Figure 11.1, indicating the construction worker catchment is extremely limited and has not been agreed with OCC. It is reasonable to believe that construction workers will travel to the site from locations like as Swindon, Oxford, Bicester, Banbury, Reading, as well as from other larger population centres, such as London and Birmingham, given the sheer scale of this project. Further details on the estimated number of construction workers should be provided for the purposes of the Transport Assessment and this will have to be agreed with OCC.

86. The inclusion of the Great Western Main Line (GWML) (London – Bristol) in the study area, as detailed in paragraph 11.4.8, is welcomed by OCC.

Baseline Desk-Based Assessment and Surveys

87. Referring to paragraph 11.5.3, OCC is disappointed that in developing the EIA Scoping Report chapter on Traffic and Movement, TW have relied upon the data gathered for the purposes of the SESRO Movement Strategy Report (Mott MacDonald, 2021) together with its initial findings and recommendations. At the time, OCC provided considerable feedback to this report and further information and clarification was required on several elements. There were trip estimations that were not considered robust and/or suitably evidenced and TW were advised to continue to engage with OCC Highways, to develop and agree these movement trip figures.

Existing Road Traffic

88. As stated above, OCC do not consider routes through Frilford junction and Marcham village acceptable for construction traffic, as well as the roads through Abingdon and Wantage. Whilst it is accepted that the B4017 will be used in part to access the construction of the new Steventon to Hanney Road, ultimately, it is not acceptable to have large volumes of construction traffic associated with the wider construction of the SESRO site, using this road.

89. TW are currently updating the Movement Strategy Report, to capture stakeholder feedback.

90. Paragraph 11.5.8 details the updated baseline traffic counts that were conducted at nine junctions in the immediate vicinity of SESRO. These are also shown in Figure 11.2. As part of the highway impact assessment, further junctions must be included in this project, given its size and significance, to inform base line traffic flows and to be taken into the future modelling scenarios for the construction and operation of SESRO. This include (but are not necessarily limited to):
    - High Street / A4130 / Abingdon Rd signals
    - B4017 / High Street roundabout in Drayton
    - Downsview Rd / Denchworth Rd / A417 roundabout
    - A417 / Denchworth Rd / Mill St / Ham Rd double mini roundabouts
    - Wallingford St / Garston Lane / Charlton Rd / B4507 double mini roundabouts
    - B4057 / Newbury St staggered signals
    - Frilford junction staggers (A415/A338)
    - Abingdon Rd / A338 / Faringdon Road staggered crossroads
    - Abingdon Road / A420
    - A415 / A420
    - A420 / A338
    - Gozzard Ford / A415
    - Double minis in Abingdon
    - Grove Road / A4130
    - High Street/Stert Street
    - Stratton Way / Stert Street / Vineyard
    - Stratton Way /Ock Street
    - Chilton Interchange on the A34

Future Road Traffic

91. OCC acknowledges the methodology for agreeing the future baseline changes in traffic, as outlined in paragraph 11.5.11-14. OCC advise that TW continue to engage with Highways Officers, to ensure they have the most up to date information with regards committed mitigation measures and construction schedules/quantum for all committed and Local Plan developments, as well as OCC infrastructure schemes. It is recommended that TW liaise with the Network Management Team.

Future Rail Network

92. With regards to the future rail network, OCC welcome the ORCS study prospective rail strategy, suggesting the need for enhancements in service frequency at certain stations and the need for new stations, including at Grove.

93. The comments made in paragraphs 58 – 63, above, are relevant for consideration here.

Bus Services

94. Existing bus services may be subject to change in any future baseline conditions, especially those that currently route along the existing Hanney – Steventon Road or are revised or introduced as part of new developments. Again, TW should ensure

they continue to engage with OCC to obtain all the latest information with regards public transport services going forward.

Cycling

95. Paragraph 11.5.20 mentions the Abingdon LCWIP, however, no reference has been made to the emerging Wantage and Grove LCWIP, as well as the Strategic Active Travel Network (SATN) and these should also be considered.

Further Survey Work

96. Paragraph 11.5.34 discusses further traffic surveys that may be required at key junctions that will be utilised for construction and operational routes. Paragraph 11.5.35 goes on to suggest anticipated timings for such surveys. OCC will expect the applicant to agree the timing and duration of all traffic surveys and operational and construction surveys should not be assumed to be limited to either weekends or weekdays, respectfully.

97. There may be an expectation for TW to provide permanent traffic counters, to enhance the transport monitoring already undertaken by OCC. The requirements for this can be developed further, as part of the ongoing monitoring of the site, both during construction and operation, as per the County's D&P guidance, specified in Policy 36 of the LTCP.

98. The use of DfT road traffic statistics, as stated in paragraph 11.5.39, must be used with caution, as they are based on estimates and are not up to date. Any data used for the purposes of the EIA and going forward, the Transport Assessment, must be agreed with OCC.

99. The surveys to capture NMUs on the surrounding PRoW will have to be agreed with OCC, with regards their timing and duration. It should be noted that whatever outputs are collected from these surveys, Policy 5 of the LTCP requires the PRoW network to be enhanced and impacts on it to be mitigated as required, so that it always ensures access, thus creating excellent opportunities for NMUs.

Receptors

100. The list of sensitive receptor locations is by no means complete and TW should liaise with OCC and the LPA to ensure that these locations are not missed. The Fitzwaryn School on the A417 in Wantage and Marcham C of E School have been missed off, for example.

101. The claim made in paragraph 11.6.10 is not accepted by OCC on two fronts. Whilst increased HGV volumes from construction could have significant impacts upon sensitive receptors and on the highway network, the resulting impact from its operation should not be underestimated. The draw of visitors on warm sunny days and/or on event days (still yet to be established in scale and type) will have a cumulative impact upon local communities and the highways network. To say that any effect from construction will be 'temporary' is misleading, as 'temporary' could mean a few days, weeks, months or even years.

Assessment Methodology

102. Whilst section 11.7 refers to the Environmental Assessment of Traffic and Movement (IEMA, 2023), it is noted that this is recognised national guidance, OCC does not agree with paragraph 11.7.4 and any extent of the highway network included for assessment, must be agreed with OCC Highways Officers.

Mitigation

103. Some of the secondary mitigation measures referred to in paragraph 11.8.2 may be requirements to allow for elements of the construction phase, however, they would contradict Policy 36 of the LTCP, which states that road capacity schemes will be considered as a last resort. The applicant will be required to agree any off-site works to facilitate construction or operation, through discussions with OCC and may be required to reinstate or provide an alternate scheme on highway layouts that are implemented for the construction phase, once the site is operational.

104. Paragraph 11.8.3 discusses Travel Plans during construction and operation. During the construction phase, there are many measures that could be employed, to minimise the need for car travel to the project area, such as shuttle buses from key locations or Dicot Parkway. OCC will expect TW to be proactive and innovative when formulating their Travel Plan for construction workers.

105. OCC welcome the idea of a website, to encourage visitors to use sustainable modes of travel, however, there has to be a firm commitment from TW to ensure these active travel measures and improvements to public transport are delivered in a timely way and this includes the provision of a station at Wantage and Grove.

Environmental Net Gain

106. Paragraph 11.8.7 is overly pessimistic and unfounded, stating that *'…a large proportion of visitors will arrive in the private car*' when the site is operational, and *'…opportunities for environmental net gain in relation to traffic and movement are limited*' during the construction period. OCC will expect TW to ensure a thorough investigation is undertaken and measures provided to reduce the impacts upon the highway network and surrounding communities.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Countryside Access Strategy & Development
Officer's Title: Team Leader Countryside Access Strategy & Development
Date: 12/09/24

Public Right of Way comments

As per the National Policy Statement for Water Resources Infrastructure (Apr 2023), the EIA needs to assess the impact of the scheme on public rights of way and users inside and outside the site's impact area.

Assessments should have four areas of focus – 1) the public rights of way itself inside and outside the site, 2) current and future users of the public rights of way and 3) the amenity of the rights of way including views, tranquillity and nature conservation inside and outside of the site, 4) mitigation measures inside and outside of the site.

1. The public right of way – assessments should look at the surface, gradient, infrastructure (ages, bridges, signs, seating etc), route, width directness, connectivity by status and source/destination (including outside of the site to key settlements), and convenience.

2. Current and future users – including all legal users according to the path's current and planned status, plus users with disabilities (physical, sensory and mental) and people with less physical agility, those who need accompanying and those with reduced understanding of language or awareness of the countryside and the more natural environment.

3. Amenity issues – including the countryside feel of a path, near and long views, the soundscape, the habitats and presence of wildlife along the routes. In addition, the availability of use the paths without car use and the availability of parking for people with additional needs and reduced mobility needs to be included.

4. Mitigation measures - adverse impacts should be avoided and prevented and mitigation in the form of onsite and offsite public rights of way and publicly accessible green and bluespace needs to be included.

Public rights of way, National Trails, and other rights of access to land are important recreational facilities for walkers, cyclists and equestrians – as well as potentially giving access for paddlers, swimmers and sailing activities.

Baseline surveys of countryside access networks and use patterns inside and outside of the site to a 10km buffer radius should be undertaken pre-development as desk surveys and standard transport surveys do not usually capture these and there are no other data sources. OCC would welcome engagement in formulating the methodology; a spread of access typologies capturing key access and user types is needed (e.g. promoted route, utility route, connecting route, horse, walker etc).

EIA Scoping specifics

Chapter 2.5 Development Zones. Zone 1-4. Include *the construction* of the canal and towpath corridor at the same time as reservoir construction. Include recreational *and utility journey* access via public rights of way (PRoW) or permissive paths. Zone 5-7. Include recreational *and utility journey* access via public rights of way (PRoW) or permissive paths.

Para 2.6.2 Construction Timings. Include the construction of Wilts and Berks Canal/Towpath at the same time as other preparatory works in order to reduce and avoid disturbance impacts.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Minerals & Waste Policy
Officer's Title: Minerals and Waste Policy and Strategy Team Leader
Date: 16/09/24

General Comments

In our response on the SESRO public consultation in August 2024 it was noted that there is a current lack of detail and clarity on the aggregate requirements for the development.

SESRO and its supporting infrastructure, such as the rail sidings and road construction, are expected to use significant resources. Not only the material from the borrow pit, but also imported Rip Rap, Sand and Gravel, concrete, and other road construction materials.

Specifically, we would like to understand the following:

- Amount of Rip Rap, Sand and Gravel and any other aggregate required,
- Source/s of Rip Rap, Sand and Gravel and any other aggregate required,
- Timescales for importation/extraction of Rip Rap, Sand and Gravel and any other aggregate required,
- Transportation methods for all Rip Rap, Sand and Gravel and any other aggregate to site,
- Consideration of the use of Recycled aggregate.

We await a response from Thames Water on the above matters.

Minerals and Waste Local Plan

The Oxfordshire Minerals and Waste Local Plan Part 1 – Core Strategy (OMWCS) is local policy not regional policy.

15.4.10 Thrupp Lane Radley is mentioned as an area of land subject to minerals ownership rights. Part of this site has planning permission for mineral extraction. It is subject to a Review of Mineral Permission (ROMP) and is currently not capable of being worked until new permissions are approved.

15.4.12 refers to the Oxfordshire Minerals and Waste Local Plan Part 2 – Site Allocations Document. The work on that document has ceased and the County Council is instead producing a new Minerals and Waste Plan. The sites identified as preferred sites and reasonable alternatives no longer have any status.

Mineral Safeguarding

If the construction of the Reservoir site would sterilise mineral set out in the Mineral Safeguarding Area this would need to be considered in the ES. This would need to be done regardless of whether the sites were likely to be allocated in the next Minerals and Waste Plan. The impact should include the volume or tonnage of mineral lost to the development.

Inert, non hazardous, hazardous

In paragraph 15.4.24 it states that it will be assumed that Minerals and Waste Planning Authorities will continue to plan for new landfill void capacity. The EIA should consider the policies on landfill in the adopted Minerals and Waste Local Plan Part 1 – Core Strategy.

Determining Sensitivity – Minerals

A theme of the scoping is the consideration of minerals only where sites are allocated. The assessment needs to include any site safeguarded under policy M8 of the OMWCS.

Regardless of the availability of materials for the construction, the environmental effects of its transportation to the site should be included, and also the effect on local mineral supply. The EIA therefore needs to consider the source of the mineral, and how it would be transported to the site.

The scoping refers to waste generation and disposal, but it would be better if this referred to waste generation and management as this allows a more circular approach to material management.

Table 15 – 16

Mineral safeguarding is proposed in the table to be scoped out because the development would not affect any allocated mineral sites. Instead, the project should have this scoped in if it affects mineral safeguarding areas regardless of whether any sites have been allocated.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Climate Action
Officer's Title: Zero Carbon Oxon Policy and Projects Lead
Date: 19/09/24

Comments refer to Section 16 (Carbon and Climate Change)

Under the Legislation, Policy, Standards and Guidance Context, references to the Climate Action Framework and Pathways to a Zero Carbon Oxfordshire Net Zero Route Map and Action Plan should be made under Regional Policy, reflecting county's intended pathways to net zero and assumptions around delivery. We would also refer TW to the forthcoming work around circular economy in the county, and its impacts on the development of a circular water economy, as well as the Climate Adaptation Route Map which will be published in early 2025.

We welcome the adoption of a whole life cycle approach to greenhouse gas emissions assessment (16.6.1). We emphasise the need for an operational assessment considering a wide range of potential climate futures with regard to temperature, extreme heat and cold, and changes in rainfall. This is due to the uncertainty with which we can accurately forecast climate outcomes further into the future, in line with research on tipping points and climate overshoot.

We note the point on uncertainty in estimating emissions from infrastructure projects (16.6.13) and strongly encourage continued close working with Oxfordshire County Council in order to align with the council's developing methodology for carbon accounting on infrastructure projects.

The negative impact of the removal of the solar farms on Oxfordshire's renewable generation is referenced in 16.5.3. We note that other renewable generation opportunities will arise as a result of the development of SESRO, however this is likely to be required for the operation of the site, if it is to align with wider net zero targets. The renewable generation capacity delivered by this project, therefore, should aim to replenish that lost by the removal of the solar farms in order to minimise the impact on the county's renewable capacity targets. Early and detailed engagement with the relevant Distribution Network Operator is required to ensure barriers such as capacity constraints on the grid are addressed.

We welcome the inclusion of carbon released through the disturbance of soils through the change in land use in the whole life carbon assessment (Table 16-8). Mitigation of this impact should be delivered through the creation of new habitats with sequestration potential. This should be managed in line with Biodiversity Net Gain (BNG) principles, noting that government guidance states that EIA compensation can only count in-part towards BNG for a development and that 10% of the total BNG should come from additional measures not providing compensation under the EIA.

Transport of people and goods also requires careful consideration in terms of emissions. We note that some materials will be transported by rail to reduce transport emissions and reliance on the highway. However, heavy plant and vehicles will still be required, and there are currently few viable low carbon fuel alternatives for these types of vehicles. Impacts of construction on active travel and public transport routes must also be carefully managed and minimised. In terms of operation, SESRO is likely to form a key visitor and employment

node, and adequate planning must be made for access to the site by public transport and active travel as a priority.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Public Health
Officer's Title: Health Improvement Practitioner
Date: 12/09/2024

The Public Health team welcomes the opportunity to comment on the EIA Scoping element of the SESRO application. Following our response on the consultation in Summer 2024, the following remarks focus on the human health aspects of the EIA Scoping report.

Comments on Chapter 12 – Noise and Vibration

It is welcomed that all noise and vibration effects from construction are scoped into the report. This is especially important due to the long-term nature of the works. It is also noted that a range of sensitive receptors have been identified for the purposes of the noise and vibration assessment. The applicant should also consider the users of public rights of way within their assessment.

Comments on Chapter 13 – Air Quality

We note that the effect on air quality from construction plant machinery emissions is considered likely to be 'not significant' and is scoped out of the EIA. The rationale for this is that despite the long-term nature of the construction, anticipated works will not occur simultaneously, and will be carried out over a large geographical area. We welcome that operational impacts of air quality will be kept under review as design progresses and more information on traffic movements becomes available. It is welcomed that public rights of way are considered among the list of sensitive receptors.

Comments on Chapter 16 – Carbon and Climate Change

We support the fact that this project has the potential to provide environmental net gain via the unlocking of renewable energy generation and the habitat creation and carbon sequestration associated with woodland planting. It is also welcomed that the sensitivity of these receptors is to be assessed based of factors such as age and disability.

Comments on Chapter 17 – Communities

We welcome the reference to public rights of way, and national cycle routes within this chapter. The users of these open-air routes will potentially be vulnerable to the impacts of the construction and operation of the project, and appropriate diversions will be required where routes are directly affected by the proposed works.

Comments on Chapter 18 – Human Health

We note that the HIA aspects of the assessment are to be included within the Human Health chapter in lieu of a standalone HIA. This will be acceptable on the basis that all relevant elements of an HIA are discussed, including identification of a health baseline, the acknowledgement of health inequalities, and an agreed list of mitigations required to address these.

The baseline assessment includes a range of relevant documents, although the applicant will also need to use the Oxfordshire Joint Strategic Needs Assessment (JSNA) to uncover a full picture of the health and wellbeing needs of the study area. This should also include data from neighbouring Abingdon South, which includes some of Oxfordshire's most deprived neighbourhoods.

The granularity of the data used is too large. Whilst it is important to consider demographic data at a national, regional and district level, the health chapter should also consider the health baseline for the specific LSOAs that the proposed reservoir will cover. This closer examination will allow the applicant to consider the specific health concerns experienced in the immediate area and to ensure that the construction process and subsequent operational phases act to mitigate any local health inequalities.

We strongly support the reference to there being mitigations proposed during the construction and operational phases of the development. In particular, the diversion of active travel routes during construction may be an important mitigation for the applicant to enact where appropriate. We also support the proposal to engage with local communities on completion of the reservoir about how routes can be made accessible.

We note the intention to conduct further investigation as to the presence of vulnerable groups within the study area, and the acknowledgement that the project has the potential to widen existing health inequalities. The Oxfordshire JSNA have a list of inclusion groups who are most likely to be vulnerable to the impacts of a proposal which can be used to inform this work.

We welcome the proposed mitigation measure of recruitment of a community liaison officer, along with other mitigation measures set out in the Community assessment (in Chapter 17) to mitigate impacts on local communities. As proposed, this will help reduce impacts on mental health and wellbeing, such as those mental health impacts associated with timely information and uncertainties surrounding the SESRO Project.

We support the proposed scope of the Human Health chapter and the proposed methodology for assessing the impact of the project on human health, both positive and negative.

Consultation: Thames Water SESRO EIA Scoping Aug-Sep 2024
Team: Joint Oxfordshire Resilience Team
Officer's Title: Resilience Officer
Date: 12/09/2024

Table 19-2

The creation of flood maps is not a requirement as per the Reservoir Act (1975), however, creating flood maps should be viewed as best practice to support Emergency Planners and Resilience Officers assess the extent of an inundation and prepare plans accordingly.

In Oxfordshire County Council, all reservoir incidents are covered by a generic off-site reservoir inundation plan. For higher risk reservoirs, specific off-site plans have been / are in the process of being developed to account for the level of risk. Due to its size and volume, once established, SESRO would likely be viewed as the highest risk reservoir within the County.

Table 19-4

Reservoir / dam breach / collapse has been scoped out of the EIA due to its low likelihood. However, on the Thames Valley Local Resilience Community Risk Register, the risk of a reservoir or dam collapse is high with a significant impact. This is in addition to an incident occurring as recently as in 2019 at the Toddbrook Reservoir in Whaley Bridge, Derbyshire. Due to these reasons, a reservoir / dam breach / collapse should be scoped into the EIA.

Table 19-4

A terrorism attack on people has been identified as a risk and placed out of scope. However, a terrorist attack on the reservoir infrastructure itself has not been identified as a risk.

A decision on the scope of this risk would be further supported by creating flood maps to identify the extent of the inundation. The extent would highlight the level of impact of a breach or failure and therefore whether this would be more or less of a target for malicious actors. Furthermore, due to the amount of media attention regarding SESRO, it's profile may be raised as a target to potential malicious actors.

Good afternoon,

Sutton Courtenay Parish Council has the following comments to make regarding the environmental statement.

Whist maintaining its huge concerns, Sutton Courtenay Parish Council (SCPC) is responding, as a 'consultation body' to the letter (dated 28 August 2024) sent on behalf of the Secretary of State requesting that SCPC either provides information on the scope, and level of detail, of the information it considers should be included in the Environmental Statement (ES) or confirms that it has none.

While Thames Water Utilities has produced a very comprehensive proposed scope of the ES in its Scoping Report (https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/WA010005/WA010005-000010-WA010005%20-%20Scoping%20Report.pdf and the several accompanying tables and figures), SCPC is concerned that the level of detail of the assessments and data used for modeling must be fully referenceable, traceable, justified and contained within appendices to the ES so that SCPC is able to follow through to understand the veracity of the conclusions. Indeed, the modelling software packages (both for inundation and traffic) should be justified as to why they are considered appropriate and fit for purpose.

Objections raised by SCPC and others should be addressed in a justifiable manner and not with 'hand waving' arguments. In particular the detail for the items listed below should be compliant with our request for clarity, referenceable and traceable details with all data included as appendices.

a. The local construction impacts of noise, dust, air pollution and traffic disruption. This should include clarity on the rail and road access to the reservoir site, an assessment of the amount of freight to be imported and the quantity of construction-related traffic and its impact on the already overloaded local transport network.
b. The Ecological impact on the immediate locale, the wider agricultural area and rural settlements.
c. The biodiversity net gain (BNG) post-development relative to the existing baseline habitats.
d. The size of the carbon footprint of the construction project and the impact the reservoir would have on the landscape and local communities.
e. The ES should assess the impact on each affected parish with particular regard to flooding and traffic - in the construction and operational phases for both normal and accident conditions.

In addition, SCPC requests that The SofS give considerable weight to the fact that the Environment Agency’s recommendation to the DEFRA Secretary of State, on which the successive SoS have not taken in to account since December 2023, is that the plans should not be approved in their present form. This has been identified as Nationally Significant Infrastructure Projects which will have a huge local impact for years to come and therefore local concerns should be addressed comprehensively.

Kind regards, [redacted]
- - -
[redacted]
Clerk & RFO, Sutton Courtenay Parish Council
[redacted] www.suttoncourtenay-pc.gov.uk
[redacted]

Planning
Head of Service: [redacted]

Vale of White Horse District Council

FTAO [redacted]
on behalf of the Secretary of State
Environmental Services Operations Group 3
Temple Quay House
2 The Square
Bristol
BS1 6PN

[redacted]
registration@southandvale.gov.uk
[redacted]
Abbey House, Abbey Close
ABINGDON OX14 3JE

By email only

25 September 2024

Your Ref: WA010005
Ref: P24/V1874/3PC

Dear [redacted],

Proposal: Scoping consultation
Location: South East Strategic Reservoir, Land between East Hanney, Steventon, Marcham & Drayton
Consultation End Date 25 September 2024

Thank you for consulting the Vale of White Horse District Council (The Vale) on 28 August 2024 regarding a Scoping Opinion for the Thames Water South East Strategic Reservoir Option (SESRO).

The following comments are based on the proposal submitted. Should the final scheme be revised compared to that currently submitted, it is considered a further scoping opinion may be required.

It is recommended that the Environmental Statement (ES) required for the proposed development should cover the format proposed by the applicant. The Vale has considered the scope of each chapter for the ES and provides advice below as to where that scope should be widened and other matters to be scoped into the ES.

Environmental Impact Assessment (EIA) should be undertaken in accordance with current legislation, national, regional, local and neighbourhood plans as relevant to the environment. The ES should demonstrate the ways in which it complies with that requirement.

To assist the applicant, the relevant documents of the Development Plan for the Vale of White Horse District should be considered and comprise the following:

Vale of White Horse Local Plan 2031 Part 1 (adopted December 2016)

Vale of White Horse Local Plan 2031 Part 2 (adopted October 2019)
Drayton Neighbourhood plan (adopted July 2015)
East Hanney Neighbourhood Plan (adopted May 2024)
Steventon Neighbourhood Plan (residents voted for adoption 5 September 2024)
Sutton Courtenay Neighbourhood Plan (adopted May 2024)
Wootton and St Helen Without Neighbourhood Plan (adopted December 2019)

The following from South Oxfordshire is also relevant:

South Oxfordshire Local Plan 2035 (adopted December 2020)
Culham Neighbourhood Plan (adopted June 2023)

The Vale considers the following matters should be addressed in the ES.

Baseline Data
The Scoping Report partly assesses the baseline scenario based on surveys that are yet to be completed. Whilst the Vale understand it takes time to collate baseline evidence, this does make assumptions within the Scoping Report difficult to assess and it is considered that scoping needs to remain under review until all the baseline evidence is collated.

Need and Alternatives
3.2 Alternatives to the Proposed Project
The Scoping Report does not provide details of reasonable alternatives.

The ES should include detailed consideration of reasonable alternatives to the development proposal, including National Infrastructure Commission (NIC) recommendations from 2018[1] for a water transfer network (national water grid) to move existing supply from where it is plentiful to where it is needed.

Furthermore, the Revised Draft Water Resources Management Plan 2024 identified that planning for a 100 Mm3 reservoir would perform better from an environmental standpoint, while the 150 Mm3 reservoir resulted in a plan which was more resilient to risks. Thus, the smaller variant should be considered in more detail as an alternative option.

Evidence is also required on why alternative less costly and less damaging options which could meet projected future water supply demand have been rejected or shelved. These should be considered in the ES with detail provided of the options and choices made.

3.3 Alternatives considered within the Proposed Project
The Vale consider options are not evidence led and it is not known if options are viable and practical. To appraise the impacts and benefits of any scheme, detailed environmental surveys are required to first identify the sites constraints and opportunities before entering the design stages of a project. With a scheme of this scale the need for accurate and detailed surveys are critical. As Thames Water have

[1] https://nic.org.uk/app/uploads/NIC-Preparing-for-a-Drier-Future-26-April-2018.pdf

not been able to gain access to a large proportion of the site, such essential surveys have yet to be completed to scope alternative options within the project as options relating to specific elements of the project contain very little technical information to make an informed view.

Furthermore, it is noted that the scoping boundary is defined as land 'to potentially be required either temporarily or permanently for the construction and operation of the Project' (2.2.2), but the boundary does not include land to the south of the railway where the recent public consultation included an option of constructing a road. The boundary should also include land options for a Wantage and Grove railway station as a railway station may be required as part of this project.

The ES should also address the effects of reconstructing the Wilts and Berks canal as it may be necessary to construct it as part of this reservoir project.

Paragraph 2.7.7 renewable energy doesn't mention existing renewable energy generation that will be lost from this project. The reprovision of renewable generation on site and associated impacts including landscape and visual and biodiversity should be covered.

Consultation and Engagement

4.2 Consultation Process for the SESRO Project

The Vale considers engagement through Technical Liaison Groups (TLG) has not been effective in assessing and evaluating environment topic areas due to the absence of technical information to make an informed view.

4.3 Engagement regarding EIA Scoping

The Vale disagrees with the statement at 4.3.1. Most TLG meetings to date have not focused on Scoping and baseline surveys in any depth, despite a request from the Vale for such information, particularly in relation to flood risk, ecological and arboriculture matters.

EIA Methodology

The Vale has no comment to make on this chapter of the Scoping Report.

Proposed Scope of Assessment: Environmental Statement Chapters

6 Water Resources

Detailed flood risk assessments and drainage strategies in accordance with the latest national and local standards will be needed to inform the ES.

There is only one current gauge on the River Ock catchment, located in Abingdon, to provide good quality river monitoring data. It would be useful if more information is provided on where other gauges will be located to verify hydrology calculations for various storms in some of the smaller watercourses as the Vale understand that these will be installed. The sooner these are in place, the better the level of data that can be provided as it takes time before a suitable record length can be achieved.

Assessment on water quality associated with proximity to the Abingdon sewage treatment works should consider upgrading the treatment works to reduce the risk of

overflows rather than focussing on the location of the intake / outtake pipe and proximity to the works outfalls.

Table 6-12 and 6-13 should ensure that hydrogeology is scoped in for assessment in relation to proposed flood plain storage areas. One concern is the interaction and interrelationship between groundwater storage and flooding from superficial deposits and fluvial flooding as it is likely the case that there is flow in both directions between watercourses and groundwater, which rises to ground levels in many locations close to the position of the reservoir. This partially shows on surface water flood mapping where large extents of fields in this area show water ponding on the surface and this is a frequent occurrence due to the relatively flat area and potential for high groundwater particularly during winter months.

Whilst the report confirms that rainfall will be taken out of the system due to the footprint of the proposed reservoir, so will the reservoir remove a larger footprint of superficial secondary aquifer with storage potential and provide a large barrier to groundwater flow. Given the widespread flooding of field surfaces as highlighted on surface water flood mapping, the effect of direct rainfall reductions will be less pronounced as there is the potential for ignoring the effect that surface water ponding on fields currently has and this needs to be considered.

The Vale understand that groundwater modelling and fluvial modelling are both proposed and being progressed, however there also needs to be suitable consideration for how the various processes including surface water, fluvial and groundwater interrelate, to ensure suitable analysis. Assessment of the effect of development is only as good as the baseline data and this needs to be robust before conclusions can be drawn and potential mitigation measures explored and assessed.

Furthermore, any hydraulic modelling needs to be fully calibrated using the latest survey, rainfall, and hydrogeological data to ensure robust baseline cases are represented before consideration is given to the impact of the development. Impacts must consider all aspects including construction activities and any temporary situations that may be created.

It is considered that the risk of dam breach / collapse should be scoped into the EIA given the potential serious consequences even if the likelihood is considered low.

There is an area safeguarded (under Policy IN7) in the Local Plan 2031 for flood alleviation to provide much needed flood defence upstream of Abingdon. Consideration should be given to ensure that any proposal includes for reducing flood risk to Abingdon.

7 Aquatic Ecology
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

8 Terrestrial Ecology
It has been acknowledged during stakeholder events that c.80% of the proposed development area cannot be accessed for ecological surveys. This represents a fundamental evidence issue and underpins a general concern over how conclusions presented have been reached.

For some species groups (bats, hazel dormice, reptiles), desk-based habitat suitability modelling is taking place to try and overcome survey issues - such as lack of access. This modelling has not been completed, or subject to independent review. As such, decisions on scoping appear to have been made in the absence of this evidence.

Furthermore, the Vale has the following points of disagreement in respect of Table 8-6 of the Scoping Report.

- Hazel dormice (construction and operation) - from a cursory view it seems unlikely that the species is present, however it does not appear that any surveys have taken place, and desk-based species modelling has not been completed. For a proposal of this scale, this is concerning. The development will remove a significant part of the landscape's hedgerow resource, reducing habitat extent and connectivity if hazel dormice are present. Considering their status as a European protected species, it would be more in keeping with the precautionary principle to assume presence (as has been done with Natterjack Toad).
- Local Wildlife Sites (LWS) have been screened out from operational impacts. There is a LWS within the project boundary, and others within 100-500m of the project boundary. A key benefit of the scheme is increased recreational provision for the area. As such, it is reasonably possible that LWS within or close to the development would be subject to increased recreational pressure (negative) - depending on layout of permissive paths/Prow.
- Operational impacts have been screened out on Great Crested Newts (GCN). GCN are present within the onsite LWS and therefore could be subject to negative recreational impacts also. Furthermore, wetland/pond habitat creation and ongoing management could have a positive impact, which should be considered.
- Similarly to GCN, natterjack toads, reptiles and other amphibians are assumed to be present but no account of increased recreational pressure (e.g. dog walking, littering, etc.) has been considered. This is an omission that needs to be included for assessment.

9 Landscape and Visual Effects
The approach using the 3rd Edition GLVIA is appropriate, and the Landscape Visual Impact Assessment (LVIA) work should be used to guide and inform the design of the SESRO scheme to ensure it is a landscape led project.

During the timescale of the EIA process, there is likely to be changes in the current policy documentation such as the Joint Local Plan (JLP) and associated evidence bases, changes to the North Wessex Downs National Landscape Management Plan and further changes to Neighbourhood Plans. Other documents are likely to change such as British Standard guidance in relation to trees and Landscape Institute Technical Guidance.

JLP documentation includes new and updated evidence base and guidance including Landscape Character Assessment, Dark Skies, Tranquillity, Renewable Energy, as well as updated Green Infrastructure Guidance, which should be referenced in the ES.

G.3 Baseline
The JLP and associated evidence base is currently being produced, which includes Dark Skies, Landscape Character. An updated North Wessex Downs National Landscape Management Plan and associated documentation are also expected. National Character Area Profiles are also now digitally based, which should be used rather than the (2013-2015) dates stated.

G.5 Timeframes for Assessment
Care will be needed for this due to the length of the Construction phase and how it differs through the years of construction. The programming of the construction works and phases needs to explore how it can help provide areas suitable for advanced mitigation planting.

G.5.3
While an assessment of effects on night skies, in their own right, or an environmental lighting impact assessment has not been scoped in, there does need to be the involvement of a Lighting Engineer to carefully design any lighting scheme and minimise light spill from any built form, this includes possible lights on towers, light from buildings, water sports club house, visitors centre and café, especially if these are located at a higher level to relate to the water level of the reservoir.

Reference should be made to the JLP evidence base with regards to which lighting zone the reservoir sits within and the associated Lighting Design Guide with regards to reducing light pollution and the impact of lighting on the local landscape.

G.7 Assumptions and Limitations: Landscape and Visual Baseline and Assessment
The Vale queries the exclusion of assessment of private viewpoints (including residential amenity assessment) in paragraph G.7.2. GLVIA paragraph 6.17 states that in some instances it may be appropriate to consider private viewpoints, mainly from residential properties and in the case of the SESRO project, the Vale expects representative viewpoints for residential properties to be used.

It is also noted in Appendix G Table 10 that the description of the viewpoints include that some are from properties, which is contradictory to G.7.2.

G.10 Visual Effects
The appendix does not state what type of photography or visualisation is to be undertaken or reference Guidance Landscape Institute, (2019), Visual Representation of Development Proposals Technical Guidance Note 06/19, although this document is included under G.15 References. The Vale is also aware this guidance is currently under review and may be updated during the timescale of the ES production.

The Vale expects that all viewpoints, including potential illustrative viewpoints, to be Type 4 visualisations Photomontage/ Photo wire (survey/scale verifiable) in addition

to those proposed as Photomontage locations. Wireframes for all viewpoints would allow everyone to understand the extent and height of the reservoir and where embankment tops and associated built development sit in views with relation to the vegetation, landform, skyline etc. Due to the lack of visual references with regards to extent and height of the proposals, it would be difficult to visualise the proposals without wireframes.

Furthermore, Figure 9.3 *ZTV and Potential Viewpoints and Photomontage Locations* is difficult to use due to the base map and the density of the ZTV shading. It is difficult to see where proposed viewpoints are located. It would also help to have the embankment footprint on the plan and at a minimum the whole of the extent of the main reservoir and associated built form should be included in the viewpoint. Adjacent viewpoints are likely to be needed to cover the extent of the view to the reservoir.

The Vale expects a greater number of viewpoints to assess the intake/outtake structures and the relocated outflow from the sewage works from both the National Thames Path, but also the Jubilee Junction path including the loop north from the Junction to Abingdon Marina. While these paths are not on the Prow maps, they are well used and need to be assessed. There will be impacts from the north and south along the National Thames Path but also effects on the river users which also need to be included for assessment.

It is noted that apart from the National Landscape, most views are within the 1km offset from the scoping boundary. Views of the Downs and the Corallian Ridge are an important feature of the local landscape, and it is hard to highlight where views of the reservoir will be able to be achieved from the wider Prow and road network due to the scale of the ZTV. It may therefore be appropriate to create physical features on site to represent the extents and height of the reservoir embankment to provide a visual aid when assessing the wider landscape for viewpoints, similar to how the Silos at Robertson Envirosystems have been highlighted on the viewpoint plans.

Viewpoint 1 indicates how the Downs form a backdrop to views within the local landscape, and viewpoints to the east illustrate views towards the higher Corallian Ridge to the north. There are likely numerous places in the ZTV where these views are part of the daily life of the local people.

Views of the site, the repositioned road, railway sidings are likely to be achieved south of the railway from the footpath network around and to the north of Grove Park Drive. These Prow routes to the west of viewpoint 12 are likely those that provide the connection between Grove and Wantage northwards.

Representative viewpoint D indicates views lost from the existing network of Prow within the SESRO redline area. There should also be an assessment of views from the reprovision of these lost footpath routes as part of the LVIA.

G.13 Assessment of Cumulative Effects

The reservoir will result in the loss of a solar farm and there is an expectation that a reprovision of electricity generation lost from the removal of the solar farm will be part of the reservoir assessment. The reprovision of the electricity generation will result in

its own landscape and visual impacts which may or may not be cumulative in the understanding of Cumulative Effects, but nevertheless will be an additional impact of the proposed reservoir on the wider landscape.

Trees
The Vale is satisfied that Appendix F outlines an appropriate Arboricultural Survey Strategy. The Forestry Commission should be consulted to confirm whether or not any restocking notices served under the Forestry Act exist within the site boundary. If it is the case that a restocking notice exists and that plans would prevent any required planting, this should be included in the Arboricultural Impact Assessment.

10 Historic Environment
The following comments relate to built heritage assets only, as archaeology will be covered by the Oxfordshire County Council Archaeologist.

The Vale is generally satisfied with the approach outlined in the Scoping Report for built heritage. The list of relevant legislation, policy, standards, and guidance includes relevant guidance for heritage impact assessment which are to be employed for the HIA element of the EIA.

Chapter 10 sets out the current known baseline of built heritage assets, taken from a high-level assessment. Figures 10.2 and 10.3 and Tables 23 and 24 within the EIA Scoping Report Appendices provide a list of all known assets within the study area and the 2km scoping area. All the assets identified are to be scoped in.

However, there is concern the 2km scoping area has been drawn based on distance rather than local conditions, in particular topography which would afford some wider extension to areas of higher ground over this particularly flat part of the district.

It is noted that at paragraph 10.5.14 of the Scoping Report, that a 'preliminary setting study' may scope out some assets. There is no methodology outlined for this study and it is recommended that the results of this are included within scoping to agree any scoped-out assets. The Vale is concerned that assets could be scoped out between this scoping process and the submission of a final ES which have not been agreed or appropriately assessed given a lack of methodology for this process.

The Vale also consider that Nuneham Courtenay Registered Park and Garden (RPG) and Conservation Area (CA) are scoped into the study. The topography of the RPG and CA, whilst outside the 2km scoping area buffer is such that the area falls within the ZTV and is likely to have a current visual relationship with the site. Given the nature of this asset as one intended and designed to have commanding views across a large area of the Oxfordshire Countryside and landscape, this should be scoped in to ensure any designed views or visual relationship is understood at the outset in order that any significance that derives from the contribution the site makes can be duly considered and preserved.

Paragraph 10.7.4 notes that the scheme is likely to result in a change to the local landscape that will 'change the legibility of the settings of assets'. It is strongly recommended that a methodology for assessing setting is agreed and that there is

appropriate overlap with the LVIA to consider the landscape contribution to setting and potential impacts.

At paragraph 10.8.8 there is a note that adverse effects will be mitigated but impacts must first be reduced as far as possible with impacts re-assessed and mitigation used as a last resort for residual harm. It is concerning that assumptions are being made as to the level of impact and accepted mitigation in advance of the appropriate level of assessment being done.

10.8.10 – The methodology should include crossover with relevant groundwater impact modelling and assessment to ensure that assets impacted by the changes to ground conditions will be protected throughout the operation period. This will be crucial to assets near the embankments and pipelines as well as those in the existing floodplain which is going to be increased, such as Marcham Mill and listed bridge.

Overall, a clear methodology for assessing setting and the contribution that the site and scoping area makes to heritage assets is needed and despite being just outside the 2km buffer of the site Nuneham Courtenay Registered Park and Garden and the Conservation Area should be scoped in.

11 Traffic and Movement
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable. Notwithstanding, the proposed 5 arterial routes described under 11.4.6 illustrated in Figure 11.1 raise some concerns.

There are concerns with the proposed route via junction 15 of the M4, which would route through A419, A420 and either route though Kingston Bagpuize, Marcham - a village with an Air Quality Management Area (AQMA), and Frilford Lights junction. This route would be unacceptable for construction traffic. It is also unclear why the entirety of the A420 between Swindon Borough Council and Oxford City's ring road is identified.

The same issues arise for Kingston Bagpuize, Marcham, and Frilford Lights junction for the proposed A40 / A415 route. Additionally, this would add SESRO traffic through Ducklington, Standlake and New Bridge (a 13*th* century bridge). This route would be unacceptable for construction traffic.

Thus 2 (M4 junction 15 and A40/A415) of the 5 routes identified for construction traffic are unsuitable and should not be considered for construction traffic. It is also unclear why the section of B4017 Steventon Road between the A34 and Steventon is identified, as it does not provide access to the A34. Furthermore, the routes shown to pass through Abingdon (a town with an AQMA), Drayton, Steventon, East Hendred, Wantage, and Grove would be unacceptable for high construction traffic demands.

Furthermore, the consultee comments table (Table 11-2) does not capture the Vale's request that the SESRO scheme supports the provision of a railway station from the rail sidings near Grove. Preference would be for the rail sidings to be designed and constructed as a permanent structure to then be repurposed for a new Wantage and Grove railway station. Nor do they capture the concerns raised regarding traffic impacts both for construction traffic and operational traffic from the SESRO site.

Lastly, the table does not capture the need identified by the Vale for the SESRO scheme to support the delivery of the Wilts and Berks Canal restoration.

Alongside further development of PROW and active travel to the scheme (as identified in 11.10.1), further work needs to be undertaken to explore public transport provision for SESRO's Masterplan for both rail and bus services. Public transport, dedicated SESRO employee transport, and active travel opportunities should also be sought for the construction phase of the development.

12 Noise and Vibration
The Vale is generally satisfied that the approach outlined in the Scoping Report is acceptable, but there are two areas for amendment.

The decision to rule operational noise from the pumping station and intake/outfall structures is based on assumed adoption of good design practice, without clearly identifying details of those good design measures. To rule these noise sources out without the mitigation measures being clearly specified appears unreasonable. It is a legitimate expectation that EIA shall identify and specify such mitigation.

The decision to rule out noise from operation of valves is also based on assumptions on the siting of the valves. However, the scoping report states that no details are available regarding the presence or location of the valves. To rule these noise sources out with no details being available also appears unreasonable. The ES should identify their location and specify any mitigation.

13 Air Quality
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

14 Geology and Soils
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

15 Materials and Waste
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

16 Carbon and Climate Change
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

17 Communities
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

18 Human Health
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable.

19 Major Accidents and Disasters
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable but consider reservoir dam breach / collapse should be scoped in and requests dam break analysis work to be undertaken ahead of finalising embankment design and for that analysis to be included in the ES.

The safety of the reservoir and its water quality, together with local impacts of its construction are not adequately addressed in the Scoping Report and this needs to be fully detailed. Further assessment is also required on emergency discharge as current proposals to discharge into the river Thames will have an impact on residents and the river.

20 Cumulative Effects
The Vale is satisfied that the approach outlined in the Scoping Report is acceptable and welcomes further engagement and review on updated lists for cumulative development during the production of the ES.

Aspects Proposed to be Scoped In and Out of the EIA
Table 21-1 Scoping Summary
The Vale is in general agreement with the Scoping Summary on Topics to be in and out as set out in this table, save for the following which should be scoped in:

Chapter 18 – Air Quality (operation).
Chapter 19 – Reservoir / Dam collapse (operation).

To demonstrate that topics have not been overlooked, where topics are scoped out prior to submission of the application, the ES should clearly explain the reasoning and justify the approach taken.

Summary of council response
Vale of White Horse District Council is broadly in agreement with the Environmental Statement topic areas set out in the Scoping Report August 2024 and the identified areas of environmental impact subject to the above technical matters being addressed and other matters that should be scoped into the EIA.

Yours sincerely,

[redacted]

[redacted]
Major Applications Team Leader

Your ref: WA010005
My ref: NSIP/2024/WA010005

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25th September 2024

Dear [redacted]

PROPOSAL: Order granting Development Consent for the South East Strategic Reservoir Option (SESRO)
APPLICANT: Thames Water Utilities Limited

Warwickshire County Council has reviewed the proposed ES scoping information available on the website and can confirm that the County Council has no comment to make on this NSIP proposal.

Yours sincerely

[redacted]

[redacted]
Development Management (Highways)
Planning & Environment
Environment, Planning & Transport

Working for Warwickshire

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Date: 19th September 2024

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Dear Ms Park

Application by Thames Water Utilities Limited (the Applicant) for an Order Granting Development Consent for the South East Strategic Reservoir Option (SESRO) (the Proposed Development).
Scoping Consultation.

I refer to your email dated 28th August 2024 consulting Warwickshire County Council on the request made by the applicant as to the scope, the level of detail, of the information to be provided in the ES relating to the Proposed Development.

I am responding on behalf of the Minerals and Waste Planning Authority to Chapter 15 of the EIA Scoping Report dealing with Materials and Waste. I have considered the chapter in terms of its potential implications for Warwickshire as an adjoining authority from the West Midlands Region and can confirm that I do not have any comments to make about the matters to be scoped in or out.

Yours sincerely

[redacted]

[redacted]
Senior Planner On behalf of Planning Policy

Working for Warwickshire