

# Policy and Programmes

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13 January 2026

Dear Sir/Madam,

## **STATUTORY CONSULTATION ON THE SOUTH EAST STRATEGIC RESERVOIR OPTION (SESRO) IN ACCORDANCE WITH S42 OF THE PLANNING ACT 2008**

**Consultation end date 13 January 2026**

Thank you for your correspondence dated 28 October inviting Vale of White Horse District Council (VWHDC) to comment on the statutory consultation materials ahead of the full submission for a Development Consent Order (DCO).

In compiling this response, VWHDC has had regard to your:

- Statutory Consultation Brochure
- Preliminary Environmental Information Report Non-Technical Summary
- Preliminary Environmental Information Report (PEIR)
- Draft Code of Construction Practice
- Draft Design Principles
- Delivering a Sustainable Legacy for People and Nature
- Map Book
- Guide to Consultation Fact Sheet
- Reservoir Safety and Operation Factsheet
- Land and Property Factsheet
- Videos – “How the reservoir would work” and “How we would build the reservoir”
- Statement of Community Consultation
- Section 47 Notice
- Section 48 Notice
- Equality Impact Assessment
- Preliminary Transport Assessment Report

**The following comments are in direct response to the above documents and do not override or change the council's stated opposition to this project.** VWHDC also fully support the comments of the other Host Authorities of South Oxfordshire District Council (SODC) and Oxfordshire County Council (OCC) and have worked collaboratively with them in preparing this response.

## **Principle of Development**

Thames Water's Water Resources Management Plan (WRMP) was approved by the Secretary of State in September 2024. Whilst the plan was challenged by a Judicial Review, this was dismissed, and therefore the WRMP is a final published document, in line with Paragraph 1.4.5 of the National Policy Statement for Water Resources Infrastructure. The WRMP identifies SESRO as a Strategic Resource Option alongside the Severn to Thames Transfer (STT) and Water Recycling Infrastructure in London. It also identifies two other options, the Thames to Affinity and Thames to Southern Transfer schemes, which would serve a wider area than the TW WRMP. As such, SESRO is a water resource infrastructure scheme within a final and published water resources management plan, and therefore in terms of a future application for a DCO, the 'need' for the scheme is established.

However, it should be noted that VWHDC has maintained an objection to the inclusion of SESRO within the plan throughout the process, particularly related to the excessive costs (which have significantly increased), the size, effectiveness, time to construct, environmental impacts, lack of clarity on how the water will be distributed and the impacts of related pipelines.

VWHDC acknowledges the inclusion of the scheme within an adopted WRMP, however, the council maintains an objection to the reservoir project given ambiguity on costs and the environmental, economic and human impacts caused by the proposals. Furthermore, VWHDC maintains concerns over the need for the proposal in this location, and given the significantly increasing costs whether it is the best option of those presented in the adopted Water Resources Management Plan to address the need for water in the South East.

Furthermore, VWHDC consider that this statutory consultation is premature, given the incomplete survey information across the board and lack of detail included in the consultation documents. This has prevented a full evaluation of the impacts of the scheme and must be taken into consideration when addressing the below comments.

The below comments follow the chapter order of the published PEIR.

## Chapter 3 – Consideration of Alternatives

Paragraphs 3.5.1-3.5.3 of the National Policy Statement for Water Resources Infrastructure cover what resources can be considered an adequate assessment of alternatives in relation to water resources infrastructure. Paragraph 3.5.2 outlines that options appraisals used as part of the drafting and consultation of Water Resources Management Plans can be used to demonstrate how alternative options have been considered.

Chapter 3 of the PEIR describes the alternatives considered and gives an indication of the main reasons for alternative options being discarded or chosen.

One of the criteria in choosing the “best” option to take forward is consideration of the “best value”. Given the significant changes in cost of SESRO since the adoption of the WRMP (from £2.2 billion to up to £7.5 billion), it is questionable as to whether SESRO still offers the best value for money, compared to the other options presented. The council suggests that this should be something which is regularly reviewed, with the potential to look at other previously considered options when SESRO is potentially no longer the best value for money.

Thames Water have provided very little justification and information relating to whether creating several smaller reservoirs rather than the 150,000,000 cubic metre SESRO would have been a “better” approach. The published documents state that SESRO was the “best performing” option, alongside Severn to Thames Transfer, but there is no information on what metrics this was tested on. What would be useful is to see where SESRO was considered superior, but also where it was not. It is very unlikely that SESRO outperformed other options on all metrics. The lack of transparency of this approach as part of the consultation materials is very concerning.

Paragraphs 3.7.7 – 3.7.13 disregard each individual option, but also fail to consider whether several smaller reservoirs would achieve the goals of the WRMP. It is surprising that this “several small reservoir option” does not appear to have been considered, especially when it became clear that an additional 50,000,000 cubic metres of capacity was required for the Thames to Southern Transfer. This could have been addressed in a separate reservoir closer to where Southern Water’s needs arise.

## Chapter 4 - Approach to the Environmental Statement

This chapter of the PEIR presents key elements of the EIA process which have informed the preliminary assessment of effects as documents within the PEIR. This includes:

- Consultation and engagement
- The scope of the assessment

- The assessment methodology, including the assessment criteria and approach to defining the current and future baseline environment
- The approach to limitations and uncertainties
- The approach to mitigation
- The approach to consideration of complex and cumulative effects
- Consideration of trans-boundary effects

Para. 4.2.2 identifies stakeholder engagement which has been undertaken so far but does not provide detail regarding changes to the scheme as a result of engagement with stakeholders.

Para. 4.2.7 discusses the Consultation Report. It would be very beneficial if a draft of this document could be provided to VWHDC prior to submission to the examination.

There are some discrepancies in Table 4.1 regarding the scoping feedback from PINS.

Para. 4.3.11 relates to the potential ground-mounted solar panels in the west of the site. It states that there has been no glint and glare assessment for these, and no surface water modelling which includes the potential impact of these solar panels. This should be included in the future Environmental Statement (ES).

Para. 4.4.8 discusses a Draft DCO and Draft ES, VWHDC requests that these will be provided to stakeholders prior to submission for review.

Para. 4.4.16 mentions “Early Works” commencing in 2027. A schedule of these works, alongside what consents and licenses would be required should be provided as a matter of urgency. Where a consent or license is not required, it should clearly explain why that is the case, with reference to the relevant legislation.

The inclusion of both “moderate” and “major” effects in the definition of “significant effect” in Para. 4.4.34 and Table 4.5 is welcomed. However, there is a lack of clarity on how many “minor” effects would lead to a significant cumulative effect. Given the scale of the project, this should be clarified.

Para. 4.5 acknowledges that there are significant uncertainties and limitations within the PEIR, but there is little clarity on how the “reasonable worst case” scenarios have been reached in each circumstance.

In Para. 4.6.2, it states that mitigation “maybe proposed to reduce” adverse effects. This wording should be significantly strengthened so that there is at the very least an attempt to mitigate or remove all adverse effects where possible.

## Chapter 5 - Water Environment

As part of the current SESRO project, VWHDC understand that a groundwater model is currently under development, as documented in J696-ARB-XXXX-XXXX-TN-EN-000031 Groundwater Modelling - Data collection, Conceptualisation and Model Build (Revision C01, September 2025). VWHDC further understand the Environment Agency (EA) will be undertaking a detailed review of the groundwater modelling activity.

As part of the ongoing consultation on this matter, and in collaboration with OCC as Lead Local Flood Authority (LLFA), statutory consultee and in discharging its responsibilities to local services and residents, the councils have reviewed the above document with support from advisers at Wallingford Hydro Solutions. In this regard, areas of concern that VWHDC consider must be addressed within the model (and which are described in more detail below) include the following potential impacts and mitigation measures:

- Groundwater flood risk;
- Groundwater impacts upon fluvial and pluvial flood risk;
- Groundwater impacts upon ordinary watercourses and land drainage;
- Groundwater contribution to the risk of a reservoir breach;
- Groundwater contribution to the risk of subsidence.

On this basis, VWHDC expects the following matters to be taken into consideration by the SESRO Project and the EA. Paragraph numbers, where relevant, relate to the Groundwater Modelling report.

### **Generic Modelling Issues**

#### Groundwater Flood Frequency, Duration and Extent

*At Paragraph 1.1.2 ‘... no detrimental change to the frequency in which groundwater reaches the ground surface’.* VWHDC submit that the duration and extent of groundwater reaching the ground surface, in addition to frequency, are material outcomes that must be investigated within the modelling activity. Furthermore, consistent with the principles of Environmental Impact Assessment (EIA) and sustainability, opportunities for beneficial effects concerning flood risk and related matters must also be explored.

#### Boundary conditions and water budget

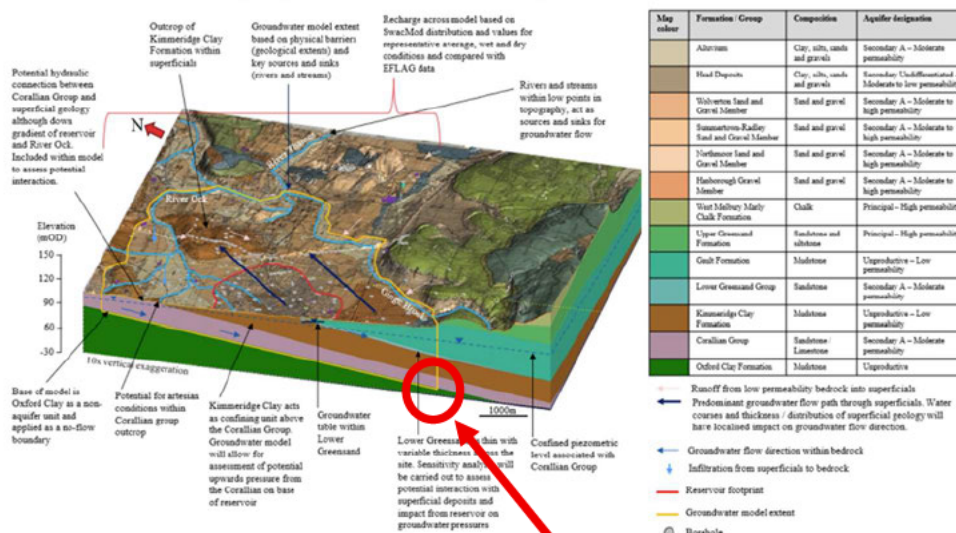
Based on Figure 3.1 and Paragraph 4.4.2 ‘... constant head boundaries will be applied to the model edge along the Corallian Group and Lower Greensand aquifers as they are considered a constant source of water within the model’. It appears that the geological boundary of the Corallian Limestone at depth (circled below) is proposed to be a constant head boundary.

As groundwater flow is indicated in Figure 3.1 as being downwards, towards this boundary, it would appear as if it will, therefore, act as a sink rather than a source and consequently may numerically remove water from within the groundwater model (and reduce modelled flood risk at the surface). If so, this may be difficult to quantify and be a potential source of numerical error. VWHDC expect this boundary (and others) to be independently checked using appropriate water budget calculations, to be presented as part of the model calibration exercise.

J696-ARB-XXXX-XXXX-TN-EN-000031

Revision: C01

Figure 3-1 Groundwater conceptual model – pre-development conditions



Confidential: Technical

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**Prescribed head boundary condition to be verified**

### Karstic Conditions and Rapid Recharge

Groundwater recharge is a key input (flux) to the groundwater model. Given the outcrop of Corallian Limestone, known for its karstic properties, VWHDC expect consideration of rapid recharge pathways within this groundwater body, in addition to seepage pathways. Currently, there appears no consideration of rapid recharge to the Corallian Limestone. The average annual and average monthly recharge data discussed in Paragraphs 4.4.3 to 4.4.5 do not appear to accommodate this. VWHDC are concerned that a potentially



rapid response in groundwater levels due to rapid recharge and low storage within the Corallian Limestone may influence flood risks at the surface.

### *Timescales for modelling flood risk and model timesteps*

Except for the Corallian Limestone, groundwater flood risk typically accumulates during extended periods of rainfall and therefore, over timescales of weeks and months, can establish saturated ground conditions that may then contribute to fluvial and pluvial flood risk. However, fluvial and pluvial flood risks typically accumulate over time periods of hours and days due to heavy (high intensity) rainfall. A groundwater modelling strategy is therefore expected that will allow groundwater flood risk to be accurately incorporated into model time steps for fluvial and pluvial flood risk modelling. The average annual and average monthly recharge figures discussed above and quoted in the model build do not appear to support such a strategy.

OCC and VWHDC have experience of local flood events that have previously been particularly challenging for local residents and local services. Flooding has affected areas of East Hanney, Marcham and Steventon on numerous occasions, from a mixture of sources, including fluvial, pluvial, groundwater influenced flooding and foul water flooding. There has been evidence of groundwater ingress into foul water systems in both Marcham and East Hanney and it is expected that Thames Water will act to reduce this risk. The interaction between all sources is sensitive in these areas and should be considered in future scenario modelling. Consultation with VWHDC and OCC on the inclusion of historical flood events, within future scenario modelling, is expected and considered essential. Furthermore, it is expected that observations of groundwater level and river baseflows, used to calibrate the groundwater model, will be available and appropriate to satisfy OCC's and VWHDC's concerns regarding local services and residents. For example, model calibration should be scaled to local concerns, not just regional scale flood mapping.

## ***Detailed Modelling Issues***

### *Groundwater Flood Risk*

The impact of elevated groundwater levels and the potential for groundwater flooding may prove to be important considerations for properties and services within the vicinity the reservoir. Therefore, the model sensitivity needs to be tested and proven to be of sufficient reliability to explore such issues in the future. The modelling should extend across the entirety of the Draft Order Limits, as expanded, and should take into account issues with drainage from south of the railway, as it does not appear that this area has been considered.

### Groundwater Impacts upon Fluvial and Pluvial Flood Risk

At Paragraph 3.1.2 'The Kimmeridge Clay and Gault Clay are assumed to be confining units which separate the Lower Greensand and Corallian Group aquifers with negligible'. VWHDC submit that the headwaters of the River Ock, including springs fed by the Corallian Limestone outcrop, are material to antecedent (hydrogeological) baseflows and hence must be considered in detail and certainly not considered 'negligible'. OCC and VWHDC have experienced flooding of local residences and services in the areas of East Hanney, Garford and Marcham and both councils expect to be consulted regarding to model build, calibration and simulated impacts of elevated groundwater levels and baseflow contributions to the River Ock and its headwaters.

### Groundwater Impacts upon Ordinary Watercourses and Land Drainage

Land to the west of the proposed reservoir and realignment of the River Ock is flat lying and poorly drained by ordinary watercourses and land drainage. OCC and VWHDC expect discretisation of the model grid, as well as field observations of groundwater level and baseflows, to be sufficient to prove model calibration and future model scenarios as being reliable in these areas.

### Groundwater and Reservoir Breach

An assessment of reservoir flood risk is mandated by the National Planning Policy Framework (December 2024). Within an assessment, the impact of elevated groundwater levels and pore water pressures upon the structural integrity of the reservoir must be considered. It is expected that the retention of sediment fines (silt and clay) required to optimise shear strength, compaction and associated geotechnical properties within the reservoir design will be considered.

It is further expected that such matters will be included in the design of any associated embankments proposed in relation to flood risk management. The advice of a suitably qualified geotechnical practitioner and geotechnical survey techniques, to inform the model build and its future use during design investigations, is expected. Additional commentary regarding reservoir breach, outfall and other accidents or disasters are covered later in this response.

### Groundwater and Subsidence

The potential for subsidence to impact local highways and local properties in the immediate vicinity of the proposed reservoir is of concern to VWHDC. In this respect and in common with limestones in general, the Corallian Limestone is known for exhibiting karstic features such as solution channels and solutionally enlarged fractures, formed by the chemical dissolution of limestone material. The present day occurrence of such



features in the groundwater model, using dual porosity and dual permeability parameters, is expected to be included in the groundwater model.

In addition, future subsidence risk caused by elevated groundwater levels and newly formed flow paths within the karstic bedrock must be explored. Obtaining the advice of a suitably qualified geophysical practitioner and using geophysical survey techniques to inform the model build and its future use during design investigations, is expected.

### General Comments

Table 5.1 states that SODC Local Plan Policy ENV4 (Watercourses) seeks to protect and enhance water resources. This is incorrect, and the policy actually refers to watercourses. This should be amended. The table also refers to Local Plan policies as “strategic objectives”, which is incorrect and therefore should be amended.

Table 5.1 also refers to various policies in VWHDC Local Plan Part 1 incorrectly, and fails to include policies from VWHDC Local Plan Part 2. This should be addressed.

Table 5.1 fails to recognise the relevance of Policies CE8 (Water Quality, Wastewater Infrastructure and Drainage) and CE10 (Pollution Sources and Receptors) of South Oxfordshire and Vale of White Horse District Councils’ Emerging Joint Local Plan 2041. This should be addressed.

In Table 5.2, the EA comments that culverted crossings should be avoided. This is a position supported by the councils. South Oxfordshire Local Plan Policy ENV4 (Watercourses) states: “Proposals should avoid the culverting of any watercourse. Opportunities taken to remove culverts will be supported.” Vale of White Horse Local Plan 2031 Part 2 Development Policy 30 (Watercourses) states: “Proposals which involve culverting a watercourse are unlikely to be considered acceptable.” Joint Local Plan Policy HP10 (watercourses) states: “Proposals should avoid the culverting of any watercourse. Opportunities taken to remove culverts will be supported.”

In Table 5.2, the EA commented that 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.”

We would be concerned if the development resulted in increased water pollution. Our [Water Cycle Study Scoping Report \(September 2024\)](#) identifies that the districts’ water environment is vulnerable at present in terms of water quality; and the condition of watercourses and the water industry is listed as a reason for many waterbodies not achieving WFD Good Status.

Table 5.6 does not include a measure in relation to changes to surface water or groundwater flooding for the area. There are also no definitive measures associated with the level of changes (e.g. minor, moderate or major).

Figure 5.8 only has monitoring points within the boundary, and it is not clear whether this will be expanded to include groundwater outside the DCO limits.

## **Chapters 6 and 7 Aquatic and Terrestrial Ecology**

Chapters 6 and 7 of the PEIR explore the developer's preliminary views on the potential for likely significant effects on notable ecological receptors. The matters scoped into this assessment are generally consistent with the feedback provided by PINS in their Scoping Opinion. A notable deviation from this is that culverts are cited as a default or preferred option for watercourse crossings, despite the feedback in ID 3.25 of the PINS Scoping Opinion.

The ecological findings of the PEIR are high level. The ecological surveys required to undertake the EIA process are not complete and may not be complete by the time that the ES is submitted to PINS as part of the examination process. This represents a fundamental evidence issue with the proposal and raises questions about the robustness of the process.

The incomplete nature of the ecological surveys is attributed to land access issues and survey series timing (for example, regarding bats, badgers, birds, habitats, water voles, great crested newts (GCNs), reptiles and otters). However, the PEIR does not make clear to what extent of the DCO area limits have been covered by ecological surveys, and whether the recent enlargement of the red line area has been accounted for in these surveys. For example, it is acknowledged that data searches were conducted only on the previous smaller DCO area limits, and not the now enlarged area. Since how the data and records search have guided assumptions made to date, this is again concerning.

Acknowledging these limitations, the PEIR has taken precautionary approaches to assessing any likely significant effects on terrestrial and aquatic ecology receptors through different pathways. This has resulted in large numbers of significant impacts anticipated, though this is likely the situation with an NSIP of this magnitude and nature. It is likely that further detail will reduce the number, type and receptors likely to be impacted in a significant way, though it is unclear to what degree that reduction is likely to be.

It is not clear, due to the incomplete nature of the information available, whether the enlarged DCO limits are appropriate for the likely ecological impacts which require mitigation and compensation – and what those mitigations and compensation actions are likely to be. It is known that the SESRO Ecology Team have draft proposals for this mitigation and compensation, but this does not form part of the PEIR in any meaningful detail for review and comment.

It is not possible to provide significant scrutiny of the evidence submitted as part of this consultation, due to its low detail resolution and incomplete nature. Indeed, it is suggested that the scheme can achieve at least 10% uplift in BNG within the DCO limits, though this is not evidenced or assessed in the submission.

The developer may wish to review document [NHL06](#) (Lowland Fens: Identifying Sites and Mapping Development Risk Zones in South Oxfordshire and Vale of White Horse) in the South and Vale Joint Local Plan examination library. This document is likely useful in considering groundwater impacts on Cothill Fen SAC, and other fen sites locally, as it maps the hydrological catchments of identified lowland fen sites.

The Oxfordshire Local Nature Recovery Strategy (LNRS) has recently been published and is now in effect. The DCO order limits interact with the LNRS in a significant way and will likely shape how further iterations of the strategy are developed. It is recommended that the masterplan and habitat creation proposals, as they develop, are reviewed against the LNRS and its priority conservation actions such that this scheme furthers the implementation of the LNRS.

Further evidence should be provided to demonstrate that the conclusions made in sections 6.6.4 to 6.6.7 are valid and should be considered alongside the information in Chapter 5 of the PEIR, related to ecological receptors and how the mitigation hierarchy is applied to them.

There are inconsistencies in section 6.6.8 regarding the “conservation value” of ditches, seemingly using multiple methods to assign “conservation value”, such as ‘fairly high’ at one point and ‘moderate’ at another. There should be consistency in value throughout the PEIR.

Internationally designated sites, such as Little Wittenham SAC are omitted from Table 6.8 with little explanation. Either these sites should be included or a statement given as to why they are not.

Between Section 7.4.5 and Tables 7.2 and 7.4 there are inconsistencies as to whether construction and operational effects on dormouse have been scoped in or out. This should be clarified. Given surveys have not been completed, it is unlikely that impacts on

dormouse can be scoped out until all surveys are finished. Justification should be provided either way.

Operational effects on Local Wildlife Sites have been scoped out in Section 7.4.5, albeit with some exceptions. Additional evidence and justification for this decision should be provided, particularly relating to Cowslip Meadows Local Wildlife Site, which is within the Draft Order Limits.

Disturbance, mortality and injury impact pathways with regards to badgers are present in Table 7.4, but are not identified for other species, such as bats, otters and water voles. Further clarity is required as to why these impact pathways have been scoped out.

The methodology outlined in Table 7.8 regarding veteran trees suggests that only trees with the draft order limits present on the Woodland Trust's Ancient Tree Inventory as being potentially ancient or veteran have been surveyed to confirm their status. It is requested that all trees with impact pathways to the scheme are surveyed to confirm their status.

Table 7.8 suggests a reduced number of Night-time Bat Walkovers (NBWs) in comparison to the number of static bat detectors deployed. Further justification should be provided to evidence why this approach is considered appropriate in line with best practice guidelines.

Table 7.8 states that 42 water bodies and 148 ditches were subject to a Habitat Suitability Index (HSI) assessment for great crested newts (GCN) within the draft order limits. However, it is not stated how many waterbodies have been identified within 500m of the scheme and connected to the draft order limits by suitable terrestrial habitat, this information should therefore be provided.

Table 7.8 also states that only 20 water bodies and 8 ditches have been subject to eDNA surveys for GCN. Further detail should therefore be provided regarding the scoping approach to water bodies and ditches for further GCN surveys, acknowledging that HSI assessments are only an indication of habitat suitability and cannot be fully relied upon to scope out further surveys.

Section 7.6.29 identifies habitats with the potential to support a wide range of invertebrates including moths. It is noted that other invertebrate sampling techniques have been undertaken, however, moth trapping has not been mentioned. An explanation of this approach should be provided.

Table 7.9 identifies Habitats of Principal Importance as high sensitivity receptors. The same table includes a number of designated wildlife sites as moderate sensitivity receptors. It is understood that the majority of these sites also have Habitats of Principal

Importance present. Clarification should be provided regarding the classification of these receptors, and this table should be amended as appropriate.

It is noted that 'important' hedgerows as defined by the Hedgerow Regulations 1997 are not included in Table 7.9. These receptors and their sensitivity should be assessed as part of the scheme.

Additional mitigation IDs AM-20 and AM-21 included in Table 7.13 should be reviewed with consideration of invasive species and measures that should be introduced to reduce their spread.

Section 7.4.5 should be reviewed to ensure consistency with Table 20.7 of Chapter 20: Cumulative Effects and consistently determine and clarify which designated wildlife sites have impact pathways with the scheme when it is in operation.

## **Chapter 8 - Historic Environment**

The PEIR has identified designated assets directly impacted by the proposed development, and designated and known non-designated heritage assets that lie within a 2km buffer of the draft Order Limits. There are a few non-designated assets that have not been identified at all, and these have been identified below and should also be assessed for their potential significance before considering if their loss is acceptable or can be mitigated.

The submitted Heritage chapter and appendices outline that the detailed significance and impact assessment will be completed as part of the ES process, in support of the submission of the main application; but this means that at present, robust impact assessment has not informed the proposals.

There will be a fundamental change to the character of a large area of the landscape where the embankments will range from c.15–27m above the ground levels. This sits in the context of several villages and towns set in a wide flat valley, all containing a vast array of heritage asset types that would be impacted by the scale of the proposals. In some areas, visibility between assets and towards the historic Ridgeway will no longer be possible across a wide vista of the landscape.

There is likely to be heritage harm resulting from the proposals. This will vary in degree from asset to asset. In some cases, it may be possible to provide some mitigation, but in others, the harm will be unavoidable due to total loss, particularly in the case of non-designated assets to be removed or due to the permanent changes to the character and contribution their setting makes to their significance. Without the further, more robust

impact assessment and detailed proposals it is not possible to quantify this harm at this stage, which suggests that this statutory consultation is premature.

Table 8.1 in Chapter 8 of the PEIR identifies the relevant national and local legislation and policy. In addition, the Adopted Conservation Area Appraisals for East Hendred, Drayton and Milton should be considered as well as any Character Assessments which form part of the evidence base for relevant Neighbourhood Plans for areas potentially impacted by the proposal.

The Zone of Technical Visibility (ZTV) and the photography within Appendix 9.4 demonstrates just how fundamental a change to the landscape this will have and on the manner in which many heritage assets are experienced.

### Further Heritage Assessment

There are a number of elements which should be further assessed as part of the ES.

In general, all non-designated assets are classified as low sensitivity, which in the context of this report VWHDC understands to be a low level of heritage significance, as the introduction to Appendix 8.2 states that value terms of significance will not be used at this stage to ensure there is no confusion about the significance of impacts. However, given that these assets have not been fully assessed at this stage, it is important that they are appropriately significance and impact assessed via the ES process. This is particularly important where the current plans indicate that the assets are proposed for demolition.

The following assets should be fully appraised specifically for their interest, given the potential for demolition:

- WWII Steventon Vehicle Depot and Pill Box
- Surviving locks and infrastructure of the Wilts and Berks Canal
- Homes for Heroes houses along Steventon Road, East Hanney
- Landmead Farm and Common Barn, both of which appear on the first edition OS map

An appraisal which provides a much clearer picture of their significance is needed before any agreement can be made on whether or not preservation by record is an appropriate mitigation. It may be that some assets, such as the locks or other canal infrastructure, can be re-provided elsewhere on site, for example as part of the re-directed Wilts and Berks Canal.



A more detailed consideration of the impact of the loss of views of the historic Ridgeway from rights of way and heritage assets should be included. The landscape visuals show that from a range of receptors, the embankment for the Ridgeway will exceed the existing horizon line, preventing the long landscape views towards the distinctive Ridgeway to the south. Whilst the full extent of the Ridgeway is not a designated heritage asset, as a landscape feature it has significant heritage interest, having directly influenced much of the development of the landscape around it. Likewise, it forms an important feature in the landscape that people orientate themselves by and this will be a fundamental change to the manner in which not only the Ridgeway itself is experienced in its wider setting, but also how assets are experienced in the context of the Ridgeway. A robust Setting Assessment, which considers the role of this landscape feature on the significance of heritage assets (and in turn how it is understood in its context) should inform the proposals. The current assessment has considered the specific designated assets that lie along the Ridgeway and of course they will not be physically impacted by the development, but as this will form such a large landscape change in an otherwise flat valley, it should be assessed in more detail.

### Transport and site access

A specific transport strategy for accessing the site should be provided which takes into consideration the listed and scheduled bridges of Ock Bridge in Abingdon and the Noah's Ark Bridge on the A338, as well as the tight bend on the A338 between the listed Venn Mill buildings.

Ock Bridge is on the route forming part of the temporary construction access for the transportation of the tunnel boring machine. This historic bridge should be fully assessed for its structural load capacity and width/turning spaces before it forms part of the assigned route for large machinery or prolonged delivery of heavy loads.

Likewise, Steventon Overbridge is Grade II listed and whilst not on the designated routes into or out of the site, it would be useful to ensure that appropriate means are in place to ensure this route is not used or overloaded during construction.

### Flood Risk

VWHDC are concerned that Marcham Mill already sits within the River Ock flood plain and has regularly experienced prolonged periods of flooding in recent years. Specific flood risk assessment, taking into consideration the risk to designated heritage assets, should be carried out for this asset. It is noted that Marcham Mill deliberately lies outside the draft Order Limits, but it is fully surrounded by the site boundary and in an area particularly sensitive to flooding and proposed for increased capacity. Given the

designation of these assets, they should be specifically assessed for potential risk, with appropriate mitigation built into the scheme, and potentially additional protection being provided for these assets.

The applicant should also consider where there is a chance of increased flooding risk or river bank erosion risk as a result of the Intake and Outfall Structure where this could impact the heritage assets in Culham and Sutton Courtenay that sit along the river. These risks need to be identified and appropriately managed.

### Intake and Outfall structure

No indicative plans for this have been provided. The scale of the structures needs to be impact assessed on setting of assets, particularly in Culham and Sutton Courtenay where a Registered Park and Garden sits near the Culham bridges. This intervention will alter the experience of the river, both on the river itself and also from the Thames Path. Many of these heritage assets are experienced from the Thames Path national trail and via the rural approaches, and as such the changes to the river in this area need to be fully assessed and carefully managed. The lack of detail at this stage would make this very difficult to do.

### Conclusion on the historic environment

The development is likely to have significant impacts on designated and non-designated heritage assets. At this stage, the full assessment of significance of the assets impacted is not complete and the full extent of the impacts is unknown, with detailed plans of the whole project also not currently available, which indicates that this statutory consultation is premature.

Archaeology is another critical aspect of the scheme but does not sit within the remit of VWHDC. VWHDC fully supports OCC's concerns with regards to archaeology as set out in their response to this consultation.

Further work is needed, to be certain all the impacts are understood and so that informed recommendations can be made ahead of, and at, DCO submission stage.

## **Chapter 9 - Landscape and Visual**

Impacts on landscape character and views are assessed in Chapter 9. Overall, the PEIR responds to comments and requests raised at the scoping stage. Requested information is either provided in the PEIR, or where it is not yet available, is proposed to be included in the ES. Outstanding information should be provided in the ES. It is disappointing that the statutory consultation has come prior to this information being available.

The following elements are most relevant in landscape and visual terms:

- The reservoir embankment with a crest of 81.7m AOD is the most extensive feature within the project. The embankment height varies between 15 – 27m and gradients of the outer face embankment are 1:9 but varies between 1:3 – 1:10 due to undulating slopes.
- Associated infrastructure comprising primary tower (32m high), two secondary towers (15m high), pumping station (L120m x W75m x D23m above ground), tunnels, a series of buildings associated with the Thames to Southern Transfer
- The replacement solar provision in the west of the site
- The intake and outfall structure and berm at the River Thames near Culham
- Buildings, car parking and lighting associated with the Recreational Lakes and Main Visitor Centre (northeastern edge near the entrance of the site), Water Sports Centre (eastern edge) and a Nature Education Centre (southwestern edge)
- Road and junction works

### Indicative Masterplan

The latest iteration of the Indicative Masterplan suggests that the previously proposed zoning of the reservoir edges (areas of nature, areas of sport etc) is no longer proposed but that the various hubs are re-arranged across the scheme.

The scheme design seeks a less utilitarian approach to reservoir design by proposing a more naturally shaped reservoir with shallower, partly vegetated embankments so that it better integrates into the surrounding landscape. The design is informed by site-specific landscape character assessment work and the preliminary assessment of impacts on landscape character and views including the North Wessex Downs National Landscape (NWDNL). It also seeks to create a new sense of place. This approach is supported.

The re-aligned East Hanney to Steventon road is shown green on the masterplan – this not only makes it hard to view on the plan but also gives the wrong impression of the infrastructure and its potential impacts on landscape character and views. This should be amended to a more appropriate colour.

The project description refers to 4m high noise bunds on the southern side of the East Hanney to Steventon road near the settlements to mitigate noise impacts on residents. Noise bunds can be incongruous features in their own right and cause landscape and

visual effects. The ES should provide further information on their design, appearance and impact on landscape character and views. It is also important that the sustainable travel options are designed in a way that allows their integration into the landscape, e.g. by the provision of characteristic boundary treatments, such as hedges and tree planting.

More detail should be provided on the appearance and workability of the floating solar. This should include further information relating to glare and how it is separated from other water users (e.g. sailing) and other matters that would result in additional clutter within the longer views of the site.

Indicative sections through the embankment are included in the Map Book. These are welcomed and respond to a request made at the Landscape & Visual Technical Liaison Group. Longer cross-sections should be provided, that show the reservoir in the surrounding landscape (i.e. the reservoir embankment in relation to the surrounding Vale landscape and the NWDNL escarpment).

It would also be helpful if the masterplan could indicate connections to the wider Public Rights of Way (PRoW) network, to ensure the proposed development connects, compliments and enhances the recreational resource.

### Viewpoints, Visual Receptors and Visualisations

A total of 59 viewpoints have been provided, which is an additional 26 from the 33 viewpoints identified at the scoping stage. However, as the design is still preliminary and design details are still being developed, some flexibility on the number of viewpoints and visualisations has to remain, to address changes in the design or any additional elements that may be required.

The LVIA assesses impacts on receptors rather than individual viewpoints, which better reflects impacts on people living in or moving through the landscape. The assessment also groups receptors together where they are expected to experience broadly similar effects. The groups comprise people using linear routes, local communities and other important groups (e.g. visitors to open access land). This approach is considered acceptable, but it should be used in combination with individual viewpoint assessments, which should also be provided in the ES.

Figure 9.1 (landscape & visual study area & 9.11 viewpoint/ photomontage locations (with ZTV) show the viewpoint locations in combination with the Zone of Theoretical Visibility (ZTV). The ES should also present viewpoints overlayed on the Illustrative Masterplan to make it easier to understand what will be visible in views. It will also help

to ensure that all relevant viewpoint locations and receptor locations are adequately considered, not just for the reservoir itself but also in relation to ancillary works.

Three different types of visualisations have been provided in the PEIR – wirelines (provided for all viewpoints), colour massing (nine viewpoints) and photorealistic visualisations (three viewpoints). The PEIR states that work on the visualisations has yet to be completed and a larger number of photorealistic photomontages will be provided at ES stage. These will show the development both at ‘winter year 1’ and ‘summer year 15’ stages, along with some construction photomontages. While this ongoing work is both required and supported, it is, however, disappointing that the statutory consultation has come too early for a full and robust assessment to be carried out.

The general approach to visualisations is supported. However, as with the viewpoint selection it is important that there remains some flexibility regarding the visualisations to address changes in the design, additional elements or particular concerns, should they arise.

#### Preliminary Assessment Findings

The assessment states under para 9.7 (project parameters, assumptions and limitations) that a worst-case scenario is considered within this assessment. Para 9.7.3 states that the assessment findings will be revisited in the ES, considering data available at that time and the design taken forward for submission. It is disappointing that this data was not available at the time of the statutory consultation, which further reinforces that the consultation is premature.

The methodology defines “*major and moderate effects as significant,*” but also states that the assessment of significance is not formulaic, and that professional judgement is a key part of the process. It also recognises that judgements need to be sufficiently explained. This approach is supported.

Preliminary assessments of likely significant effects are outlined in *Chapter 9.9. and Appendix 9.5 Preliminary assessment of effects for Landscape and visual*. The LVIA contains a lot of useful information but there is no short and easily accessible summary of significant effects on landscape character and views in the chapter itself. This should be provided in the ES.

#### Construction effects

Key construction effects are identified in Para. 9.9.6 and comprise general construction activities (machinery, compounds, stockpiles etc), excavation, extensive areas of earthworks and construction lighting.

Likely significant construction effects (major adverse) have been identified for “*the most localised and limited to visual receptors that pass within 1km of the proposed reservoir embankment, or within 100m of the proposed intake / outfall structure, and the landscape character area within which the most extensive construction would take place.*”

The PEIR identifies the following visual receptors to likely experience ‘major significant (adverse and long-term)’ construction effects to be: people using the Thames Path or the River Thames; people using local PRowS; people living and working within the villages of Drayton, Steventon and East Hanney; and people in individual properties (Bradfield Farm, Venn Mill, Marcham Mill and The Views).

Significant landscape effects during construction have been identified for landscape character areas within which construction would occur, or where construction would occur in close proximity. As a general rule, the closer the receptor to these areas of construction activity, the greater the impact.

It is important that predicted indirect impacts, such as displaced traffic or increased congestion, are also considered in ES.

### Operational effects

The preliminary assessment considers the main operational effects to be caused by:

- the appearance and form of the proposed reservoir embankment especially at year 1 and where its crest stands above the horizon, blocking or limiting distant views and changing the skyline (para 9.9.13)
- The appearance of the intake/outfall structure
- Other large infrastructure associated with the reservoir, particularly elements with significant elevation (eg reservoir towers, various centres/hubs, other water infrastructure)
- Other supporting infrastructure such as car park, new roads
- Operational lighting and the impact on the dark sky
- Large-scale changes in land use and field patterns
- Solar re-provision, both on water and on land
- Appearance of water within the reservoir

‘Major (significant operation effects)’ are expected to be localised and limited to receptors that pass within 1km of the proposed reservoir embankment, or within 100m of



the proposed intake / outfall structure, and the landscape character area within which the Project directly sits (para 9.9.17).

Visual receptors considered likely to experience ‘major significant operation effects’ are:

- People using the Thames Path between Abingdon and Culham, along with people using the River Thames itself, and people using permissive footpaths between Jubilee Junction and Abingdon Marina
- People living / working within three villages located within 1km-2km of the proposed reservoir, i.e. East Hanney, Drayton and Steventon
- People using PRoW at distances of up to approximately 2km from the proposed reservoir, including within the area of the proposed reservoir itself, in and around Drayton, and between the railway and the A338 in the south-west corner of the Site. People at three individual isolated properties within 1km of the proposed reservoir, i.e. Bradfield Barn, The Views, and Marcham Mill.

A likely significant beneficial effect has been identified for some PRoW users in the area who are expected to experience a more varied and elevated experience on the replacement walking routes along the reservoir embankment and crest.

The only landscape receptor considered likely to experience ‘major significant operational’ effects is LCA 13A Ock Lower Vale, a ‘host’ landscape character area (i.e. the landscape character area within which physical elements of the Project are proposed), most of which will be occupied and transformed by the proposed reservoir.

The preliminary findings also identify a number of ‘moderate’ but still ‘significant’ effects for several receptors during the construction and operational phases.

With both the design and assessment processes still ongoing it is too early to judge the accuracy of the assessment, however, the PEIR recognises that the Project will cause significant effects during construction and operation as it is expected for a development of this scale.

### Mitigation

Mitigation is embedded, meaning that it is considered as part of the design. Measures that have been included in the project to reduce adverse effects include:

- Measures to limit the visibility of construction activities
- A ‘landscape-led’ approach to design, so that landscape character, a sense of place and identity, and integration of the Project into its wider setting are given high priority.

- Strategically locating vegetation, habitats, and/or landforms to help reduce visual impacts of new infrastructure.
- Measures to protect trees (that are to be retained) during construction, prioritising the landscape and visual, ecological, and arboricultural benefits.

Work is ongoing and additional mitigation is being explored that may reduce significant adverse effects. Additional mitigation is identified in Table 9.19 (Additional mitigation identified to date in relation to the Landscape and Visual Assessment):

- *Implementation of construction design measures to reduce landscape and visual impacts and identify potential benefits during construction*
- *Phase the works to enable early establishment of woodland / structural planting between the development and sensitive visual receptors*
- *Long term management and maintenance of planting and habitats*

These proposed mitigation measures are supported in principle, but they are high-level at this stage and likely do not go far enough. Further information and detail should be provided in the ES and preferably provided in advance so stakeholders can influence appropriate mitigation measures.

### Effects on the North Wessex Downs National Landscape (NWDNL)

The development is not located within the NWDNL but within its setting. A preliminary assessment of effects on the special qualities the North Wessex Downs National Landscape is set out in detail in *Appendix 9.2: Preliminary assessment of effects on the North Wessex Downs National Landscape*. Overall, the assessment concludes that the project is unlikely to result in any significant effects on the National Landscape, its special qualities or statutory purpose.

However, some significant effects on landscape character within the setting of the National Landscape have been identified for both construction and operation (for project-level landscape character areas 12B, 13A and 9B).

Natural England (NE) is in the process of preparing a *Guidance on Landscape-led Reservoir Design*, but this is not yet published. However, NE have shared draft core principles with the applicant, which according to the PEIR have been taken into account in the design. The document will provide non-statutory guidance on how a landscape-led approach to the design of new reservoir projects can be achieved and sets out ways to ensure the design is responsive to landscape context and character.

With the NE's guidance not yet published it is difficult to judge to what degree the design aligns with these requirements. The Council is therefore be guided by Natural England's advice on this.

### Effects on Night Sky / Lighting

Para 9.7.3 states that at this preliminary stage design information on proposed lighting is limited and a precautionary approach has therefore been adopted for assessment of effects. Paras 9.9.21ff address effects on the night skies with baseline information on this being provided in *Appendix 9.1: project-level landscape character assessment*.

The assessment is supported by night-time photography for four viewpoints including one from the Ridgeway and one from the Wittenham Clumps, both of which are in the NWDNL.

The impact of lighting is a key concern in landscape and visual terms. The importance of the night sky and the impact of lighting is recognised in the PEIR. However, more detail on lighting and its impact on the night sky, landscape character and views should be provided in the ES. In particular, additional views should be tested.

### Glint & Glare

No glint and glare study has been carried out due to lack of design detail. The need for this is difficult to judge at this stage but should be reviewed at the ES stage. A glint and glare study might not only be required because of the large water surface but also because of the solar provision within the reservoir and the replacement of the ground-mounted solar. Further information should be provided in the ES, and if a study is not carried out, this should be robustly justified.

### Solar Provision

The proposed solar provision has been a late addition to the scheme and has not been reviewed by the Landscape Technical Advisory Group during the pre-application process in any level of detail. Currently the level of assessment is not great enough and is only covered by 6 viewpoints.

The location of the proposed solar raises a concern with regards to spreading the impact of the Reservoir to the west of the A338, the impact on landscape character and visual amenity and the cumulative impact on loss of views to the Downs and also the cumulative impact due to the increase of solar provision in the area.

The solar provision has not yet been fully integrated into the suite of documents which are currently predominantly reservoir focused. i.e. paragraph 2.4 Landscape character of the site does not acknowledge the location of the proposed solar farm and its proximity

to the River Ock. For example, LCA 12B: Western Middle Vale does not mention solar in the Project Specific Design Guidance and the guidance is at odds with the provision of solar in this LCA.

The amount of onsite solar should be maximised including floating solar, canopy solar over parking and boat storage and roof mounted solar to minimise the amount of offsite solar required.

There may be opportunities elsewhere to locate solar, in areas impacted by the scheme such as west of the site entrance road or broken up into smaller areas that will be less visually prominent. Thames Water has suggested that a variety of sites were considered and discarded – it is important that this process is appropriately interrogated, and alternative sites adequately assessed, so this should form part of the ES, and should be discussed with stakeholders prior to the DCO submission so the best possible site can be determined.

It is difficult to see the locations of the proposed viewpoints on Figure 9.1 Landscape and visual study area, especially the solar area. The viewpoints should be provided at a larger scale using 1:25000 base mapping so that the viewpoint locations in association with the PRoW routes can be better seen. For the solar scheme, more viewpoints are required including the PRoW and roadside causeway path between East and West Hanney, as views towards the solar development are likely to be visible from these areas.

It appears that Viewpoint 40 is taken below rise of the slope so less of the solar farm is visible. This should be addressed and the viewpoint changed if so. Viewpoint 42, view southwards towards solar farm is also required. Viewpoint 44, this is north of the River Ock but there should also be a viewpoint south of the River Ock. Discussions should be held with stakeholders to identify appropriate additional viewpoints.

To the south of the road there have been two previous solar application appeals dismissed P15/V0169/FUL and P14/V0552/FUL. These appeals were predominantly dismissed due to the impact of solar and associated mitigation removing views to the North Wessex Downs National Landscape and the impact on landscape character and lack of detractors in this area. The reservoir proposals remove the long-distance views towards the National Landscape and the solar development in this area would further reduce the availability of views towards the National Landscape spreading the impacts of the proposed Reservoir scheme westwards across the A338. VWHDC note the proposed solar panels are stated to be 4.5m high. This proposed height of the solar panels for offsite provision is a specific concern with regards to the proposed visual impact of the solar and any associated mitigation.

There is currently a solar farm in the planning system P24/V2698/FUL abutting the northern side of the Garford solar provision. The southern extent of this solar farm, follows the vegetated boundary of the River Ock which provides a natural boundary of the site, minimising the impact of solar to the south. The reservoir solar area is proposed to be located either side of the Garford road extending solar development to the southern side of the P24/V2698/FUL solar farm. Cumulative impact includes sequential impact as the PRow routes pass through and adjacent to a number of areas of solar development.

With regards to the Cumulative schemes listed in section 9.6.29. this will need to be monitored for changes between PEIR and EIA stage. It is expected that the P24/V2698/FUL Solar Farm Application will be determined in this timescale. There is also the Denchworth Solar Farm (P23/V2673/FUL) to the south west and the P21/V3395/FUL Solar Farm which abuts the site to the south.

Other cumulative developments include the HIF Didcot project including the construction of a bridge over the Thames. There is also the strategic housing allocation at Culham and redevelopment of the Culham Campus.

Appendix 9.2 covers the preliminary assessment of effects in North Wessex Downs National Landscape. The solar farm and associated mitigation will also have an impact on the availability of views towards the North Wessex Downs. This needs to be covered in the assessment. Currently the assessment is focused on the impact caused by the SESRO scheme and does not also include the impacts of the solar scheme.

### Intake/Outfall Structures

The Intake/Outfall structures at the Thames near Culham also require additional viewpoints, including an additional viewpoint from the Thames path to the south and also from the water users, especially looking south. There are boat hire establishments upriver at Abingdon, local launching points for craft such as canoes and paddleboards and canoeing, sailing and rowing clubs which means that this stretch of the river is very busy. Due to riverside vegetation Photo 26 is not representative of river users.

There may be opportunities for offsite planting to reduce vistas to the proposed structures, while still allowing views towards the river and this should be thoroughly explored.

### Other comments

The project description states '*The River Thames path would be reinstated in its current form (rough grass track) on its present route at the reduced level of the berm with an additional path provided around the periphery of the berm to maintain access in times of*

*high river flow when the berm is activated as flood conveyance.* VWHDC have concerns about the lowering of the level of the Thames Path and that this will lead to additional wetness, and impact on the usability of the Thames Path. Further justification is required for this aspect, and where possible the Thames Path should be kept on the same level by the use of bridges or elevated footpath over lower areas which allow access to flood storage areas behind the path.

The viewpoints, such as VP 30 illustrate that the proposed Thames to Southern Transfer WTW building will be prominent in views from the edge of Drayton village. Thames Water should investigate opportunities to explore offsite planting to the east of the A34 and the building to soften views towards this significant intervention in the landscape.

In Chapter 9, Table 9.1 “Relevant legislation”, the policy numbers do not seem to match the emerging draft Joint Local Plan. With regards to the Vale of White Horse Local Plan 2031, there are also additional relevant Policies such as Part 1 Core Policy 41: Renewable Energy and Part 2 Development Policy 21: External Lighting, which do not appear to have been considered.

Reference should be made to the South Oxfordshire and Vale of White Horse Oxfordshire Joint Design Guide. There is also an associated new Landscape Character Assessment. The new North Wessex Downs National Landscape Management Plan has now been adopted. These are not considered

### **Arboriculture**

Despite the scale of the proposal, Thames Water arboriculturists (hereafter known as ‘the Surveyors’) have carried out to date a detailed assessment of the arboricultural impacts using several different methodologies to demonstrate the impacts upon trees and whether the proposal can be considered acceptable or tolerable. All the methodologies are industry recognised and accepted.

### **Tree Quality**

The report states that the survey is not a ‘health and condition’ survey, thus no mention specifically is given about tree health or recommended management. Instead, the trees have been categorised in accordance with British Standards ‘Trees in relation to Design, Demolition and Construction’ 2012 Recommendations – data of which, is often used to accompany a planning application for the development of a site. BS5837:2012 was written to provide recommendations and guidance for all interested in harmony between trees and development in its broadest sense, therefore, it is not wrong to apply its



principles to a project of this scale, and it certainly helps to demonstrate the diversity of species, age, and tree quality across the landscape.

### *Ancient and Veteran Trees*

Two main methods have been used to quantify the likely impact on ancient and veteran Trees, and both are industry recognised and credible. The Woodland Trust Ancient Tree Inventory (ATI) has been referenced and in recent months, numerous trees across the proposed Reservoir area have been added. The Surveyors have also used a survey method known as RAVEN 2 (Recognition of Ancient, Veteran and Notable Trees).

It is essential that an alternative survey method over and above the Woodland Trust ATI was used to define these trees. The ATI is something of a 'Citizen Science Project' that in the main, records the location of trees reported by interested landowners, members of the public etc and so an absence of records on the map does not mean an absence of ancient/veteran trees. Hence, relying on this data only to demonstrate the number of ancient and veteran trees, might have given only a limited picture of the tree age distribution. Using the RAVEN 2 methodology confirms if surveyed trees meet the definition of ancient or veteran or not and further reinforces the findings of the ATI.

The application of the NPPF 2024 (Paragraph 193) definition of ancient and Veteran trees when recording ancient trees within the draft Order limits, is appropriate.

### *The RAG Assessment of trees*

In addition to the BS5837:2012, the ATI and the RAVEN 2 methodology, the Surveyors have applied a traffic light colour reference to each tree which demonstrates whether the tree is to be removed, at threat of removal or can be retained. Of all the data produced, this is the most useful in helping the lay reader quickly understand the full impact of tree removal. In addition, table 6.1 on page 29 (of Appendix 9.7 of the PEIR) usefully sets out the impacts of the proposal in relation to tree loss/retention.

### *Omissions*

In terms of whether the information currently being collected and provided to date helps to give us a full picture of arboricultural matters or not, I consider that there are several elements that will need to be addressed prior to full application submission. These are discussed below.

Given the rural/agricultural nature of the landscape, it is expected that most of the hedgerows (whether managed or not) will be statutorily protected under the Hedgerows Regulations 1997, yet other than in table 2.1 'Legislation relevant to the arboricultural impact assessment', there has been little mention of this legislation at all. It is understood that the survey of hedgerows has been allocated to the Terrestrial Ecology

Survey team and yet Appendix 7.1 of the PIER 'Preliminary Assessment of effects for Terrestrial Ecology' gives no specific detail of the Hedgerows across the site to date. The Surveyors have in part surveyed the hedgerows, but their report (Appendix 9.7) does not discuss the impact on hedgerows, and they have confusingly labelled them as groups rather than hedgerows. Uncertainty could, therefore, arise using the data produced by both the ecologists and the arboriculturists, with the danger that the impact on hedgerows will ultimately not be illustrated clearly enough.

Calling them a 'group' is misleading and downplays the significance of the hedgerow feature in terms of its contribution to the character of the landscape, its value as an ecological habitat and its contribution to biodiversity. For example, G0571 is a hedge comprising of Hawthorn and Blackthorn yet G0567 is a group of five Ash trees. This latter vegetation is not comparable to a hedge, and no mention is given to the length or age of the G0571 hedgerow that will be lost. Neither Appendix 7.1 or 9.7 yet quantifies the length of hedgerow that will be lost or describes whether the hedgerow is deemed protected by virtue of the Hedgerow Regulations 1997.

Ultimately it is considered important for the hedgerows to be defined in terms of their length and historical importance rather than just as an 'arboricultural feature' so that the impact that the Reservoir Project would have on the landscape character can be more easily appreciated.

Quantifying the distance of hedgerow to be lost is also essential to enable a mitigation/compensation strategy to be developed. Ultimately, knowing the total distance of protected hedgerows lost as a result of the proposals would enable equal or more hedgerows to be planted to mitigate for the loss of the existing ones.

Further use of aerial photography or The Bluesky National Hedgerow Map™ (NHM™) National Hedgerow Map | Bluesky International Limited, will show the length, volume and height of the hedgerows and in conjunction with field data collected, the criteria as set out in the Hedgerow Regs 1997 can be applied to define the status of the hedgerows so that ultimately, a greater appreciation of the impact that the Reservoir will have on landscape features, can be given.

It would be useful if a plan (even if at a scale of 1:50,000) could be produced which shows the complete picture of tree and hedgerow removal in relation to the reservoir location (like dwg no. J696-ARB-XXXX-XXXX-MP-EN-000145 Rev C01) including a key to the smaller detailed areas.

A number of typos were noted within the preliminary AIA (for example, what tree does TB1x refer to on sheet 27 and 28 of the Arb Impacts?) and confusingly, the trees are not listed in numerical order within Annex D Tree Survey Schedule) all of which should be

corrected and refined once the final AIA has been produced to inform the ES and DCO application.

It is acknowledged that at this stage, there is still more information needed to be able to produce a comprehensive AIA of the Project, a Tree Protection and Removals Plan (which would identify trees to be removed and show how retained trees are to be protected) and also an Arboricultural Method Statement which would set out the specification for tree protection measures in relation to construction – the latter being equally important given the size of the site and consequential outlying working areas that are assumed will be needed.

Ultimately, as per para 1.1.3 of Appendix 9.7 of the PIER, the Council should be given assurances that the arboricultural survey data will be used in conjunction with the ecological survey data, the geological survey data, the hydrological survey data and the landscape mitigation strategy to inform and ensure appropriate tree retention, suitable mitigation measures and appropriate monitoring of habitats. It is important to note that any changes to the ecology, geology, hydrology, air quality and landscape features will have a knock-on effect on all the retained trees (whether young or old, individual or woodland) and their ability to thrive and also whether new trees and hedgerows will thrive once planted. Species choice will be critical as only certain trees will thrive on the heavier conditions of clay soil being proposed to build up the sides of the reservoir for example.

As per para 4.1.2, ensuring a buffer of up to 15m (and 30m if the tree is considered an ancient or veteran) outside of any boundary delineating the Draft Order Limits is welcome, but consideration needs to be given as to whether the mitigation strategy needs to be wider than just the Draft Order Limit to ensure that the project blends in with the surrounding landscape. It will be important to consider whether trees to be retained or new ones planted will really have enough space to thrive ultimately, in conjunction with the infrastructure associated with the reservoir construction.

Furthermore, the Joint Local Plan, which is at examination, takes a different stance to the current Local Plan. Given the strategic nature of this development and the long timescale of it, the applicant should consider the additional criteria that the Council has suggested putting in place where there is loss of tree cover. A Tree Canopy Cover Assessment should be carried out to show the extent of canopy now, versus that which will be lost across the landscape, and what could be achieved with proposed mitigation planting 10, 15, 30 and 100 years after planting. In particular, Policy NH3 that sets out the need for the assessment of canopy cover now versus proposed, to ensure canopy cover gains following completion of the project:

**Policy NH3 – Trees and hedgerows in the landscape**

- 1) Development should make every effort to retain, protect and enhance existing trees, woodlands and hedgerows. Where retention is not possible, and a proposal seeks their removal; compensatory planting should provide a net gain in canopy cover. The planting must include a wide variety of tree species, suited to the sites growing conditions and include long lived, large canopied species. New hedgerow planting must be suited to the sites growing conditions and include a mixture of locally native hedgerow species when suitable.
- 2) Developments must secure the long-term maintenance of landscaping elements on site, including trees and hedgerows, through a management and maintenance plan.
- 3) The design of developments must allow sufficient space for the future growth of all proposed trees and all retained existing trees, taking into consideration the tree species growth habits and characteristics. Developments must prevent poor relationships with retained or new trees by allowing sufficient space for their long-term retention without residents finding the tree overbearing, or a cause of nuisance, such as shading or leaf litter.

Not enough emphasis or research has been done yet on the impacts upon the Black Poplar population across the Draft Order Limit. The Black Poplar is a rare tree native to north-west Europe. It is a declining species in the UK and generally grows in isolation. Therefore, its importance should be identified whether or not it has reached a size or age that can deem it an Ancient or Veteran. Indeed, because the tree is scarce, it does not appear in Chart 1 – ‘Range of Tree Species on site’ (page 18) – as this gives detail of trees recorded on more than 20 occasions. To date, 5 individual trees have been recorded (T0811, T0808, T0809, T1006, T1007) and their occurrence within four groups (G1435, G1442, G0810 and G1445). T1006 has been identified as ‘Notable’ as per the RAVEN 2 Assessment criteria. This tree confusingly has been recorded twice in Annex F of the RAVEN Assessment – shown within the table on page 106 and 116. Worryingly, also, in Annex D Tree Survey Schedule, there seems to be some ambiguity as to what species the tree is within the description of it (page 64) saying ‘Not and Ash and not a Veteran’.

Certainly more survey work and information is needed as to what the impact the Reservoir will have on the Black Poplars in the area.

### Summary

Appendix 9.7 acknowledges that the total figure of trees to be removed is likely to rise once the surveying is complete. At the time of writing, the Preliminary AIA had only been completed across approximately 38% of land within the core project area and 35% of the draft Order limits. No trees protected by a TPO or within a Conservation Area are to be removed, but overall, the data is currently showing that the project will result in the loss of 77% of the tree stock surveyed (470 out of a total of 608 features i.e. a feature being individual trees, groups or woodlands currently surveyed).

Currently, seven trees to be removed are identified as ancient or veteran. A further three trees identified as ancient or veteran are at risk of harm or removal unless careful

design can enable their retention. Given only just over a third of the site has been surveyed, it is reasonable to assume that this number will increase as surveys are completed. One area of Ancient Woodland was identified and can be retained.

As the Surveyors have begun to discover, woodland cover is low (at only about 3 per cent according to the Natural England National Character Area description for the Upper Thames Clay Vale), but hedges, hedgerow trees and field trees are frequent, with watercourses often being marked by lines of willows. The survey work is ongoing with the aim to ultimately produce a comprehensive AIA, Tree Protection Plan and an Arboricultural Method Statement relevant to the project. This must be in place prior to submission and should be provided to stakeholders in draft at the earliest opportunity.

The current scale of the proposals in relation to trees and hedgerow loss means, therefore, that from an arboricultural perspective, it fails to comply with the NPPF or Core Policy ENV44 – ‘Landscape’ of the Local Plan 2031 Part 1 & Core Policy 37 ‘Conservation and Improvement of Biodiversity’ of the Local Plan Part 2 (2031) and Policy NH3 of the emerging Joint Local Plan - all of which seek to ensure the promotion and integration of proposals within the context and character of the Upper Thames Clay Vale by the retention of existing trees. Given such extensive tree loss, it will be difficult to support the proposal from an arboricultural perspective even if a full and viable compensation strategy (for the loss of ancient and veteran trees, trees and hedgerows) was provided.

### Urban Design

The Councils understand that Thames Water will continue to refine the design parameters as the design, ES and associated assessments are progressed to inform the parameters that would be secured through the DCO. Given the current proposals, the Councils have the following comments, questions and clarifications relating to urban design. Some of the comments were raised as part of the previous non-statutory consultation in 2024 but are considered still relevant.

It would have been useful if the applicant had set out the main changes to the scheme compared to the previous consultation in 2024. This could be presented in a matrix format as a summary. The applicant should do this as part of the next phase following this consultation period.

The appointment of a design champion and the involvement of an independent Design Review Panel to review the progress so far is very much welcomed. VOWHDC are pleased to see that the Design Council has been involved in providing feedback to this proposal. It would have been useful to point out specifically how the Design Council feedback comments have been taken on board as part of this latest consultation. Design

Review Panel comments do not seem to appear in the Statement of Response (SoR) other than in Paragraph 4.2.84 which states that *‘Based on this feedback, we are developing them further as we refine our masterplan for the project, integrating advice from the Design Council, the UK’s national strategic advisor for design.’*

Once all the technical surveys have been carried out, an overall constraints and opportunities plan (in a visual format) covering an area beyond the red line plan should be included summarising all the key findings (tallying with Principle V3-4 in the Draft Design principles document). Presenting the information following a morphological layers’ approach which will help develop the overall design rationale. Page 39 of the statutory consultation brochure follows a morphological layers’ approach, and this is a good starting point to present design ideas once all the constraints have been identified.

#### Water treatment works (WTW)

Thames Water should ensure that the WTW is located in an area which is the least visually intrusive from a landscape and design point of view and away from/ does not conflict with the intended recreational uses of the reservoir when considering noise, light pollution, potential vibrations and smell associated with it (if any) whilst understanding other technical matters identified within the PEI Report. From the information provided, including the viewpoints, it is not clear whether this has been achieved.

Lighting used for the WTW should emit a soft light and point downwards to minimise glaring lights that are shone into the area/ potential impacts on wildlife and night time views.

The WTW should be visually screened as far as possible. This would help with its appearance within both long and short views as well as its visibility from the National Landscape to the south and from any heritage assets nearby. See Southern Water Peacehaven WTW project (see image below).





### Connectivity to the River Thames

The connection to the river should have the shortest tunnel length possible, and should seek to minimise impact on landscape. The intake/outfall buildings have the potential to be very harmful to views along and across the Thames, and a design solution should be advanced with urgency and collaboration with stakeholders. Currently this appears to be at a very early stage, and does not provide much detail in how this would be treated. The River Thames is a sensitive area, and an intervention of this scale and type would undoubtedly cause harm, and an urban design solution can only go so far to resolve this.

### Indicative masterplan, Draft Design Principles document, Mapbook and PEI Report

Some comments may overlap with other disciplines, so this section should be considered in tandem with other relevant sections of this consultation response.

VWHDC welcome that design is considered at the outset of the development process, but key design decisions need to be informed with further technical studies and result in a strong narrative around a design rationale. The design of the scheme has advanced prior to the completion of technical studies, and so it is impossible for the overall design to have been effectively informed by these surveys and technical studies.

There should be a strong link between the masterplan, the overall vision for the project and the design principles. The diagram showing the iterative process for the design principles development is encouraging to see (image 3 page 8 of the design principles document). Where does the masterplan sit in the diagram presented in Image 2 page 8?

The size of the reservoir means that it presents the potential for many different areas and experiences. The design principles based around five themes (taken from the NIC's

design principles for national infrastructure) of Safe and Well, Climate, People, Place and Value are generally acceptable. Project-wide design principles feed into project element design principles, more focussed, specific and measurable. Considering design principles at different scales whilst being cohesive with one another is welcomed. It is encouraging to see how the design vision and overarching principles are at the core of the indicative masterplan and are being translated into the masterplan via more specific design principles. The dialogue between these different scales is welcoming.

The interface between the reservoir and the surrounding villages beyond is key to assimilate this development into the landscape. Boundary treatments need to be considered carefully, and a section should be dedicated to this. If fencing is required to keep people and animals out of the reservoir, its location should be carefully considered. If fencing is located off the crest there will be far less impact on the landscape, and access for the public should also be a key consideration.

The embankment slopes should be designed to appear as natural as possible and blend into the surrounding landscape. The work that has gone into this is promising in principle, but it is still unclear from the documents how it would fit into the wider landscape. Wider sections which include the land either side of the reservoir and additional views would be beneficial.

The replacement flood storage and reliance on the flood plain north of the proposed reservoir could put significant pressure on the existing floodplain surrounding Marcham. The watercourse diversions and flood replacement storage issues across the site could pose a significant risk to increase existing flooding issues in Steventon village. Therefore, specific modelling for all possible scenarios of flooding in this area should be undertaken in liaison with the LLFA, LPA and EA in order to ensure that all mitigation and measures are in place to protect Steventon from further flooding issues.

The applicant should liaise with the Equality Officer to understand how accessible the development would be for everyone. The design principles are more inclusive than the previous draft design principles (June 2024). A key part of the masterplan vision should be to ensure that the reservoir is accessible to all to promote health and wellbeing.

Priorities should include connecting the reservoir to existing and new communities in the surrounding area and ensuring visitors can access the reservoir using a range of sustainable transport modes. Providing walking and cycling routes, alongside the creation of a high-quality public realm and managed vehicular access, will enhance the area. Future development should be designed to minimise the need to travel by private car, and maximise opportunities for walking, cycling and public transport.

Providing a segregated cycle along the proposed East Hanney and Steventon Road is very much welcomed from an active travel and urban design point of view. Connectivity and choice of routes from a pedestrian and cycle point of view is currently poor in the area, therefore, the development should present greater connections between the surrounding villages with a range of sustainable modes of transport in mind. This will encourage more people to use active travel to access the reservoir and enjoy the health and wellbeing benefits it has to offer. The emerging pathway strategy detailed in chapter 2 of the PEIR is a good starting point. There is an opportunity, which should be taken, to expand routes beyond the Draft Order Limits to ensure that routes created do not stand alone, but tie into other existing active travel routes in the area.

The circular route provided around the reservoir should create a continuous high-quality pedestrian and cycling routes for all. The proposals should also provide meandering paths going through different spaces/zones created around the reservoir and thereby avoid the Farmoor Reservoir approach to a circular tarmac route. This would provide interest and the opportunity to create different areas that will have different functions. The creation of nature trails is welcomed, but the lack of detail at this stage is concerning.

Communities should be able to access the reservoir on foot and by bike through entrances that are clearly marked and create a welcoming environment. Pedestrians should have priority and any potential conflict between pedestrians and cyclists at the reservoir should be managed through signage and the design of pathways. Cycle parking facilities should be provided at appropriate entrance points. Cycle parking for adaptive bikes would be welcomed. Cycle hire facilities within the site should be considered and included where appropriate.

It is unclear whether cyclists and pedestrians would have separate routes within the site or would share surfaces. This should be clarified, and a strategy created to ensure that there would not be a conflict.

At entrance points around the reservoir there should be lighting to enhance safety, being aware that any lighting should minimise light spill and must not cause an adverse impact on wildlife, night time views and dark skies.

Entrances to the reservoir should be made accessible to all and include features that make the reservoir welcoming such as clear signage and artwork that reflects the identity of the area. Artwork should be considered throughout the site, and further comments are provided on this relating to Chapter 15 later in this response.

Green roofs should be incorporated into any building including plant and pumping equipment if at all possible. This would help those buildings to integrate into the

landscape, and would have additional biodiversity and sustainability benefits. These structures should be visually screened as far as possible.

There does appear to remain a significant missed opportunity for visitor/recreation access direct from Steventon village, which is something VWHDC raised in its previous response. The Wilts and Berks Canal restoration is also an aspiration of Local Plan policies, and the proposals should go further to bring this forward. The Wilts and Berks Canal Trust's aspiration for reinstating the canal must form part of the design to enable full recreational benefits to be realised. A functioning and navigable section of canal of this length would be a great benefit to the scheme and the wider community.

Furthermore, the inclusion of locks and associated water control structures would have a potential benefit for controlling water within the channel, which would help with flood prevention. Without these structures, there is a risk that the "wet channel" would overflow in times of heavy rain.

Furthermore, the pipeline and intake/outfall buildings should be constructed so as not to frustrate the future ambitions of linking a navigable canal to the Thames in this location. It is clear from the consultation documents that the works at the A34 for the pipeline, treatment works and access road would leave very little opportunity for the canal to come forward at a later date, and at the very least this should be re-thought to allow for the canal to come forward in the future.

Thames Water should seek to work proactively with the Trust and Local Authorities to achieve a solution which recognises the benefits of a navigable canal.

VWHDC support what the Design Review Panel suggest around having the project follow net zero carbon principles and using frameworks such as the *Building Research Establishment Environmental Assessment Method* to ensure sustainable development and understand that Climate is one of the overarching design principles. The draft design principles should place a greater emphasis on environmental sustainability, aiming for net zero carbon buildings and green roofs for example.

VWHDC agree with Para 4.1.3 of the Draft Design Principles document in that *'The Design Principles approach is considered an appropriate means to provide a proportionate degree of flexibility to ensure the Project can be delivered within fixed parameters, whilst ensuring that key elements of and approaches to the detailed design are articulated and secured. They give clarity to stakeholders on design intent and required outcomes, whilst still providing flexibility for the detailed design to be developed.'* The balance between the two is key to progress this project further.

In page 11 Table 4 of the Draft Design Principles document, Place overarching design principles, principle PL1 should add “*connecting buildings with a common architectural style that blend in the landscape and are not intrusive.*”

Principle P4-2 of the Draft Design Principles document should add lighting disruption. *‘Minimising Construction-Phase Disruption: Disruption to local communities, environments, and infrastructure will be minimised as far as practicable through careful planning, proactive communication, and responsible site management, as detailed in the draft CoCP. Standard good practice measures will be taken to reduce noise, lighting, dust, and traffic impacts, while protecting local habitats and preserving the character of the surrounding landscape’.* The design principle should make a distinction between construction lighting and operational lighting.

VWHDC understand that there is utility infrastructure to contend with. There is little mention at this stage of how overhead powerlines will be assimilated into the design. It is understood that an existing 132kV overhead electricity cable that currently runs through the project area would need to be rerouted. Discussions with Scottish and Southern Energy are taking place and, subject to their agreement, this line would be diverted for around 1.95 kilometres to the north east of its current position, supported by nine pylons at the same height as those already in place. Access would be required to a pylon east of the A34, but no new pylons would be built east of the road. VWHDC have not had any sight of these plans, and they could have a significant impact on the appearance of the scheme and wider area. At a human level, designing around powerlines would need to be considered carefully having all disciplines in mind.

## **Chapter 10 - Geology and Soils**

The geoenvironmental ground investigation to further characterise any land contamination is ongoing with subsequent reporting to include a DQRA (Detailed quantitative risk assessment). These investigations intend to and must ensure all potential sources of land contamination that could impact the proposed development or environment are adequately investigated so that any risk from plausible pollutant linkages in the conceptual site model can be assessed and quantified in the DQRA.

All investigations must be undertaken in accordance with current government and Environment Agency Guidance and Approved Codes of Practice such as Land Contamination: Risk Management 2025 and BS10175:2011 +A2:2017 Investigation of potentially contaminated sites. Once this assessment is complete then any potential risk to the development from land contamination will have been assessed and if necessary, a remedial strategy can be formulated.



Due to the incomplete nature of the information available, full comments are not possible. Areas within the site which are most at risk of contamination, e.g. Steventon depot, have not been assessed, and so the applicant should proceed assuming the worst case scenario. As soon as information is available it should be provided to the Local Planning Authority for comment, and VWHDC will be able to provide more detailed comments following completion of the geoenvironmental assessment report.

## **Chapters 11 and 12 Materials and Waste and Traffic and Transport**

### *The Brochure*

We welcome the clear efforts to make the scheme accessible on foot for residents living on the edge of the SESRO site, however there is a clear omission of consideration for public transport travel. Both the Brochure in its entirety and the Preliminary Transport Assessment Report (PTAR) access strategy omit bus travel to the scheme. Both the S6 and X2 provide regular bus services running in a north-south orientation to the west and east of the SESRO site respectively, with short walk distances into the site from existing bus stops. The X36 bus route runs between Didcot-Wantage, using the Steventon/East Hanney road, which would be replaced in this proposal. It is critical that appropriate diversions are managed during construction for all of these routes, and the design of the new road should ensure that bus use is integral. Noting the proposed modal share assumed for the site, this is a considerable omission.

These two bus services are just existing services and bus infrastructure, negotiations with bus operators, including fare opportunities for visitors to the reservoir, should be undertaken to further improve bus provision (services and infrastructure) in the area for access to the site.

The footbridge for the educational centre over the canal channel should be delivered by the scheme to assist in active travel movements around the site and help reduce the demand for and attractiveness of vehicular travel across the site. Alternatively, without the bridge pedestrians would have to walk a considerable distance in the wrong direction by the car park and along the proposed new road before accessing an alternative path to reach the reservoir's crest walkway. This element of infrastructure should be designed with appropriate clearance to allow canal boats and people using the towpath to traverse beneath it.

In describing the location of the materials handling by rail, the report fails to identify the proximity of homes in Grove (referencing East Hanney and the reservoir only). Measures to mitigate noise for residents in Grove will be required.



We approve of the primary route to the site being via the A34 and use of internal haul roads within the SESRO site, with minor local public roads only being used when "absolutely necessary". However, this does not appear to be the case when reviewing the HGV distribution, which will be considered further in comments on the Preliminary Transport Assessment Report (PTAR).

Building the rail sidings in from 2032 (and then would be operational sometime after this) seems a little late in the construction process to mitigate traffic impacts of the proposed works on road traffic - a large proportion of the footings, roads and buildings will be constructed in the years prior to this which are likely to generate a need for large amounts of hardcore, sand, cement, bricks, wood and other construction materials that could be transported by rail if the sidings were available sooner in the project phasing. Furthermore, removal of waste materials for landfill could be undertaken by rail from an earlier stage in the project. To be most effective in reducing road construction traffic, the rail sidings should be installed at the earliest stage possible.

Issues identified for human health during operation include: "permanent changes in access to other communities, community assets and services, primarily due to increased visitor numbers to the local area and additional traffic." This is understandably concerning for our residents.

Many construction workers are needing to access the site daily during construction, particularly in the peak construction phase. Suitable traffic management of these trips will be paramount to ensuring the local road network is not severely impacted by these journeys (over 500 vehicles in the peak hours). Best efforts are expected to be put in place such as exploring the use of existing and safeguarded land for park and ride sites (where workers travel from the relevant direction). While secure tool storage should be provided on site to allow workers to travel by non car/van modes.

It is unclear in the Brochure and elsewhere in the reports how much navigable width will be lost for boats and water vessels in the River Thames. The precise location of the intake/outfall structure is also unclear, as set out in the Non-Technical Summary comments.

Waste during operation has been identified as being negligible in the Brochure, however, if the site is to become attractive to vast amounts of people as set out in the PTAR, waste generation could be considerable, from people generating large amounts of food related waste from picnics and BBQs at the site. Suitable waste management, litter collection and control of BBQs (risk of fire) is likely to be a considerable task for ongoing operation at the site.

When considering greenhouse gasses during operation of the site, it is unclear why there is no promotion of the use of electric vehicles on-site. Indeed, with the creation of free electricity from solar and hydropower already planned, this would be a missed opportunity not to use this free energy for all operational energy needs for the site. Buildings, lighting and transport across the site should all utilise this green source of energy generated on-site.

### Non-Technical Summary

The majority of the consultation documents describe the extent of the scheme being within the previous red line boundary, i.e. with the scheme only extending up to the railway line. This needs to be rectified in all cases to ensure a suitable assessment of the project as a whole. For example, it is unclear if the traffic and staff trip generation considers the construction of and installation of the re-provided solar panels or Biodiversity Net Gain (BNG) in locations within the revised red line boundary. It is also critical to consider the impact of construction of the intake/outfall structures and the works to the eastern side of the Thames near Culham, particularly the berm and re-routing of the footpath, especially with cumulative impacts of other construction on nearby junctions, particularly junctions with the A415.

We are concerned by the lack of detail regarding the transfer pipe works for Culham to Steventon and Culham to Farmoor Reservoir. Noting these may also be 8 metre wide tunnels. It is unclear what routes are to be taken for pipe installation and therefore the associated impacts on our infrastructure, residents and business.

Plate 6 shows a map of the local area. The map key includes both 'Borough' or 'Unitary' to describe the border between South Oxfordshire and Vale of White Horse districts. This should be changed to 'District Boundary'.

The Summary states that the tallest reservoir tower will be 23.7 metres tall above the height of the embankment. With a typical embankment height of 20.5 to 21.9 metres, the tower will stand at approximately 45 metres high or equivalent to a 12-15 storey residential building. It is unclear if this has been added to the landscape views shown in Plates 20-26.

The Summary suggests that the intake/outfall structure will be provided with a 10 metre intake area that would extend into the River Thames. Thus a c.50 metre width of the existing navigable river would be reduced by approximately 20%. Further to this, the outfall structure is estimated to be 40 metres wide and 65 metres in length, if this protrudes into the river that would reduce the navigable River Thames width by 80%, with just 10 metres remaining. Further still, 10 metres of width is required for bank reinforcement on either side of the river. It is unclear how each of these elements will

coincide and what river width will remain (although this is shown to be less than 25% width reduction in PEIR Chapter 12 page 69). It is unclear also what/if measures would be required on the River Thames to ensure the safety of boats and barges during times of discharge. These river bank changes are very onerous and could potentially result in a challenging situation for vessel navigation, including two-way passing vessels. Finally, it is not clear what measures will be in place to warn and or evacuate river users in the event of an emergency drawdown.

It is unclear how close to and or disruptive the intake/outfall structures will be for the short section of navigable Wilts & Berks Canal known as Jubilee Junction near Abingdon Sewage Treatment Works. The canal section was officially opened in 2006 to form part of the new connection of the Wilts & Berks Canal to the River Thames, with the historic route running through the built up area of Abingdon to the north. Restoration of the canal and creation of a complete navigable route for boats and towpath for active modes are key policy aspirations for our council, as reflected in adopted and emerging Local Plan policies:

- [Vale of White Horse Local Plan Part 1](#)
  - Core Policy 14, particularly the clause that specifies “...any proposal for a reservoir must: ... vi. make provision for the new route of the Wilts and Berks Canal in relation to the reservoir proposal between the villages of Drayton, East Hanney and Steventon”
- [Vale of White Horse Local Plan Part 2](#)
  - Development Policy 32: Wilts and Berks Canal – The whole policy is relevant.
- [Joint Local Plan \(currently at examination\)](#)
  - Policy IN4 – Wilts and Berks Canal safeguarding – The whole policy is relevant

The applicant should ensure that the new Wilts & Berks Canal section is not disrupted or obstructed by the intake/outfall operations both during construction and operation or the reservoir.

The applicant should seek to provide as much support as possible to the Wilts and Berks Canal Trust to creating a fully navigable canal through the site. The current proposals would allow for a “wet channel” through the site around the north and west of the reservoir, but would not provide the infrastructure for this to be navigable. Given the proposals would demolish the remains of the historic Wilts and Berks Canal, including some historic locks, consideration should be given to re-providing the locks along the new canal route. This would provide considerable benefits to the community, managing

flood risk through water control methods (locks and associated infrastructure) and wider benefits to ultimately work towards the policy aspirations of the Council and the Trust.

The Summary identifies that there is no intention of using the proposed rail siding tracks or associated embankment to enable future rail opportunities in the area, such as in support of four tracking along the Great Western Main Line. This has been a key deliverable that we have raised in a number of workshops. Thus, we consider building the rail embankment and railway tracks in a way that could not then be reused for ongoing rail infrastructure is a considerable missed opportunity. We strongly suggest Thames Water reconsiders this element of the scheme to reduce the need for short term infrastructure and facilitate rail improvements in the immediate area

Principally, the SESRO scheme must not prevent the prospect of Wantage and Grove Station coming forward. The safeguarded land for the station falls entirely inside the revised red line boundary for SESRO and thus the scheme must be designed in such a way so as to not prevent the provision of this future infrastructure project, as set out in the emerging [Joint Local Plan Transport Safeguarding Topic Paper](#). Furthermore, the SESRO scheme is expected to: *“if a proposed development encroaches or abuts a safeguarded transport scheme it will need to either provide a corridor to allow the safeguarded scheme to come forward or deliver (or partly deliver) the safeguarded transport scheme.”* We understand that Oxfordshire County Council is in the process of reviewing the station further through an Outline Business Case which we hope will be available in time to shape the location of BNG areas. Noting the considerable number of expected visitors for the reservoir (one million visitors per year, with some 8,000 per day during the August peak period), improved rail provision would help reduce the operational road traffic impacts of the scheme, as well as create a positive legacy for sustainable travel.

The use of non-committal language in the Summary does not reassure us that the scheme will deliver the positive benefits identified. For example, the report states that a range of active travel schemes ‘could’ be provided and measures to improve construction staff travel ‘may’ be provided. These should all be key mitigation requirements delivered as part of the scheme.

### PEIR Chapter 12 – Traffic and Transport

There are a number of omissions in the policy section identified in Table 12.1. As summarised below:

- [Vale of White Horse’s Local Plan Part 1 – Core Policy 14: Strategic Water Storage Reservoirs](#):
  - o “Including specific requirements as follows:

- i. mitigate the impact of construction on local people, the environment and roads*
  - ii. minimise the effects on the landscape of an embankment reservoir through its design, general configuration and the use of hard and soft landscaping*
  - iii. maximise the creation of wildlife habitats and biodiversity*
  - iv. promote the recreational uses of the reservoir consistent with the landscape and biodiversity values of the proposal and having regard to the traffic impacts of such uses*
  - v. include a new route for the diverted Hanney to Steventon road, to include provision for an off-road cycle path in relation to the reservoir proposal between the villages of Drayton, East Hanney and Steventon*
  - vi. make provision for the new route of the Wilts and Berks Canal in relation to the reservoir proposal between the villages of Drayton, East Hanney and Steventon*
  - vii. include measures to avoid or mitigate any other significant adverse effects identified through the environmental impact assessment of the proposal, including on the local and wider highway networks and on surface water and fluvial flooding, and*
  - viii. minimise any impact on the archaeological significance of the site, to include the retention of in situ archaeological remains, where possible, and their full investigation and recording with the results deposited in a public archive.*
- The Wilts and Berks Canal policies in adopted and emerging forms:
    - o [Vale of White Horse Local Plan Part 2 – Development Policy 32: The Wilts and Berks Canal](#)
    - o [Joint Local Plan – Policy IN4 – Wilts and Berks Canal safeguarding](#)
  - Safeguarded areas that the development's red line boundary either encroaches into or abuts in adopted and emerging policies:
    - o Wantage and Grove Railway Station
    - o Southern Abingdon movement corridor

- Marcham movement corridor and improvements to Frilford Lights (shown separately in adopted policy)
  - Improvements to Featherbed Lane and Steventon Junction and Relief to Rowstock and Harwell to Didcot Busway (shown separately in adopted policy)
  - Abingdon - Marcham via A415 (SATN) (new in the emerging Joint Local Plan)
  - Abingdon - Drayton via B4017 (SATN) (new in the emerging Joint Local Plan)
  - Abingdon - Berinsfield via A415 (SATN) (new in the emerging Joint Local Plan)
- The Local Transport and Connectivity Plan adopted by Oxfordshire County Council

Please ensure these documents are captured where appropriate in the next stages of the application process.

The Classified Turning Count (CTC) surveys and Automatic Traffic Count (ATC) surveys undertaken in November 2024 will not capture the operation of traffic in the Wantage area effectively. This is due to a new eastern bypass road (Wantage Eastern Link Road) called King Alfred Way opening to traffic on 5th December 2024. We are concerned that the traffic modelling (both construction and ongoing operational traffic) will not suitably capture traffic movements for access to the south-west access / proposed education centre.

Chapter 12 suggests that a 0-30% change in peak hour traffic will result in 'negligible' severance to active modes seeking to cross the carriageway. However, in practice, if a road is operating close to maximum acceptable capacity (Ratio of Flow to Capacity RFC) then additional traffic flow may result in notable severance, particularly if there are multiple lanes of traffic such as Marcham Interchange. We do not think that a blanket use of RFC change can be used to understand actual experienced severance to Non-Motorised Users (NMU) and this should be considered on a case-by-case basis.

The PEIR Report suggests that Abnormal Indivisible Loads would not be expected for the operational phase of the scheme. However, we disagree because it is anticipated that there are likely to be times when there will be disproportionately large volumes of boats being transported on trailers to and from the site. Therefore, the 'magnitude of impact for effects caused by hazardous or large loads' should be considered in the assessment of the scheme during operation of the development. This may be



particularly important for any boating competitions or events that may occur at the development in the future.

Details regarding Dalton Barracks are misrepresented in both this Chapter 12 and the PTAR. Chapter 12 (third bullet point of 12.6.24) infers that Local Policy is seeking to construct up to 5,250 homes at Dalton Barracks, however the site promoter is seeking this number, the emerging joint Local Plan is seeking to provide 2,750 homes at Dalton Barracks. Similarly, in the PTAR (ref 5.8.9) conflates what the site promoter and Local Plan are seeking to achieve. Please review and ensure this information is captured appropriately.

Page 62 of Chapter 12 states that there will be no on-site residential accommodation, however 2.6.13 states that *“The construction compounds may include temporary accommodation facilities for workers. This would likely be located at the main compound. Such accommodation facilities may be up to two storeys high.”* Due to the demands of residential accommodation and impacts of the SESRO works on communities, we would like discussion and clarity on whether construction workers are proposed to be living on-site (see also comments on construction workforce from our Economic Development Team at page 60)

The assumption that the site would not be used for large scale events has not been justified. The site has considerable potential to facilitate largescale sporting events such as sailing, running, swimming, cycling and triathlons. These type of events and associated impacts should form part of the operational phase assessment. Event management requirements should be added to the Chapter 12 ‘key potential’ cause of effect.

We are pleased to see that the proposal traffic impacts will be further assessed using a strategic highway model which allows ‘dynamic’ assignment to different highway routes between an origin and a destination.

We are surprised not to see Marcham Interchange works (which includes additional filter lanes and traffic lights at the roundabout) in Tables 12.28 and 12.29 in Chapter 12 or in Appendix 2.2 – Draft commitments register. Owing to the traffic impacts identified in the PTAR these must be included in the commitments of the scheme. Furthermore, due to the ‘large magnitude of impact’ rating for Marcham Interchange, we feel that this impact should be upgraded to a Major (significant) construction effect (ref 12.9.8).

It is reassuring in Chapter 12 that the scheme is intended, as far as practicable, to use the rail sidings for reservoir material transport. However, it also considers a hypothetical month where all material delivery and removal is undertaken by road during peak construction demands. The result equates to 110 HGVs per hour (equating to 1,100

HGVs per day). If one were to assume that the PTAR stated proportion of trips per access will also be used (72/28 between the main access for the site and the other accesses), this would mean 31 HGVs per hour would travel through local settlements and local highway junctions that have been demonstrated as being over capacity in 2036 and 2043 (ref PTAR). While demand on the already impacted Marcham Interchange will also be increased (see PTAR review Marcham Interchange comments). As set out in 12.9.22, the peak construction phase results in significant effects to the operation of Marcham Interchange (without mitigation), this is demonstrated by modelled queuing of traffic that would back up on to the Strategic Road Network (A34), therefore, if we were to add more traffic to the junction in the 'all by road' scenario this would not be a 'small impact' as asserted in 12.9.23, the already unacceptable operation of Marcham Interchange would become even more congested and it is likely that the impact would spread further onto the local road network. When the scheme progresses to using the 'dynamic' traffic model, it is likely to show other junctions of the A34 with increased demand due to re-routeing and thus impacting more residents and business in the area.

The assertion (12.9.24 and 12.9.26) that HGV movements, all by road, would not give rise to significant effects to other routes to the development site (i.e. journeys not via Marcham Interchange) are unfounded. Marcham Interchange (without remedial measures) became unsuitable (with over 100 vehicles estimated queuing on the A34 nearside lane south of the Marcham Interchange slip lane) with 75% of the HGV traffic in the peak construction traffic scenario with rail. Therefore, with 25% of HGV traffic expected to route via Milton Interchange and other local junctions, it is possible that the with rail scenario will generate issues for the operation of those junctions (this is supported by estimated traffic flow results in the PTAR), and likely to become unsuitable in a without rail scenario.

Furthermore, we would expect HGV scheduling to avoid the network peak hours, this should be added to the construction traffic parameters, modelled scenarios and Construction Traffic Management Plan measures for the development. Correspondingly, there is an opportunity to arrange shift patterns so as to avoid construction workers from also travelling during the AM and PM peak periods.

Following the above, the representation of likely congestion impact on buses is also understated in Chapter 12. Similarly, the impact of additional HGV traffic on the road network with regard to road user and pedestrian safety is understated. Walking and cycling users seeking to cross the arms of Marcham Interchange would experience fewer opportunities to cross, due to increased traffic flow, which may lead to more risky decisions when seeking to traverse across the junction under its current guise with no pedestrian priority.

We consider that all 'additional mitigation' identified in Chapter 12 Table 12.30 should be provided to mitigate the impacts of the development.

### Preliminary Transport Assessment Report

We agree that Traffic Regulation Orders and suitable lighting will be required along the stopped-up Steventon Road (ref 3.318-3.3.20). Measures should be in place to enable to extension of such parking controls to other areas of Steventon, in the event that residents confirm their desire for such proposals. The same approach should apply to East Hanney, with a similar stopped-up road head parking arrangement sought to be provided there. Following opening of the two car parking areas, the developer (or agent) should consult residents of both Steventon and East Hanney periodically to offer remedial measures that may be required to prevent indiscriminate parking and or antisocial behaviour.

We welcome the acknowledgement of OCC's 'Decide and Provide' document and need for the assessment of the development to address the requirements contained within it. Please be aware that there is a revision to the document forthcoming, expected in early 2026. Similarly, the revised Parking Standards for New Developments revision is expected at the same time.

We also welcome the identified need to improve active travel at Marcham Interchange (ref 3.4.7), as a result of increase lane capacity and traffic flows (development traffic – construction and operational) at the junction. A traffic free active travel bridge (similar to the White Heart Roundabout in Swindon) may be an appropriate solution where at-grade solutions result in considerable queuing of vehicles.

We acknowledge the preference to avoid building multiple bridges over watercourses, however, this should not be at the detriment of key desire lines or general flow of movements across the site.

We would like to see a well-defined access plan for within the site, which would enable interpretation of separate types of users, including horse riders. Noting the available land within the site and proposed extinguishment of existing horse riding opportunities through the area, the proposed plan should ensure that conflict between users is minimised through either provision of different paths for different users or width suitable to allow passing with ease (5 metres width may not be suitable to accommodate all users).

In addition to a land train and / or shuttle bus to assist people accessing the different amenities across the expansive site (ref 3.4.17), the restored Wilts & Berks Canal (with locks) could be used to transport visitors via canal boat, e.g. visitors may board the boat near the visitors centre/recreational lakes to the north-east of the site and depart via the

education centre at the south-western end of the site. This would be a considerable community benefit for the project and accord with our policy aspirations (see Vale of White Horse Local Plans part 1 and part 2, as well as the emerging Joint Local Plan referenced previously).

Please note that Didcot Local Cycling and Walking Infrastructure Plan contains several appendices, not previously publicly available, which include a list of infrastructure improvements required to improve infrastructure for walking and cycling in the area (Appendix E). These are available [here](#) and should be reviewed for suitable schemes for the SESRO site to support or directly deliver.

Where possible, including where existing substandard walking, cycling and horse riding infrastructure is present currently, the scheme should seek to improve Non-Motorised Users (NMU) travel infrastructure off-site, where it connects with the scheme's proposed NMU routes.

The River Thames activity surveys were taken upstream near to Saxton Road in Abingdon and downstream at Culham Lock. Owing to access being available via the Thames Path, it is unclear why the canal usage survey was not undertaken adjacent to the location where the intake/outfall structures will be constructed. The survey results wildly vary between these two locations, likely linked to fact that the Abingdon Marina and Abbey Sailing Club are located between the two survey locations. Surveys should be undertaken to ascertain this possible impact.

Plate 5.4 illustrates the locations of the junctions assessed. However, it is unclear where Junction 16 is located on the map, it is also not represented in Table 5.3, while Junction 13 is also not represented in Table 5.3 but is illustrated on the map. Noting the operation of Denchworth Road and Grove Road present an either/or arrangement for Wantage traffic it is important that the Ham Road / Denchworth Road (junction 13) double roundabout is captured in the assessment. The assertion that Junction 13 is not required to be assessed is unreasonable, particularly as construction worker traffic may use this junction.

We disagree with the assertion (ref 5.6.4) that a junction is generally expected to operate within capacity up to 100%. Indeed, it is recognised by industry leaders in transport modelling ([TRL Software](#)) that often an 85% Ratio of Flow to Capacity (RFC) is used as a threshold, but identify that the affect is influenced by vehicle flow. TRL highlight that the primary indicator of a junction operating suitably is vehicle delay (and thus also queue lengths). Similarly a Degree of Saturation (DoS) figure of above 90% is considered to make a junction unstable, with 'random delay' shown thereafter (Ref [Transport for London Traffic Modelling Guidelines](#)). The TfL modelling guidance also identifies that unsignalised junctions have a lower 'practical capacity limit' of 80-85%

than signalised junctions. Therefore, it is also disappointing to see that delay and queue lengths are not provided for all the junctions presented.

The existing (baseline) situation for the two double roundabouts in Wantage (A417 with Larkhill and Charlton Village Road - Junction 6 and Garston Lane, Charlton Road, Orman Road and Wallingford Street – Junction 14) reported in the PTAR are expected to operate better than shown in the assessment. This is due to the opening of King Alfred Way (the Wantage eastern Link Road) 6 December 2024. The traffic data used in this assessment precedes this opening. The 2036 estimate also does not report on Junction 21 for A415 with Faringdon Road near to the proposed site's main access, which is a concern.

We welcome the notion that the development will work with promoters of our strategic site allocation at Dalton Barracks to develop modelling that can be used for both cases. This both assists in ensuring the modelling outputs reflect the two separate schemes appropriately and may reduce costs for both organisations.

We observe that the Planning Inspectorate have asked for the scheme to be assessed with an 'all by road' scenario. We also note the congested situation on the local highway network identified in future years 2036 and 2043, we request that the applicant offers a condition to any permission for the development which states that reservoir material must be transported to the site via rail, while excess topsoil that needs to be exported is removed by rail too. This will help to reduce the likelihood of severe traffic impacts on the local highway network as a result of an 'all by road' scenario.

We are pleased to see in 'Chapter 2 Project Description' and PTAR paragraph 6.2.19 that a transport contractor is to be used to transport construction workers in shuttle buses from larger settlements and nearby railway stations. Notwithstanding this, it is unclear if the ambition of achieving 2.5 staff members per vehicle on average is likely without clear strategies in place to make sure this happen. Similarly, Chapter 12 sets out daily visitor trips, which are estimated to be 70% by car (driver and passenger), with 2.2 persons per vehicle on average (just over 30% of trips will be as car driver). This car driver proportion appears to be optimistic, even with a clear strategy to encourage car pooling and sustainable travel to the site. No evidence has been provided to justify this rate. Hence, the rate is not considered to be the 'worst case' which is typically used to plan relevant transport mitigation for a scheme. Therefore, both the visitor and construction employee modal proportions assumed in the documents are considered to be ambitious. We expect to see a similarly ambitious suite of Travel Plan measures employed to ensure these modes shares are experienced in practice.

In the event that suitable mitigation/enforcement is implemented to achieve the high vehicle patronage (2.5 employees per vehicle), and 75% of employees travelled to the

site in the AM peak hour (and same for the PM peak) there would be 540 employee vehicles in the peak hours (1,800 staff, 2.5 patronage makes 720 vehicles and 75% in the peak hours). As a less optimistic scenario, if sustainable travel measure were less effective and the travel proportions resulted in 1.5 employees per vehicle this would equate to 900 employee vehicles in the peak hour (1,800 staff, 1.5 patronage makes 1,200 vehicles and 75% in the peak hours). Such alternative / worst case scenarios should also be tested.

Plate 6.3 of the PTAR erroneously illustrates a number of local highway roads as 'strategic network' including the A338 between Frilford and the A420, sections of the A420 (which forms part of the Major Road Network), A415 between Frilford and Moreton, as well as roads in Abingdon-on-Thames, Drayton, and Didcot. The only 'Strategic Network' road in the area shown is the A34. Annotations for the A34 should continue to the edge of the mapped area (i.e. west of Oxford and south of Harwell Campus).

Noting the assumption that some 70 employees will reside in locations that use routes 7, 8, and 9 and that 72% of those employees will access the main access for the site (A1), this would mean that approximately 38 employee vehicles will route through the constrained roads of Marcham during the AM and PM peak hours (70 employees, 72% via main access and 75% in the peak hour) if no sustainable travel options were provided/used. Road width capacity constraints in Marcham should be replicated to ensure the model captures road conditions appropriately, particularly for the section of road to the east of Mill Road.

Noting that existing population figures are not necessarily a good representation of medium to long term rental opportunities, we are surprised to see that no factor has been applied to increase the proportion of journeys from Didcot, Abingdon-on-Thames and Wantage, where a greater number of rental opportunities exist.

There are several Public Rights of Way (PRoW) that will be disrupted by the construction works, these are annotated in Plate 7.1. As illustrated, the affected section of Peep-O-Day Lane (National Cycle Route No.5) appears not to be provided with an alternative route (yellow line shown for disruption but no equivalent blue line for diversion, south of PRoW Bridleway 192/26/20). Owing to this route being a key off-road strategic cycle route between Didcot and Abingdon-on-Thames and forming part of the National Cycle Network Route 5, we are hugely concerned about this journey being truncated for any length of time. The supporting text (7.2.6) suggests a 70m diversion for this route, but the details of the diversion are unclear.

We acknowledge that there is no pavement available currently in East Hanney to assist NMUs when accessing the existing PRoW network in the SESRO site. However, the



proposed diversion routes (Plate 7.1) significantly increase the distance that PRow users would have to travel along the grass verges of the A338 to access the site. As such infrastructure should be provided to at least not disadvantage these users further, and ideally, look to connect into existing pavements and PRow in East Hanney. For example, the proposed diverted route in the southern part of the site could tie into PRow route no. 198/15/10 to the south of East Hanney. A further path could be extended from the diverted route in the north of the site to tie into the north-eastern part of East Hanney. The off carriageway northern route could either connect to the A338, near to the 20mph sign for East Hanney or connect with Stallwood Row, Hunter Avenue or similar minor roads.

It is important to ensure permeability into the site, particularly given the amount of leisure activities that could come forward at the site. In particular hard boundaries, such as the A34 and the railway should be considered, and active travel routes across them to link to the PRowWs should be integral to the scheme.

PRow / cycle routes should be considered through the site for longer distance commuter travel. Including between: Grove and Abingdon, Marcham and Drayton (for the NCN5 southbound), Frilford, Marcham and Abingdon, as well as Grove and Steventon. These routes will help to capture journeys between these settlements but also longer distance cycle journeys that may be further afield. These strategic cycling routes should be provided with suitable surfacing and lighting to enable year-round usage.

Noting the RFC and DoS thresholds identified previously in our response, Table 7.1 illustrates a widespread failing of junctions in the area, with many junctions showing as over capacity for at least one modelled time period (15/27). Although Table 7.2 identifies some low proportions of change attributed to the scheme, some of those changes result in a junction changing from operating below RFC thresholds to over those thresholds, and a single percentage point change may not be suitable, subject to the junction in question.

Frilford lights is a light controlled staggered crossroad junction and is modelled with additional capacity than how it exists today. We understand from our Oxfordshire County Council colleagues that the plans are not sufficiently advanced and should not be included in the baseline for the junction. Notwithstanding, the data shows that in 2036 without construction traffic, the AM peak operates at 90% RFC. When construction traffic is added this changes the junction operation to 95% RFC, which is unsuitable. Where traffic flows are great, as experienced at Frilford lights, it is likely that delay and queue lengths will also be great when the junction is operating over capacity.

The data in Table 6.3, Table 6.4 and Plate 6.2 identifies that 58 HGV trips, with rail, will route via the Marcham Interchange per hour (two will go onto access Abingdon-on-Thames) and 19 HGV trips will route via Milton Interchange and local highway junctions. HGVs are converted to Passenger Car Units (PCUs) to enable representative modelling for larger vehicles, HGVs are 2.3 PCUs. Therefore, the above values equate to 134 PCUs for Marcham Interchange and 45 PCUs for Milton Interchange from HGV traffic (with rail scenario).

Marcham Interchange is both illustrated to have a large degree of change in Table 7.2 and indeed changes from 82% DoS to 106% DoS as shown in Table 7.1. Specifically, the northbound A34 off slip for Marcham Interchange in 2036 with construction traffic is shown to operate at 106% of DoS in the AM peak with no mitigation. The data states a queue length of 159 PCUs. As an estimate, the off slip length is approximately 300 metres in length, if we assume each PCU is an average car length of 5 metres and 1 metre between each queuing car (total 6 metres per PCU), this equates to 954 metres queue length (159 vehicles multiplied by 6). This is far in excess of the slip length and thus means that the nearside lane of the A34 prior to the northbound slip lane would be stationary with approximately 109 cars queuing. Stationary queuing traffic on national speed limit roads (70mph) can increase the risks of rear end collisions. The A34 forms part of the Strategic Highway and is managed by National Highways (NH). We expect that this modelled situation will not be accepted by NH without remedial measures to prevent queuing back onto the A34.

The reports have not provided sufficient evidence to confirm if the case studies and examples used to base the visitor trip profiles on are indeed comparable to the proposal. Further details will be required to confirm if this is the case, or if further bespoke work is required to suitably estimate visitor use profiles i.e. the number of journeys per year, time and day of journeys and vehicle patronage assumptions.

Please be aware that 2021 Census data for method of travel to work data should not be used due to COVID lockdown procedures occurring during the year of data collection, please see further information [here](#).

The operational visitor highway trip distribution map shown in Plate 8.5 oddly assumes that those travelling on the A34 northbound from the south of the district would not use the Chilton Roundabout to access the A417 Reading Road for Wantage and then the south-west access for the site. We would expect some to do so and request that this is appropriately reviewed in the variable demand modelling, where such choices then impact capacity and loading on the network.

### Preliminary Transport Assessment Report: Appendix 1: Outline operational travel strategy

We would expect a full suite of travel documents for the scheme to include a Construction Travel Plan (CTP). The CTP should include modal travel targets for construction workers, and a suite of remedial measures should be also identified in the report to be employed in the event that the travel proportions are not achieved. Funds should be set aside for this, as appropriate. A CTP coordinator should be employed to monitor, review and update the CTP periodically through the construction full period.

Similar to the Brochure, non-committal language such as ‘Active travel provision could include:’ does not provide us much comfort that necessary and suitable provision for active travel will be secured.

Car sharing should be promoted for the construction workers, forming part of the suite of measure in the construction travel strategy and CTP.

### Draft Code of Construction Practice

The Statutory Consultation Documents include a Draft Code of Construction Practice. Whilst it is appreciated that this is included, we do note that it is in draft form and, therefore, lacking the detail and clarity we would expect from a document of this kind.

Paragraph 2.1.3 states “suitably qualified and experienced personnel will be employed”. Clarity is required on what qualifications and what experience levels would be required for different activities. We also require more detail on the professional standards that would be expected on site.

Paragraph 3.1.1 states that “An approach to community and stakeholder engagement... will be developed by the Project and the Contractor”. The Council would like to stress that any approach to community engagement should be developed in collaboration with all Host Authorities, as they have a greater insight into the communities that will be impacted by this development.

Paragraph 3.2.1 states that “a programme of relevant and ongoing communications will be prepared and implemented”. This as an incredibly vague statement and we require more detailed information on what this programme will constitute, and what is considered “relevant” by the contractor. It is important that helplines and we addresses are displayed clearly on the boundaries of the site (fencing etc.) to make it clear to the public where complaints should be directed.

Paragraph 3.3.1 states that “Occupiers of nearby properties” will be notified “in advance” of planned construction work. The Council requires both “nearby” and “in advance” to be defined more precisely. How close do residents need to be to the planned works before they are notified, and how far in advance will they be notified.

Paragraph 4.1.2 covers measures to prevent unauthorised access to the site. Site Lighting should be used sparingly, and in accordance with policies on Night Lighting (see also specialist officer comments in the Landscape and Visual section) We also request that any fencing around Public Rights of Way is limited, to reduce any harm to the amenity of those areas.

Paragraph 4.2.2 covers the “core working hours” on the site. It mentions that maintenance of plant and equipment will be done between 1pm and 6pm on Saturdays. This is unacceptable as this work is typically noisy, dusty and disruptive to neighbouring areas. Also, these times are when the Public Rights of Way around the site are most likely to be used increasing the impact that this work will have on the public. Maintenance of equipment and plant should happen on weekdays only.

Paragraph 4.2.5 covers works that may occur outside of core working hours. Any work that is noisy and disruptive to the tranquillity of the Public Rights of Way and the amenity of those living nearby, should be minimised as much as possible outside of core hours. Increasing work hours outside of core hours during the summer for earthworks is likely to be unacceptable as this is when the Public Rights of Way are most likely to be used and the tranquillity of those areas will be severely impacted.

Paragraph 4.3.1 describes at a very high level, the measures that will be taken to reduce the likelihood of environmental incident or nuisance. In addition to the measures stated the following should also be included:

- The site must have a waste management plan that includes the provision of food waste and recycling bins for workers with guidance on what can and can't be disposed of in those bins. Residual waste should be minimised as much as possible.
- Any tracking of mud on to the highway is unacceptable, wheel-washing facilities must not only be maintained but also used by all relevant vehicles.
- Lighting and illumination should be avoided as much as possible. Where this isn't possible it should be of a warmer Kelvin to reduce the impact on biodiversity and the circadian rhythm of nearby residents. A construction phase lighting strategy should be provided as part of a detailed code of construction practice.

- It should be made clear to workers that leaving smoking waste is a form of fly-tipping and is unacceptable. There should be e-waste receptacles onsite for e-cigarette and vapes to be safely and appropriately disposed of.

Paragraph 4.4.1 discusses the use of “long-term security hoardings” any fencing and hoardings on the site should be designed to have the smallest impact on the amenity of the area as possible.

Paragraph 4.7.1 mentions that onsite worker accommodation is being considered. This can have significant effects on the local area and so should be done only in consultation with the Host Authorities.

Section 4.8 mentions a Worker Code of Conduct, however there is no mention of how this will be enforced, the Council requires more detail on this matter.

Section 5.1 states that an emergency plan will be created. This is not enough detail; the Council requires more information such as:

- Who onsite will ensure that the plan is followed
- How the plan will be used in an emergency
- Whether it will form part of site inductions
- What the review process for the plan will be
- Whether there will be regular refreshers for staff on site.

Without this added information, the Council considers merely to provision of an emergency plan to be inadequate.

Paragraph 7.1.4 mentions that there will be an exclusion zone to protect retained watercourses, there should also be regular monitoring of these watercourses to ensure that there is no reduction in water quality as a result of any construction activities.

Paragraph 7.2.3 mentions that a Clerk of Works will be employed to monitor the ecological impacts of the development, but no mention is made of what qualifications and experience will be required.

Section 8 covers the Historic Environment however, it makes no mention of the Wilts and Berks Canal, of which several locks remain on the site and will need to be removed for the project. There is opportunity here for preservation of the existing locks or reprovision, and to not mention the canal at all in the Draft Code of Construction Practice is an oversight (see also specialist officer comments in the Heritage section and Transport section).

Paragraph 8.1.2 covers archaeological remains there should be a wider discussion about the public education in relation to any remains that will be left in-situ. There is real public benefit in signage and explanation of any significant archaeological remains found on the site.

Paragraph 9.2.1 covers several measures that will be taken to reduce the potential impacts of construction on the landscape and visual amenity of the area. It should also consider any site lighting, as mentioned previously, and ensure that any site lighting that is deemed necessary should be used sparingly, and use a warm light temperature to reduce the visual impacts at night (see also specialist officer comments in the Landscape and Visual section).

Paragraph 9.3.7 discusses the procurement of trees and shrubs, there should be an avoidance of the use of non-native species, and that any species that are planted are climate resilient (see also specialist officer comments in the Arboriculture section).

Paragraph 10.2.4 states “Control methods will be implemented to manage the risk of harm to human health, prevent significant pollution of waters and prevent significant harm to environmental receptors.”. Any level of pollution of waterways, or harm to environmental receptors is unacceptable and should be avoided as far as possible. To only control for “significant” levels of pollution or harm is unacceptable to the Council.

Paragraph 11.2.6 states that “The Contractor will establish a system with the aim of ensuring that waste materials are separated into appropriate waste streams to maximise their reuse, recycling and recovery on and off site.”. This “system” should be developed in collaboration with the Waste Removal Authority.

Paragraph 12.1.5 states that “The Contractor will consult with members of the stakeholder engagement forum... regarding traffic management and other traffic related measures to be implemented in accordance with the draft CoCP.” This should be amended as ‘consulting with stakeholders is not enough, any traffic management or traffic related measures should only be done in collaboration with and following the approval of the Highways Authority.

Paragraph 12.3.1 mentions the development of a CTMP and CTMS, these should be produced in collaboration with the Highways Authority and Local Planning Authority.

Paragraph 12.3.6 states that “Public access to existing routes for cyclists, pedestrians and vehicle users will be maintained, where reasonably practicable. Where this cannot be maintained, appropriate diversions will be put in place ahead of closures, where feasible, with advanced notice provided to users.”. Appropriate diversions must be put in place ahead of closures. The applicant will need to ensure compliance with the Oxfordshire Permit and Lane Rental schemes as well as any other network



management schemes in place during the construction phase (see also specialist officer comments in the Transport section).

Paragraph 12.4.1 mentions the development of a Construction Workforce Travel Plan. This must be developed in collaboration with the Highways Authority.

Section 13 discusses air quality management measure that will be put in place. Paragraph 13.1.3 states that “These measures will be developed with reference to good practice publications...” this is not a strong enough provision. Any measures shouldn’t just reference, but follow any relevant good practice publications available throughout the course of the construction period, and that these measures are updated with the latest available information.

Paragraph 13.3.1 mentions various measures that will be implemented to reduce emissions from vehicles on site. One such measure is the “Setting of on-site speed limits”. The Contractor should set on-site speed limits and enforce them as well. Non-compliance of on-site speed limits should be in breach of the Construction Workers Code of Conduct.

## **Chapter 13 - Air Quality**

VWHDC welcome the suitable approach taken to assessing air quality impacts for the South East Strategic Reservoir Option, as outlined in Chapter 13 and Appendices 13.1–13.4 of the PEI Report. The methodology is consistent with IAQM and DEFRA guidance, and the inclusion of both construction and operational phases provides a robust framework. The identification of sensitive receptors and use of magnitude descriptors for annual and short-term concentrations is appropriate and offers clarity on potential risks.

At this early stage, the preliminary assessment indicates that no likely significant air quality effects are expected during construction or operation. However, ahead of the Environmental Statement, further work must include an assessment of construction site equipment emissions, updated traffic screening, and detailed modelling where necessary. It is important that the Environmental Statement assesses the cumulative effects of the proposed reservoir with other committed development, in accordance with Paragraphs 4.2.3 and 4.2.5 of the National Policy Statement for Water Resources.

The Council looks forward to reviewing the Environmental Statement and any updated information it contains to ensure our comments reflect the most current assessment and proposed measures.

## Chapter 14 – Noise and Vibrations

The broad approach to noise and vibration is satisfactory. That is establishing a baseline and comparing potential noise and vibration impacts of the construction and operation of the reservoir against that baseline. VWHDC does have some concerns around points of detail, these are set out below.

There is a simple duplication in 14.6.22. The reference to new housing allocation at Monks Farm is duplicated.

Table 14.21 makes reference to Control of Pollution Act 1974 section 72 as a guidance for minimising noise and vibration impact from construction. This section refers to establishing best practicable means to control noise for the purposes of any duty imposed by law. In most cases that would relate to statutory nuisance. For most construction projects this is an acceptable approach. However, this project will have a construction phase of several years, so such an approach should be regarded as the minimum standard of protection rather than a target. Perhaps a better target would be preventing significant loss of amenity in this case – the applicant should seek to meet this and provide a robust justification in the ES if they cannot.

The use of a restriction on hours of operation for construction is entirely reasonable. However, extending hours for the maintenance of plant (as suggested in appendix 2.2) is unreasonable if that activity is audible beyond the site boundaries. Any maintenance that will be audible beyond the site boundary should only take place during the agreed operational hours. The applicant should confirm this prior to submission. Particular consideration should be given to noise arising from enabling development (e.g. the railway sidings) – given the scale of this development in it's own right, robust hours of operation and noise restrictions should be in place.

Noise and vibration from the operation of the reservoir (for example pump and valve chambers) is stated as being covered by "embedded design mitigation". At this stage it is not clear what this entails, and this should be clarified. A commitment to use the baseline noise survey to establish acceptable parameters for noise emission from such fixed plant is needed. This will ensure that the embedded mitigation will be at an appropriate level to prevent loss of amenity (or worse, nuisance). I am sure that an unambiguous statement to this effect will provide a measure of reassurance to the local authority and to local residents. Likewise, the baseline study should be used to identify appropriate construction plant and techniques.

Reference is made to the use of prior consent under Section 61 Control of Pollution Act 1974. This is a common practice in construction, demolition and engineering works. At this stage in the process, it is not clear whether this should be a single consent covering the whole project or separate consents covering different aspects of the project which may have very different characteristics. For example, enabling works, such as roadway construction or railway siding construction, might have very different characteristics to

construction of the reservoir embankment or the construction of pump or valve chambers.

## Chapter 15 - Socio-Economics and Communities

The Economic Development team have reviewed the consultation documents for the proposed development. These comments take note of the National Policy Statement (NPS) for Water Resources Infrastructure as the primary NPS for the project and take account of local economic policies and strategies.

### Design Principles

Two of the project's overarching design principles relate closely to economic development with specific relevance within the "People" based principles that follow:

- **P1 Seek Socio-Economic Opportunities:** Develop a project that actively engages local communities and organisations, fostering local inclusive economic growth, employment, education, training, and skills development throughout the entire project lifecycle.
- **P2 Create Safe, Accessible and Inclusive Spaces:** Develop inclusive, accessible and multifunctional recreational spaces for both local residents and visitors, offering opportunities for nature and recreation, contributing to an improved quality of life.

Further details are provided in table 14 and 15 of the Draft Design Principles document, that detail the intention of the proposed development to support education and local employment, support local businesses and work closely with local communities, all of which closely align to local economic development objectives as detailed within the Councils' respective Local Plans and Corporate Plans, as well as the Strategic Economic Plan for Oxfordshire.

### Community Employment Plan

Many of the benefits proposed for the development would be facilitated locally through adoption of Community Employment Plan (CEP) for the development. CEPs are typically requested as a planning condition under Vale's Local Plan 2031 Part Two, Core Policy DP11. They support local benefits being derived from large scale developments.

On this occasion, the CEP structure has been adopted by Thames Water (TW) and ahead of the Development Consent Order (DCO) submission, a CEP is being developed with support from both Vale of White Horse District Council's Economic Development team and Enterprise Oxfordshire's (EO) CEP Advisory Service.

The CEP should agree targets relating to local socio-economic outcomes and will be subject to monitoring and reporting throughout the construction phases and into the end phase of the development. We understand that TW intend to include the proposed CEP as part of their DCO submission. It is critical that this work continues, and the CEP is included as part of the DCO. If possible, a draft should be provided to the Councils for comment prior to submission.

The CEP should include targets relating to local skills and employment of between 15 to 25 per cent of opportunities created by the development should be targeted locally (local defined as within Oxfordshire, as per Local Plan derived CEPs). As an example, this could include an agreed minimum percentage of apprenticeships created by the development being filled by residents with Oxfordshire postcodes.

To support this outcome, the District's Economic Development team alongside EO are facilitating early workforce development meetings with key stakeholders such as the Department for Work and Pensions and local Further Education Colleges and other training providers to ensure that local employment and skills development opportunities are planned, possible, and maximise local impact.

The CEP should be a key component of guiding the development to create inclusive growth opportunities, such as work experience, training and jobs for those furthest from employment. We understand that TW have engaged with the Oxfordshire Inclusive Economic Partnership (OIEP) regarding the potential for the development to support inclusive opportunities in line with the OIEP's recommendations. This should strengthen local communities through delivery of inclusive growth, a key objective of Oxfordshire's Strategic Economic Plan (SEP).

The CEP should also include additional targets for local supply chain and community benefits, as detailed below, alongside the wider principles that inform the development of the CEP:

- Targeting local employment, skills training, apprenticeships and bootcamps, utilising the apprenticeship levy and workforce development training initiatives that address local skills shortages.
- Ensuring that there are opportunities for local businesses and facilitating engagement through meet the buyer events to help support diversity in the supply chain.
- Provide education and careers support for schools, colleges and alternative education providers working with those with additional needs. This should include support for inclusive employment opportunities.
- Support for communities including local charities and social enterprises to help create social value that strengthens the local economy and supports our communities.

- Supporting development of green skills and initiatives including that support climate action and nature recovery.
- Continued work with key CEP stakeholders and relevant partners across Oxfordshire throughout the project.
- A commitment to actively managing the CEP including a CEP Consultant acting as the lead on behalf of TW.

The principles of the CEP should also be passed to TW's appointed contractors/ infrastructure providers who will be expected to also adhere to the targets agreed. Early engagement with contractors should include the opportunity for EO and the District's Economic Development team to liaise directly. This is expected to lead to separate CEPs that will be reported on during each phase of construction and will include assessments against the Themes, Outcomes and Measurements framework (TOMs) to quantify economic and social value outcomes.

To help manage this process, we expect TW to employ a CEP Manager, who will report regularly upon the project's delivery of benefits against all targets throughout both the construction and end phases. The full CEP strategy, incorporating above priorities, must be submitted alongside the DCO to be secured as a requirement.

### Construction Workforce

To date, only a high-level qualitative assessment of job creation during construction and operation has been undertaken, this is based on the construction and operational workforce estimates. A quantitative assessment of direct, indirect and induced employment during construction and operation, and the associated impacts should be provided as part of the Environmental Statement (ES) and should be submitted alongside the DCO, this should include offsets against current employment due to be displaced by the proposed development.

At present, peak construction workforce is assumed to be approx. 1,800 individuals and linked to the CEP process described previously, TW are working alongside EO and the Council's Economic Development team to engage with local skills and training providers. This seems to be a low estimate, given the significant nature of the scheme and the length of the construction period. The ES should include a detailed assessment of the workforce's impact on local services, including accommodation, (as when at its peak, the workforce could affect availability of visitor accommodation in the area) transport and travel, and public services. It is understood that workforce accommodation may be incorporated on site within the main construction compound, however, the number of workers this is likely to accommodate has not been confirmed and it is, therefore, assumed at this stage that no construction worker accommodation will be provided on site as this represents a reasonable worst-case scenario. If on-site accommodation is proposed, this should be robustly justified, and included within the DCO.

VWHDC note the risk regarding the scale of workforce demand to negatively impact forthcoming developments elsewhere the local area, including beyond the draft order limits. The DCO submission should include an assessment of the expected workforce, detail the planned skills development programme, assess potential impacts on wider projects in the county and demonstrate how negative impacts on wider development could be mitigated.

### Visitor Economy

The consultation documents detail that works will take place on the Thames between Abingdon at The Nags Head and the Culham Cut, affecting river width for boaters, and views from the Thames Path. The river is a key asset in attracting visitors locally, and the potential for disruption in and around Abingdon could affect visitor businesses. This impact should be examined in the ES.

Information within the socio-economic paper states that once operational, the site could attract up to 1.058 million visitors per year in a high-use recreational scenario, and that peak summer weekends may see up to 8,000 visitors per day.

Further details are required regarding the economic impact of the reservoir as a visitor attraction, including the basis for the numbers of visitors detailed, a breakdown of visit types, catchment areas, day trips vs. overnight, and appropriate multipliers to help quantify the impact on supply chain.

Assuming that the numbers proposed at this stage are accurate, TW should also address the following concerns:

- TW suggest that visitor traffic is expected to be “car-dominated” with between 70 per cent and 100 per cent of trips to the site are expected to be by private vehicle. This is inconsistent with local objectives for sustainable growth, and alternative travel options should be investigated (see also specialist officer comments in the Transport Section).
- The ES should include an assessment of how local infrastructure is intended to cope with hundreds of thousands of additional car journeys, especially at peak weekends or at key commuter times, mitigating impacts on rural areas and communities.
- The assessment should cover the availability of parking facilities at the operational site and show how these are anticipated to accommodate the peak visitor numbers proposed, mitigating impacts on rural areas and communities.
- Little detail has been provided regarding whether TW intended to consider options to support alternative transport to site to alleviate potential congestion and environmental impacts of private vehicle reliance. This extends to workforce travel to work at peak construction.



- Further details on how this increase in visitors can be managed sustainably, and how TW's intends to participate in the local visitor economy over the longer term should be detailed within the DCO submission.

The potential for positive impact as a visitor destination should also be presented within the DCO submission detailing direct spend and supply chain multipliers. The assessment should also consider whether the reservoir will serve as an attractive leisure amenity that supports inward investment both for the visitor economy and other prevalent sectors in the local area, including science and technology.

A key consideration is whether the development would help to advance the region globally, positioning the area as a leader in sustainable infrastructure and investment, or act as a key asset to attract investment or drive innovation. It is key for us to understand how this is weighed against factors such as disruption to road networks, competition for workforce, and the impact on local accommodation or public services. Ultimately, we will need to understand how the project will affect inward investment, given the interest in the local area as a magnet for innovation, science and technology.

VWHDC understands that further quantitative data, such as the multipliers in related sectors, will form part of the updated economic assessment within the ES, and expect this to be presented in line with additionality guidance within the Government Green Book.

#### Impact on communities and businesses (NPS)

A significant amount of information regarding the socio-economic impact of the project is due to be submitted in more detail as part of the ES within the DCO submission. The lack of specific detail available at the current time is very disappointing, results in significant uncertainty for communities and businesses and limits our ability to make a thorough assessment of the issues and potential benefits of the project, but our initial observations are as follows:

- The Planning Act 2008 requires developers of nationally significant infrastructure projects to identify and consult with affected landowners and ensure they have a fair opportunity to make representations about the project.
- There is an impact of displacement of existing businesses, specifically those with sites falling within the project's draft order limits (referred to as those with Category 1 and 2). The impact of displacement on the local economy needs to be quantified and offset against the benefits of the proposed development.
- The act further requires TW to identify those affected whose land is not needed by the project (and is therefore outside the draft Order Limits) but could be indirectly impacted by the construction activity or the operation of the proposed infrastructure, these are referred to as Category 3 land interests. Again, the

potential impacts on economic activity on Category 3 land interests should be addressed within the DCO process.

- Category 1 and 2 businesses include nine farms or small holding complexes, three solar farms, 20 businesses based at the Steventon Depot, the Landmead airstrip and four business properties located at the former Goose Willow Farm.

The approach to land acquisition is detailed in Thames Water's land-and-property-factsheet, this includes the organisation's preference for land to be acquired by agreement rather than through compulsory acquisition powers available under the Planning Act 2008. We understand that at the time of the statutory consultation, Thames Water have sent Land Interest Questionnaires to all those currently identified as having Category 1, 2 or 3 land interests and will also be sending Section 42 letters to appropriate parties.

It is vital that both efficient and sufficient support is made available by TW to those affected in all categories, this should include offering direct engagement with the proposed development and facilitating clear guidance in all matters relating to their plans for land acquisition and support for those being displaced. TW should ensure a transparent and responsive service is offered to all affected businesses, and the progress and effectiveness of this process should be detailed within the DCO submission.

Noting that affordable space for foundational economy businesses is a recognised pressure in South and Vale, (as detailed in research for the councils' emerging Joint Local Plan evidence base via the Employment Land Needs Assessment Phase 2) appropriate mitigations on the negative impacts of business displacement on local economic activity need to be considered and provided as part of the scheme. No information on this has been provided, and must be included going forwards.

### Transport and Travel

The Socio-Economic document states that businesses in proximity to the draft order limits would be able to continue operating as normal despite presence of temporary road closures / diversions. However, it also details that an additional 540 offsite HGV movements per day will be required at peak construction, with most arriving via the A34 and accessing the site from both the A415 and A338.

These are popular commuter routes for employees accessing growing employment destinations such as Milton Park, Culham Campus and Harwell Campus. This area is a nationally important economic and research hub, and additional traffic movements have potential to impact commuter patterns and significantly affect local productivity. It is vital that TW clearly details this impact, and seeks mitigations for increased vehicle movements, diversions and roadworks on commuters, as well as the operations of local businesses, especially when considered alongside other large scale development in the area. TW should seek to quantify the impact within the ES to allow for an accurate and

honest picture of the economic impact of the project. Currently, this has not been done, and is a significant deficiency of the scheme.

### Operational Phase

The consultation documents detail that the operational phase will create circa 100 direct jobs. Specific details of the exact types and value of jobs to be created have not been provided, but it's expected that maintenance, water management, and visitor services are likely to be most prevalent. As part of the economic benefits assessment it would be helpful to also understand current employment within the site's draft order limits and view these against the proposed job creation over the longer term. It is disappointing that this has not been undertaken at this stage in the process given its importance.

The DCO submission should detail any plans that TW have to ensure there will be ongoing communication with local businesses and communities beyond construction to continue to help the area adapt to impacts of the development. VWHDC strongly supports the creation and management of a Community Benefit Fund which should be in place throughout the construction and operational phases of the development. This should be developed prior to submission of the DCO and be put in place as soon as practicable following determination of the DCO, if approved.

### Economic Resilience

VWHDC understand that the reservoir, and its relationship with existing facilities, (such as Farmoor Reservoir), should lead to increased resilience for businesses and residents within the region. Further details of the level of impact anticipated and how this could support key industries within the development area should be clearly articulated as a component of the DCO submission.

### Leisure

VWHDC welcomes the opportunities for leisure activities at the site once operational, however, there are concerns regarding the provision of these facilities and their operation.

Neither the water sports centre/sailing facility on the crest or the education centre would form part of the DCO application. This is incredibly disappointing and risks these facilities failing to come forward as it relies entirely on other providers undertaking the works to gain permission and then construct the facilities. VWHDC is also concerned that Thames Water haven't been entirely clear in what would be included within the scheme being considered at the examination throughout the pre-application period, which may lead to significant confusion amongst residents as to what facilities would actually be provided.

Thames Water should include these facilities as part of the proposals in the DCO, thereby allowing them to be considered as community benefits of the scheme. As it stands, they cannot be considered as benefits, and would not come forward at the same time as the remainder of the infrastructure. There is also a lack of information on how Thames Water anticipate these to come forwards if not funded as part of this scheme.

As discussed earlier in this response, VWHDC supports the Wilts and Berks Canal Trust in their ambition to reinstate a fully navigable canal. Although the proposal would provide a “wet channel”, VWHDC does not consider that this goes far enough, and Thames Water should contribute further towards creating a navigable canal through the site, especially given they would be removing several historic locks and other historic canal infrastructure as part of the works.

VWHDC supports the creation of leisure lakes for fishing/open water swimming, kayaking and other leisure activities to the north as part of the proposals. However, whilst beneficial, given they would be created as part of the physical works to the site as balancing lakes, their provision is considered to be a bare minimum as part of the leisure offer on site. Thames Water should be providing significantly more leisure opportunities across a site of this size, and it is disappointing that this has been limited in such a way.

### Public Art

VWHDC’s Local Plan and Public Art Policy (Development Policy 20) encourages the integration of public art within all major developments to enhance local identity, community engagement, and environmental understanding. In line with these policies, the proposed reservoir presents an important opportunity to embed high-quality public art throughout the site to support public interpretation, nature recovery awareness, and community benefit.

A carefully developed public art strategy for the reservoir should:

- Support public understanding of the site’s role in water management, biodiversity enhancement, and nature recovery;
- Address and alleviate local concerns and objections by providing accessible interpretation and points of connection with the landscape;
- Create distinctive and meaningful features that encourage visitors to view the reservoir as a valued local amenity and leisure destination;
- Offer opportunities for local artists to collaborate with environmental and conservation organisations, contributing creatively to habitat restoration and ecological education;
- Generate employment and skills development within the local creative sector, aligning with community employment and engagement plans.

It is encouraged that a public art strategy is created and forms part of the DCO submission. An arts programme should then be secured as part of the requirements, and where possible, integrated into the detailed design. This should also consider art provision during the construction phase, especially where the proposals would result in unsightly views or hoardings.

## **Chapter 16 - Human Health**

Public health matters are generally overseen by OCC, but VWHDC supports this in its role as Local Planning Authority.

The introduction of additional leisure facilities, albeit not as comprehensive as they could be, and active travel routes provide some human health benefits.

The health assessment methodology appears reasonable, but we would also promote the use of Oxfordshire's HIA guidance which includes a toolkit and checklist on what is expected in a thorough assessment. We strongly support the use of the Oxfordshire Data Hub as a platform for Oxfordshire Joint Strategic Needs Assessment data, as outlined in the Methodology section.

Engagement and support for existing communities throughout the construction process is vital, especially given the likely impacts on communities. Thames Water should seek to reduce uncertainty and provide clear answers to resident's concerns regarding the proposals to reduce the impact on resident's wellbeing and mental health.

Thames Water should provide a full and detailed prevention and mitigation plan for waterborne diseases, given the potential risks to human health. This should be provided at the earliest opportunity, and must be submitted as part of the examination documents.

Overall VWHDC supports OCC's response on Human Health matters.

## **Chapter 17 – Greenhouse Gases**

The consultation documents include many 'draft proposals' and 'options' which are under consideration, particularly in chapters 17 and 18 of the Preliminary Environmental Information Report (PEIR). The lack of firm commitments from the applicant makes it difficult to assess the relative merits of the proposals and provide meaningful comments. The lack of data in the documents also makes it difficult to fully assess the climate impacts and enable comment on specific solutions for mitigation, adaptation and offsetting. We have however identified some broader issues, and our comments are detailed below.

### Alignment with local emissions trajectories and carbon budgets

As per paragraph 17.4.34, the greenhouse gas (GHG) emissions of the scheme have been contextualised against the Climate Change Committee's carbon budgets and the Balanced Pathway. While this is a Nationally Significant Infrastructure Project, and it therefore makes sense to compare with emissions budgets on a national scale, SESRO will have a greater proportional impact on emissions in Oxfordshire at both a county and district level. Oxfordshire has a set of carbon budgets for the county which are published in the Oxfordshire Net Zero Route Map and Action Plan, and targets for South Oxfordshire and Vale of White Horse districts are published in our [joint Nature and Climate Action Plan 2025 – 2029](#). South Oxfordshire and Vale of White Horse councils have ambitious targets to become net zero in their own operations by 2030 and to become net zero districts by 2045. Additional analysis is needed to demonstrate the impact of the emissions from SESRO on Oxfordshire's countywide and district carbon budgets and targets.

### Benchmarking GHG emissions with similar developments

It would be helpful for the applicant to provide some analysis comparing the GHG accounting for SESRO with other developments of a similar nature and scale or information from databases if available. This would provide a benchmark to compare the GHGs at each lifecycle stage and understand areas in which SESRO is expected to under or overperform compared to similar projects.

### Offsetting

Table 17.1 states that details of measures for offsetting significant effects are addressed in Section 17.8, however there is no information about plans regarding offsetting residual emissions within this section. It is noted that offsetting will be addressed within the Carbon Management Plan (17.10.12). We recommend that any offsetting strategy follows clearly defined 'good practice principles' when identifying offsetting projects to match residual operational emissions and construction emissions. These principles could be based on the Oxford Principles for Net Zero Aligned Carbon Offsetting. By adopting and following these principles, the applicant will demonstrate its intention to support high quality, local offsetting projects that offer demonstrable, meaningful impacts which also deliver wider benefits to local communities.

### Renewable energy generation potential

No information has been provided in Chapter 17 regarding the use of wind as a renewable energy source. Ideally, an Energy Strategy should be provided alongside the Environmental Statement making clear the analysis of renewable energy generation opportunities and the factors which have led to different technologies being pursued or discounted. A project of this scale and significance has the opportunity to lead the way



with installing additional renewable energy generation, beyond replacement of the existing solar farm on site and meeting the site's operational energy use.

#### GHG release from the reservoir itself

According to Table 17.3, no consideration has been given to the GHG emissions which will arise from the reservoir (the body of water) itself during operation. While capturing the scale of these emissions can be challenging, they will be significant to the overall GHG evaluation and therefore should be considered as part of the operational GHG assessment. It is important to recognise how future climate change scenarios may also affect the GHG releases from this water source. In addition, there has been no consideration of the capacity of the reservoir to sequester carbon which may help to offset the emissions.

#### Sequestration potential of the site

It would be useful to include an estimate of how the proposed biodiversity enhancements will help to capture and store CO<sub>2</sub>. This would need to be assessed against the baseline conditions to provide estimates of the potential sequestration capacity for nature-based carbon sequestration on the site following these interventions. The results may be used to support offsetting onsite, but the applicant needs to be mindful of additionality on top of BNG requirements. It is disappointing that this statutory consultation has come prematurely to allow for this to occur.

## **Chapter 18 – Climate Resilience**

#### Future baseline modelling

It is accepted that the UKCP18 projections have been used to establish the future baseline, however, there needs to be some assurance that consideration has been given to recent record-breaking weather patterns when modelling the SESRO's climate resilience. Additionally, no reference is made to existing local work which has been undertaken to demonstrate the impacts of climate change and severe weather in Oxfordshire. This includes the Climate Vulnerability Assessment and Extreme Value Analysis for Oxfordshire. Both reports highlight that recent weather records from 2022, such as excess heat, were far greater than the extremes modelled in the UKCP18 climate projections and previously not anticipated until the 2050s.

#### Climate-related water quality impacts

While Appendix 18.2 refers to climate-related risks associated with water quality which may impact the reservoir in the future, such as hotter, drier periods encouraging algal blooms, specific mitigation has not been identified outside of embedded design measures. Further assurance on mitigation measures to reduce the identified impacts on

water flows and the physical characteristics of the associated water courses throughout the life cycle of the SESRO would also be welcomed.

### Recognising significant climate risks

Consideration of climate resilience is currently spread across four different chapters, (climate resilience, traffic and transport, water environment, major accidents and disasters). Key information on climate risks would benefit from being pulled together into a summary providing a holistic assessment of risk.

### Extreme wind and storm damage

While some specific risks from extreme wind and stormy weather have been identified in Appendix 18.2, the information about measures which are included within ED-13 is very high level. Reservoir flooding impacts on staff, visitors, machinery and infrastructure are all risks associated with extreme wind and storms, and more reassurance is required that the measures under ED-13 will provide sufficient resilience against extreme weather events for the whole life of the reservoir. There have been recent recorded incidents of damage on site at other reservoirs around the country, including Lake Vyrnwy; assurance that learnings have been taken from this and similar incidents would be welcomed.

## **Chapter 19 – Major Accidents and Disasters**

VWHDC is very concerned that reservoir breach, emergency discharge plans and failure inundation mapping has not been completed as early as possible for risk assessment and planning. There is also no emergency plan to set out prevention measures and response if an accident or disaster occurs, which has been requested by the leaders of both SODC and VWHDC. The applicant currently states that this would be completed prior to the reservoir being filled. This is far too late in the process and could result in significant safety issues only being flagged at a very advanced stage in the construction process. A more precise and sensible timeframe is critical to ensure that residents, communities and businesses within the district and further afield are protected. This should also include modelling for when the rivers are already in flood to enable preparation for the most reasonable worst-case scenario. Thames Water should also commit to providing the resources necessary to deal with any such accident or disaster as part of the DCO.

Dealing with any impacts of an incident relating to the reservoir, would fall to the relevant Local Authorities, and as the local emergency planning authority they would be responsible for managing such a crisis. Thames Water should therefore have plans for this potential eventuality in place as part of the DCO application, rather than waiting until the last minute to address these issues. In particular, the combined discharge limit into the Thames is 600Ml/d, which converted to m<sup>3</sup>/s gives a value of just under 7m<sup>3</sup>/s. The expected discharge into the Thames in the result of an emergency drawdown is

approximately 76 m<sup>3</sup>/s. This is an order of magnitude over ten times greater than the standard limit, which would result in a catastrophic impact downstream, especially in times of flood. The lack of emergency measures to address this at the earliest possible stage is incredibly worrying.

If the Environmental Statement does not include appropriate reservoir breach and inundation mapping, including for emergency discharge into the Thames, it is clear that it would fail to adequately inform the Secretary of State in their decision making. The Council considers that this must be done as part of the DCO application to appropriately inform both the Examining Authority and the Secretary of State prior to a decision being taken. If they are not aware of the inherent risks of an infrastructure project of this scale, then they would be unable to make an informed decision.

In Table 19.3 there is mention of Harwell as the nuclear decommissioning site. It is correct this is no longer in the Radiation (Emergency Preparedness and Public Information Regulations) (REPPIR). However, there is no mention of UKAEA Culham which is an upper tier REPPIR site and well within the 10km outer buffer from the SESRO site. This needs to be scoped in and considered, and it is very concerning that this has not been picked up and undertaken.

## **Chapter 20 – Cumulative Effects**

This chapter of the PEIR considers the potential inter-project and intra-project effects arising from the construction and operational phases of the Project. These effects are defined as:

- Inter-project effects: The consolidated effect of multiple residual environmental effects of a single project with other developments on a single receptor or group of receptors.
- Intra-project effects: The consolidated effect of multiple residual environmental effects from within a single project affecting a single receptor or group of receptors.

The assessment methodology generally follows the guidance set out in the PINS Advice Note. The advice note sets out a four-stage process to evaluate how a proposed development's environmental impacts may combine with those of other existing or approved projects. It also provides guidance on identifying interrelated effects and provides best practice recommendations to support Environmental Impact Assessments under the Planning Act 2008. PINS Advice Note is considered to be best practice for CEA. There are four stages to the CEA, which are currently incomplete, but should be finalised for the ES.

The cumulative schemes do not seem to include the Thames to Southern Transfer scheme which would almost certainly come forward if this proposal gained approval,

especially as the reservoir was increased from 100,000,000 cubic metres to 150,000,000 cubic metres primarily to account for the transfer to Southern Water. This should be included in the cumulative impact assessment. Consideration should also be given to the Severn to Thames Transfer, which may come forward alongside or following the reservoir.

It is disappointing that the cumulative effects analysis is incomplete, but this should be continuously updated going forwards, with robust justification for excluding schemes from the assessment.

## **Chapter 21 – Next Steps**

Thames Water should actively engage with the Host Authorities, Parish Councils and other stakeholders going forwards, with as much information being shared to allow host authorities to inform and shape the scheme where possible.

Additional Technical Liaison groups should be established to adequately address topics which present themselves.

The lack of information at this stage is particularly concerning, especially where the lack of complete surveys fail to inform the overall design.

It is also of great importance that additional work is undertaken prior to the DCO submission regarding the opportunities for both mitigation and community benefit. Community benefits should be things which provide a benefit above and beyond what is necessary for mitigation. For example, the following important aspects must be included in the DCO going forwards, and should be worked on alongside stakeholders prior to submission:

- Establishment of a Community Enhancement/Benefit Fund which can run during construction and operation to allow for the proposals to positively benefit communities in and around the site
- Establishing a Community Ownership Scheme for the proposed solar farm within the site, which would provide benefits to the affected communities.
- The Abingdon Flood Alleviation Scheme should be brought forwards in collaboration with Local Authorities and the Environment Agency. It is welcomed that the access road would facilitate this, but it should be secured prior to submission of the DCO
- A commitment to not blight any of the options for the Grove/Wantage Station. Currently the plans would prevent this coming forward in any meaningful way on any of the preferred sites. This should be addressed in collaboration with the relevant authorities.
- The proposals include other infrastructure projects, which are proposed in the Emerging Joint Local Plan, within the Draft Order Limits, namely the Marcham

Movement Corridor & Improvements to Frilford Lights, the Southern Abingdon Movement Corridor, Improvements to Featherbed Lane and Steventon Junction and Relief to Rowstock and Harwell to Didcot Busway. Thames Water should clarify whether the proposals would have an impact on whether these projects can come forwards, and if so provide alternative options.

- East Hanney Flood Alleviation Scheme
- Steventon Flood Alleviation Scheme
- Commitment to working alongside the WBCT and relevant authorities to work towards a fully navigable canal through the site, and to not blight the opportunity to link it to the Thames in future.
- Commitment to providing the onsite leisure and education facilities, beyond the visitor centre and leisure lakes in the north east of the site. The sailing facility and education centre could provide great benefits to the community, and should form part of the DCO submission, rather than relying on other groups to bring these forwards.

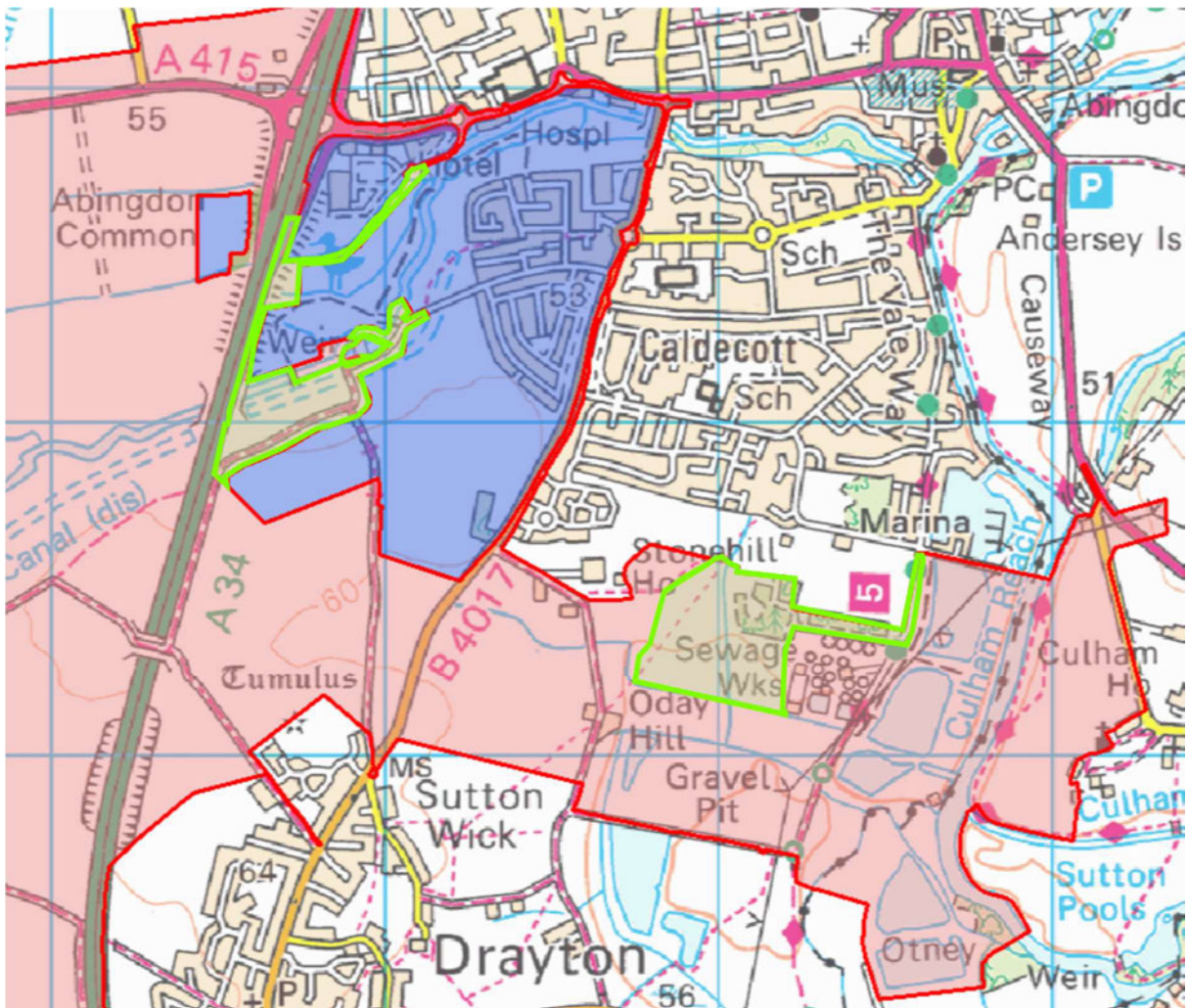
Whilst the Council retains an objection to the proposals in principle, it remains open to working with Thames Water to achieve the above objectives in the event that the proposals gain approval.

### **Property/Landowner Matters**

VWHDC owns land within the Draft Order Limits and which could be affected by the proposed development and biodiversity mitigation for SESRO. The council as landowner would welcome discussions with Thames Water to understand it's proposals clearly.

Council owned land within the Draft Order limits is outlined in green on the plan below. The Draft Order limits are outlined and shaded in red and the "Area omitted from the draft Order limits" is shown shaded in blue:





Land owned by the council within the area omitted from the draft order limits is not shown on the plan above but should the proposals change to include proposals in that area or any other area, Thames Water must contact the council as further representation may be required.

The proposals directly impact on council owned land as follows:

- The “River Tunnel” passes beneath council owned land south of Kensington Close, Abingdon and west of the sewage works;
- “Project Priority Areas for Biodiversity” are included on council owned land east of the A34; and,
- Part of the access from the A415 to the north east and a construction compound east of the A34 are on council owned land.

The council's land north and south of Mill Road, Abingdon and south of Kensington Close, Abingdon is the subject of a farm business tenancy agreement and the land is in



agricultural use (pasture and arable). Using the farmland north of Mill Road for access and a construction compound even on a temporary basis then using the same land and the farmed land south of Mill Road as “Project Priority Areas for Biodiversity” would preclude the land being farmed or at least prejudice the means by which it is farmed e.g. it could prevent arable use.

Constructing the River Tunnel beneath land south of Kensington Close would for the temporary construction period prevent use for agricultural purposes.

The proposed developments and proposed biodiversity mitigation would impact on agricultural activity and affect the rent the council could justify charging a tenant. This will impact on financial returns the council currently receives in letting the land under the tenancy agreement reducing council income which contributes to funding council services.

An oil pipeline passes beneath the area proposed as a construction compound. The council is obligated through a legal agreement to “not permit to be erected or installed any building or structure or permanent apparatus over the pipeline”. The proposals could prevent the council from complying with this obligation or cause the council costs in negotiating revisions to the legal agreement to accommodate the SESRO proposals. Again, this could divert council funds away from providing its services.

Housing land has to be provided to meet objectively assessed housing need in the district and to meet central Government housing targets. The council’s land east of the A34 and north and south of Mill Road, Abingdon is in a sustainable location at the edge of the main town in the Vale of White Horse district and with excellent opportunities for walking, wheeling and public transport links to local services, facilities, employment opportunities and into Abingdon town centre. Consequently, with support from the council as landowner, Berkeley Homes has promoted council owned and adjacent land through the emerging Joint Local Plan, as part of an up to 1,500 dwelling development.

A co-ordinated approach is required to ensure this opportunity for a sustainable housing development can be delivered in the future. Reserving the land for “Project Priority Areas for Biodiversity” could prevent the site or at the very least, severely limit its chances of being made available for housing now and in the future due to impacts on biodiversity that would become established as part of the SESRO project or without significant costs in replacing habitats created as mitigation for SESRO. In addition, a vehicular access is proposed as part of the housing development being promoted, from the north and across land on which the construction compound is proposed. This could prevent access to the proposed housing land and make the housing proposal undeliverable.

Constructing the River Tunnel beneath allotments south of Abingdon and immediately west of the sewage treatment works, could for at least a temporary period prevent allotments being used and may prevent their re-establishment should that impact on future tunnel maintenance requirements. Development Policy 33 of the Vale of White Horse Local Plan 2031 Part 2 may permit the loss of open space (which includes allotments according to paragraph 3.279 of the Local Plan), provided they can be replaced by equivalent or better provision in terms of scale, quantity and quality in a suitable and accessible location.

Allotments can enhance the well-being of residents and enable and support healthy lives as acknowledged in paragraph 3.281 of the Local Plan and paragraph 96(c) of the National Planning Policy Framework.

Should allotments be lost due to the SESRO proposals, in accordance with Development Policy 33 of the Local Plan, the council would expect the allotments lost to be permanently replaced by equivalent or better provision in terms of scale, quantity and quality in a suitable and accessible location.

## **Other Matters**

There is very limited information provided regarding the security aspect of the proposals. Due to the large size, strategic importance and potential serious impacts of reservoir breach and emergency drawdown, the site could be a potential target for terrorist activity. It is therefore concerning that no information regarding this has been provided, beyond minimal fencing, CCTV and lighting in certain locations, especially given the advanced stage of the process. Thames Water should have provided details much earlier than this stage and must seriously consider this and include a full plan to mitigate against such attacks for the examination.

In order to achieve a level of security which would be able to mitigate against potential interference, it is likely that there would be changes to the layout of the site, with probably impacts on the biodiversity, landscape and leisure parts of the proposals. Given these aspects provide some of the few benefits of the proposals, it is important that they remain as part of the scheme, and security aspects should be considered at the earliest opportunity to limit their impact.

## Conclusions

VWHDC has worked closely with other host authorities and stakeholders to prepare these comments, and fully support the comments made by SODC and OCC. These comments should be read in conjunction with the submitted comments of other host authorities.

It is clear that there is a significant amount of information which has not been provided as part of this statutory consultation. Whilst the Council appreciates that a proposal of this scale is difficult to prepare for, the lack of information does mean that the statutory consultation feels very premature. The Council suggests that if Thames Water proceed with this scheme, further consultation should be undertaken when an adequate amount of information is available to be commented upon. In its current form, there are significant gaps which result in a huge number of assumptions rather than relying on evidence and fact.

The lack of information throughout the published documents makes it very difficult to effectively comment. This is worrying, especially as Host Authorities and other stakeholders will not have had a meaningful chance to comment on the full scheme prior to the examination stage, which would be far too late for effective collaboration and comment.

It seems unlikely that the applicant will be able to bring together all of the missing information to maintain their timeline of submission of the DCO towards the end of 2026, and there is a risk that this proposal is rushed and significant issues are not adequately addressed prior to the examination stage.

In particular, the lack of emergency plans for drawdown, accidents and disasters appears at best an oversight and at worst negligence in the face of potentially catastrophic disasters. The Council urges Thames Water to address this as issue as a matter of the utmost urgency, given its potential impact on communities in the Districts, Oxfordshire and beyond. The Council believes that if this information and these plans are not included in the DCO, the applicant would be failing to adequately inform the Examining Authority and the Secretary of State of the potential impacts of the proposal.

It is disappointing that throughout the statutory consultation, there are areas of concern which have not been adequately addressed. In almost every chapter of the PEIR, there are matters which have not been resolved, baselines which have not been established or surveys which have not been carried out. A scheme of this importance and scale should not go through a statutory consultation with this amount of information missing or not provided. It raises serious concerns regarding the ongoing DCO process, and whether this scheme would be able to come forward at all.

For the reasons described in this response, the Council maintains its strong objection to the proposals.

Yours sincerely,



**Tim Oruye**

**Head of Policy and Programmes**

South Oxfordshire District Council and Vale of White Horse District Council