River Thames Scheme

Protecting our communities
Securing our economy
Enhancing our Thames

Preliminary Environmental Information Report

Volume 2

Chapter 9: Cultural Heritage, Archaeology and Built Heritage

9 Cultural Heritage, Archaeology and Built Heritage

9.1 Introduction

9.1.1.1 This chapter of our Preliminary Environmental Information Report (PEIR) considers the effects from construction and operation of the River Thames Scheme (RTS) ('the project') in relation to cultural heritage, archaeology and built heritage. Within this chapter we have included topic specific sections on:

- Legislation, policy and guidance (noting any changes since Environmental Impact Assessment (EIA) scoping);
- Engagement with consultees, including responses to comments received on the RTS EIA Scoping Report;
- The assessment methodology for this topic (again noting any changes or updates since EIA scoping);
- Key environmental considerations and opportunities;
- Primary and tertiary mitigation;
- Our preliminary assessment of effects;
- Secondary mitigation; and
- Future work for this topic of our EIA.

9.1.1.2 For a summary of the key baseline elements associated with cultural heritage, archaeology and built heritage see Section 5.5.

9.1.1.3 To determine the potential likely significant effects on cultural heritage assets data was collated within three study areas which have been combined to form the Cultural Heritage Study Area for EIA PEIR (Figure 5.6). The areas are largely unchanged from our EIA Scoping Report, apart from the setting study area.

- For the archaeological desk-based assessment, a 500 metre study area from the Project Boundary for EIA scoping was used to assess the archaeological potential of the project and identify sensitive areas for further investigation (areas of high archaeological potential are shown on Figure 5.6).

- The 1 in 100 year floodplain (i.e. the area with a one per cent chance of flooding in any given year) benefitting from the RTS was also used in the desk-based assessment to consider the effects on designated and non-designated heritage assets of a change in the flood regime.
- An initial study area for the setting assessment was used in 2018 but has been amended to reflect changes to the project boundary. The setting assessment study area is now defined as an additional one kilometre from the archaeological Desk Based Assessment (DBA) boundary combined with the area within the 1 in 100-year floodplain benefitting from the RTS. This area was used to produce an updated setting assessment in 2022 (Appendix 9.1). The final setting assessment will include any additional assets where Zone of Theoretical Visibility (ZTV) indicates that the project will be visible which could affect their setting (see 9.7.1.2 for further detail).

9.1.1.4 The assessment of cultural heritage is connected to the assessment of landscape and visual amenity (Chapter 12) in relation to changes to the setting of heritage assets and historic landscapes. There is also a relationship with effects arising from flood risk (Chapter 10), water environment (Chapter 18), soils and land-use (Chapter 16), traffic and transport (Chapter 17), and noise and vibration (Chapter 14) assessments.

9.1.1.5 This chapter considers the effects from construction and operation of the project on cultural heritage and the likely significant effects that may arise. The cultural heritage resource comprises archaeological remains, historic buildings and historic landscapes. A cultural heritage asset is considered to be a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Setting is defined as the surroundings in which the cultural heritage resource is appreciated (MHCLG, 2023).

9.1.1.6 In total the following numbers of assets within the Cultural Heritage Study Area for EIA PEIR were considered during the archaeological desk-based assessment and 2022 setting study:

- 14 Scheduled Monuments (SM);
- 18 Grade I listed buildings;
- 43 Grade II* listed buildings;

- 521 Grade II listed buildings;
- 41 Conservation Areas;
- 15 Registered Parks & Gardens;
- 63 Areas of High Archaeological Potential (AHAP) or County Sites of Archaeological Importance; and
- 2009 non-designated heritage assets

9.1.1.7 Scheduled Monuments, Conservation Areas and Registered Parks and Gardens are shown in Figure 5.7.

9.2 Legislation, Policy and Guidance

9.2.1.1 A summary of the key legislation, policy and guidance relevant to cultural heritage is provided in Appendix M of the RTS EIA Scoping Report (Environment Agency and Surrey County Council, October 2022) ('the EIA Scoping Report'). Since the publication of our EIA Scoping Report in October 2022 the National Policy Statement (NPS) for Water Resources Infrastructure (Defra, 2023) has been updated and finalised. With regard to the historic environment, the update included a statement that the applicant should undertake an assessment of likely significant heritage impacts including cumulative impacts and consideration of positive contributions to the historic environment (Defra, 2023a). There has been no additional new relevant legislation, policy or guidance published since the submission of our EIA Scoping Report.

9.3 Engagement

9.3.1 Responses to EIA Scoping

9.3.1.1 Table 9-1 below summarises the comments and responses received on our Scoping Report following formal submission to the Planning Inspectorate (PINS) EIA Scoping Opinion (dated 15 November 2022) ('the PINS Scoping Opinion') and any key comments received from statutory consultees. Full consultee comments on our EIA Scoping Report and our responses to these comments are provided in Appendix 4.1.

Table 9-1: Responses to comments received on our EIA Scoping Report

Consultee or Organisation	Summary of Comment	Project Response
PINS	Scoping out effects of transportation of non-hazardous material will depend on traffic routing and affect on setting of designated heritage assets.	Stages 1 and 2 of the setting study (Appendix 9.1) identifies heritage assets potentially affected by transportation of non-hazardous material. Once all haul routes are known, further assessment of effects will take place and will be covered in the Environmental Statement (ES).
PINS/ Historic England	The ES should explain the methodology for assessing impacts to historic landscape character and assess impacts to where significant effects are likely to occur.	In terms of work undertaken to date, historic landscapes have been discussed in the setting study (Appendix 9.1) and will be covered in the ES. Further liaison will be undertaken between the cultural heritage and LVIA teams to provide assessments for the ES, including differences in approach.
PINS	The ES should determine if demolition of buildings or other structures is likely to impact historic receptors and if so, assess significant effects where they are likely to occur.	Buildings at the upstream end of the Runnymede Channel and at Sheepwalk may require demolition. These have been considered as part of the desk-study for our PIER and are not of historic value. This will be verified on the ground for the ES.
PINS	The operation of the Proposed Development may include installation of new sources of lighting, such as stadium lighting at new recreational facilities. The ES should assess effects from operational lighting on cultural heritage where they are likely to be significant.	Lighting has been considered when identifying assets in the setting study at Appendix 9.1. Further assessment will be undertaken as part of the next stages of the setting study for the ES.
Historic England	The ES should encompass all areas to which the presence of the	This is being addressed as part of the setting study and will be

Consultee or Organisation	Summary of Comment	Project Response
	project might make a change to the setting of heritage assets and historic landscapes. This will mainly align to the extent of Zones of Theoretical Visibility (ZTVs) relating to Heritage Assets and Key Views.	developed further for the assessment as described in paragraph 9.1.1.3 above.
Historic England	The 'significance criteria' in the Scoping Report considers various magnitudes of change, distinctions between them are not clear.	The methodology set out in the Design Manual for Roads and Bridges (DMRB) has been used as a guide for the assessment methodology. The DMRB guidance has five levels for magnitude of change and these are set out in Section 9.4.3.3 of this chapter, along with criteria for each category.
Historic England	It is not entirely clear which areas within the study area have been robustly assessed and evaluated and where / whether there are areas for which little is known. Need to separately identify areas of unknown potential.	Figure 9-3 of our EIA Scoping Report shows evaluation undertaken to date. This has not been updated for our PIER as further evaluations were not complete at the time of writing. The ES will include these further evaluations as well as updating Figures with remaining areas of unknown potential.
Local Planning Authority Project Group	There is not a lot in the EIA Scoping Report about the location and nature of the proposed habitat creation in relation to cultural heritage. It is assumed that design of these areas are still at an early stage and that there will be more discussion, therefore, further engagement will be required.	Discussions are ongoing and cultural heritage is a strand in the design of priority areas for habitat creation, enhancement or mitigation.

9.3.2 Other Engagement since EIA Scoping

9.3.2.1 Section 9.2.2 of our EIA Scoping Report summarises the stakeholder engagement relevant to the Cultural Heritage, Archaeology and Built

Heritage topic that was undertaken prior to submission of our EIA Scoping Report.

9.3.2.2 A meeting was since held with Historic Environment Officers covering Surrey County Council and constituent local planning authorities in March 2023 to discuss the archaeological survey programme. A further briefing was given to the Local Planning Authority Project Group in summer 2023 on the current and proposed archaeological investigative fieldwork.

9.3.2.3 Written Schemes of Investigation (WSI) for individual surveys, in addition to survey reports, are circulated to Historic Environment Officers, and Historic England where applicable, for comment.

9.4 Methodology

9.4.1 Introduction

9.4.1.1 This section should be read in conjunction with Chapter 4 'Approach to the Environmental Assessment', which sets out relevant information on the design parameters and information that have informed our PEIR assessment, and how we have approached various aspects of the assessment including:

- The scope of the assessment;
- The methodology (including the approach to defining the baseline environment, topic study areas, and assessment methodology and criteria);
- The approach to mitigation; and
- The approach to cumulative effects.

9.4.1.2 The assessment methodology used for the Cultural Heritage assessment in this PEIR and to be used in the ES is presented in Section 9.7 of our EIA Scoping Report and updated below in Sections 9.4.2 to 9.4.3.

9.4.2 Baseline Methodology

9.4.2.1 Our baseline methodology is set out in Section 9.2 of our EIA Scoping Report. It comprises a combination of desk-based assessment (DBA), setting study, archaeological and palaeoenvironmental risk modelling, and a staged programme of field-based archaeological and geo-archaeological evaluation.

9.4.2.2 Archaeological investigative fieldwork has been conducted in areas considered to have moderate or high potential for archaeological remains (see Appendices 9.2 to 9.6). Fieldwork has been carried out in stages. Stage 1 comprises geophysical, earthwork, fieldwalking and metal detecting surveys, Stage 1a geoarchaeological survey and Stage 2 trial trench evaluations. Fieldwork conducted to date is summarised in our EIA Scoping Report Section 9.3.8. In addition, Stage 1, Stage 1A and Stage 2 surveys will take place at further sites during 2023/24. Full fieldwork reports for Stage 1 and Stage 2 evaluations will be provided as Appendices to the Environmental Statement (ES).

9.4.2.3 The setting assessment follows the five stage approach defined by guidance published by Historic England (Historic England, 2017). Stage 1 and 2 of a setting assessment was carried out in 2022 to identify designated and non-designated assets where setting could potentially be affected by the project through visual effect, noise, dust, lighting or a change in land use (Appendix 9.1). The assessment identified 37 designated heritage assets which could potentially be affected by the construction phase of the project and 13 designated heritage assets which could potentially be affected during the operational phase and are therefore considered in this PEIR. In addition, available data on haul routes has been incorporated into the assessment of potential likely significant effects in this PEIR.

9.4.2.4 Further assessment to refine the list and identify likely significant effects (negative or positive) will take place as part of preparation of the ES when the design is sufficiently advanced to perform a more detailed assessment. The effect on surviving areas of historic landscape will also be assessed.

9.4.3 Assessment Methodology

9.4.3.1 Our assessment of likely significant effects is based on the baseline conditions, including sensitivity and importance of receptors, and the magnitude of change, including the severity or scale of change. The assessment for cultural heritage follows the guidance in the DMRB, Section LA104 (Highways England, 2020a). Specific examples of how this guidance relates to cultural heritage are given in our EIA Scoping Report, Section 9.7.

9.4.3.2 Following the Planning Inspectorate (PINS) EIA Scoping Opinion (dated 15 November 2022) ('the PINS Scoping Opinion'), our assessment methodology references the latest revision of the DMRB (LA104 referenced above). The environmental value is described in Table 3.2N of LA104, which defines the Value Sensitivity of Receptor/Resource and gives a typical description:

- Very High – Very high importance and rarity, international scale and very limited potential for substitution.
- High – High importance and rarity, national scale, and limited potential for substitution.
- Medium – Medium or high importance and rarity, regional scale, and limited potential for substitution.
- Low – Low or medium importance and rarity, local scale.
- Negligible – Very low importance and rarity, local scale.

9.4.3.3 The magnitude of change is described in Table 3.4N with a typical description:

- Major negative – Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
- Major positive – Large scale or major improvement of resource quality; extensive restoration; major improvement or attribute quality.
- Moderate negative – Loss of resource, but not adversely affecting integrity; partial loss of/damage to key characteristics, features or elements.
- Moderate positive – Benefit to, or addition of, key characteristics, features or elements; improvement of attributable quality.
- Minor negative – Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
- Minor positive – Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some positive effect on attribute or a reduced risk of negative effect recurring.
- Negligible negative – Very minor loss or detrimental alteration to one or more characteristics, features or elements.

- Negligible positive – Very minor benefit to or positive addition of one or more characteristics, features or elements.
- No change – No loss or alteration of characteristics, features or elements; no observable change in either direction.

9.4.3.4 The sensitivity of the receptor and the magnitude of change are then compared to the significance matrix set out in Table 3.8.1 of LA104 (Highways England 2020a), reproduced below in Table 9-2. Effects which are moderate or above are considered to be significant.

Table 9-2: Effects Significance Matrix

	No change	Negligible Magnitude	Minor Magnitude	Moderate Magnitude	Major Magnitude
Very high sensitivity	Neutral	Slight	Moderate or large	Large or very large	Very large
High sensitivity	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
Medium sensitivity	Neutral	Neutral or slight	Slight	Moderate	Moderate or large
Low sensitivity	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
Negligible sensitivity	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

9.4.4 Assumptions and Limitations

9.4.4.1 In areas where the original ground surface is no longer present and any potential deposits have been made inaccessible or destroyed by quarrying or landfill, these have been recorded as having negligible archaeological potential. It is possible that very deep deposits under these areas may exist, however it is not expected that the project will affect these due to their depth.

9.4.4.2 Similarly, it is possible that very small areas of intact ground may exist at the margins of former quarry or landfill areas. Such areas have been evaluated where possible, but it is possible that some areas of unidentified intact ground containing archaeological remains exist.

9.4.4.3 Some areas of high archaeological potential could not be fully evaluated due to logistical issues, for example tree cover or use for access (Thames Path). These sites will be carefully investigated at the construction stage, with time and facilities to do this built into the programme.

9.4.4.4 The archaeological survey work is ongoing, a reasonable worst-case scenario has been adopted for the assessment in relation to unknown archaeological remains for all periods.

9.5 Key Environmental Considerations and Opportunities

9.5.1.1 The key considerations with respect to cultural heritage, archaeology and built heritage are:

- Scheduled Monuments, Registered Parks and Gardens, Listed Buildings, Conservation Areas and historic landscapes present in the cultural heritage study area are sensitive to changes in setting from new built development;
- Buried archaeological deposits identified by Historic Environment Records (HERs) as non-designated heritage assets (including AHAPs) or identified during archaeological evaluations in the cultural heritage study area are sensitive to damage, truncation and/or removal caused by development; and
- Buried archaeology not identified or not yet identified during archaeological evaluations is sensitive to damage, truncation and/or removal caused by development.

9.5.1.2 The key opportunities with respect to cultural heritage, archaeology and built heritage are:

- Potential to reduce flooding of Scheduled Monuments, Registered Parks and Gardens, and Listed Buildings;
- Potential to uncover further new archaeological and paleoenvironmental finds during construction of the project, thereby expanding the archaeological record of the River Thames floodplain;
- Potential outreach and wider dissemination associated with such finds; and
- Potential heritage input into project design, thereby enriching the River Thames environment, increasing community connections with

the historic landscape and further assisting wider dissemination and outreach.

9.6 Primary and Tertiary Mitigation

9.6.1 Primary Mitigation

9.6.1.1 The design of the RTS uses areas such as existing waterbodies created through gravel extraction, re-instated ground and areas of landfill where possible. This generally avoids undisturbed ground where archaeological remains are more likely to survive. Much of the channel, the majority of green open spaces and many of the priority areas for habitat creation, enhancement or mitigation are situated across land which has been heavily affected by gravel extraction such that there is little to no remaining potential for the preservation of archaeological or palaeoenvironmental remains.

9.6.1.2 An integrated landscape design process approach is being pursued which aims to sensitively integrate all project components within the existing landscape. For construction this will consider the sensitive locating of material stockpiles and screening of construction components. For operation this will include consideration of landscape design and planting in relation to setting of Scheduled Monuments, material finishes to buildings and structures and the form and contouring of raised earthwork profiles into the existing landform, which will reduce visual effects on the setting of heritage assets.

9.6.2 Tertiary Mitigation

9.6.2.1 The following tertiary mitigation is proposed in relation to the cultural heritage, archaeology and built heritage effects assessed within our PEIR. Some of these measures will also serve as mitigation in respect of other EIA topics:

- A Hydro(geo)logical Risk Assessment to evaluate the environmental risk of pollution of groundwater from contaminated soils, in accordance with the Water Resources Act 1991. This will also inform the assessment of effects on archaeology that may result from changes to groundwater.

- A Construction Traffic Management Plan to ensure all highways works are safe, planned and co-ordinated in order to secure the expeditious movement of traffic on the road network; and to minimise inconvenience to the public. This will reduce effects on setting of heritage assets from construction traffic movements.
- A staged approach to archaeological evaluation including:
  - Stage 1 non-intrusive investigations;
  - Stage 1a geoarchaeological investigations; and
  - Stage 2 trial trenching.

9.6.2.2 Archaeological evaluation works will not reduce the likely significant effect as remains will still be damaged or removed, but it is a recognised approach to archaeological mitigation to recover as much information as possible prior to the loss of the receptor.

9.7 Preliminary Assessment of Likely Significant Effects

9.7.1 Introduction

9.7.1.1 Our PEIR adopts a precautionary approach. Assessments reported within this chapter are a preliminary assessment of potential likely significant environmental effects based on the design parameters set out in Chapter 2 Project Description. This precautionary approach has been taken for the PEIR as there is some information on the project that is currently incomplete and the parameters within Chapter 2 are high level and account for a range of uses and allowance for design development within a boundary that could possibly be refined once this work has been completed. For example, some designs, construction and mitigation details (and therefore also land requirements) or baseline information is still required from further surveys, assessments and/or consultation feedback. In making a determination of likely significant effects, we have considered the sensitivity of receptors (a receptor being a feature of the environment that responds to change) and the potential magnitude (i.e. size) of change caused by the RTS. The methodology for defining sensitivity and magnitude varies by topic and are defined in Section 9.7 of our EIA Scoping Report and updated in Section 9.4.3 above.

9.7.1.2 We are committed to including mitigation measures as necessary to address likely significant negative environmental effects as far as reasonably practicable. Both primary and tertiary mitigation are

considered to form part of the RTS; those applicable to this topic are set out in Section 9.6. Several of these mitigation measures are still being developed, and therefore as a precaution, the preliminary assessment of effects for our PEIR does not assume full achievement of these in considering if a project effect is likely to be significant (Appendix 4.2 identifies the implementation status of primary and tertiary mitigation for the PEIR assessment). Furthermore, the potential likely significant effects reported within our PEIR have been assessed prior to the implementation of secondary mitigation measures, those applicable to this topic are set out in Section 9.7.5. These secondary mitigation measures are the subject of further development; and given they are still being developed, are not able to be applied to develop a 'residual' effects assessment.

9.7.1.3 Our PEIR is based on the latest design and construction parameters and baseline information. As such the findings of the preliminary environmental appraisal presented within our PEIR may be subject to change as the design progresses, as mitigation is further developed or information from further studies, such as staged archaeological evaluation, becomes available. The final assessment of effects undertaken as part of the EIA and reported within the ES will be based on the latest information at that time.

9.7.2 Potential Likely Significant Effects

9.7.2.1 Our preliminary assessment of likely significant environmental effects has identified the potential for the following significant effects from construction in relation to cultural heritage:

- Permanent damage to buried archaeology and palaeoenvironmental deposits at Scheduled Monuments from habitat creation: Chertsey Abbey, specifically the cemetery identified to the north of the Abbey River where there are proposed works to the banks and also the habitats creation at the Earthworks on Laleham Burway.
- Permanent damage to buried archaeology from excavation, through truncation and/or removal of the extant remains at known sites: Roman or early medieval fish weir at Ferry Lane Lake (also known as Ferris Meadow Lake); a range of archaeological deposits at Abbey Meads Dry Floodway (Bronze Age drainage network, Mesolithic to Bronze Age flint scatters, preserved wooden structures from the Iron

Age and medieval period, Medieval stock enclosure, Post-Medieval wooden structures; medieval ridge and furrow; Roman period remains); Late Upper Palaeolithic flint scatter at Land South of Wraysbury Reservoir from planting; at Desborough Island Late Neolithic to Bronze Age deposits and other undated features; Mesolithic/Neolithic artefacts at Land between Desborough Cut and Engine River; and Medieval boundary of Oatlands Park.

- Permanent damage to buried or riverbed archaeology: Deposits in the Abbey River from improvements, particularly Medieval deposits; in-channel sediments and deposits in the River Thames at fish-passes, weirs and bed lowering downstream of Desborough Cut.
- Permanent damage to buried archaeology from excavation, habitat creation and/or sheet piling: Truncation and/or removal of organic remains and artefacts from palaeochannels, which can provide dating evidence and be used for re-creation of past landscapes.
- Permanent damage to buried archaeology from excavation, habitat creation and/or sheet piling: Truncation and/or removal of waterlogged deposits which could preserve organic remains.
- Permanent damage to buried archaeology from excavation and other construction activities: Truncation and/or removal of previously unknown remains: Palaeolithic, Mesolithic, Neolithic, Bronze Age, Iron Age, Romano-British, Early medieval, Medieval, Post-medieval.
- Temporary negative effect on historic landscape and setting at Scheduled Monuments from construction activities: Chertsey Abbey and Abbey Meads; Large Univallate Hillfort and 14th Century Chapel at St Ann's Hill Scheduled Monument; Chertsey Bridge.
- Temporary negative effect on setting from construction activities at Registered Parks & Gardens: St Ann's & The Dingle, Garrick's Villa.
- Temporary negative effect on setting from construction activities at Conservation Areas: Chertsey, Shepperton, Lower Sunbury, Hampton Village, East Molesey Kent Town, Hampton Court Green, Riverside North, Teddington Lock, Lower Halliford.
- Temporary negative effect on setting from construction activities of Listed Buildings: Grade I – Garrick’s Villa, Garrick's Shakespeare Temple Royal Mews and Great Barn; Grade II* St Mary's Church; Grade II - remains of St Ann's Chapel, St Ann's Hill and St Ann's Cottage, Dovecote in farmyard of Abbey Bridge, Abbey Farm Barn, Bridge and Remains of Abbey Mills Chertsey Lock Cottage, Chertsey

Bridge, Eyot House (D'Oyly Carte Island), Garrick's House, War Memorial (Molesey Wier), Old Office House, Mitre Hotel, Hampton Court Bridge, Boathouse (Teddington Weir), Teddington Footbridge.

9.7.2.2 Our preliminary assessment of likely significant environmental effects has identified the potential for the following significant effects from operation in relation to cultural heritage:

- Permanent damage to buried archaeology: A change in ground water levels adjacent to the new channels might have a negative effect on the preservation of unknown buried archaeology: Palaeolithic, Mesolithic, Neolithic, Bronze Age, Iron Age, Romano-British, Early medieval, Medieval, Post-medieval.
- Permanent negative effect on setting of Conservation Areas from creation of new green open spaces and changes such as new sculptural landforms or lighting: Shepperton, Egham, Staines, Egham Hythe, Lower Halliford and Manygate Lane.
- Permanent negative effect on setting of St Peter's Church Grade II from creation of new green open spaces and changes such as new sculptural landforms or lighting.
- Positive effect on users: Heritage is a consideration in design e.g. new green open spaces. Interpretation, research outputs and information produced by archaeological works will increase understanding of the heritage of the area, and appreciation of assets.
- Positive effect on setting of the Earthworks on Laleham Burway Scheduled Monument as former golf course contributes very little to its significance and habitat creation presents an opportunity to improve the setting of the asset.

9.7.2.3 Further details of the potential likely significant effects from construction and operation with respect to receptors, project components and project activities, in relation to cultural heritage can be found in Table 1 and 2 in Appendix 9.7.

9.7.3 Potential Likely Non-Significant Effects

9.7.3.1 Further details of the non-significant effects from construction and operation with respect to receptors, project components and project activities, in relation to cultural heritage can be found in Table 3 and 4 in Appendix 9.7.

9.7.3.2 Some examples of non-significant Cultural Heritage, Archaeology and Built Heritage effects include (this is not an exhaustive list):

- Temporary negative effects on setting of Laleham Burway Scheduled Monument, some Conservation Areas (Hampton Court Park, Hampton Wick, Laleham, Normansfield, Thorpe) and other assets.
- Permanent positive effects on designated and non-designated heritage assets from a reduction in flood risk.

9.7.4 In-Combination Climate Impact

9.7.4.1 Consideration of 'In-Combination Climate Impact' (ICCI) has been undertaken. The preliminary environmental assessment has considered a future climate scenario and has determined that the potential likely significant environmental effects identified for this topic are unlikely to be exacerbated further by climate change. Further consideration of ICCI will be included in the ES.

9.7.5 Secondary Mitigation

9.7.5.1 As noted in Section 9.7.1.2, primary and tertiary mitigation are still being developed, and therefore as a precaution, the preliminary assessment of effects for our PEIR does not assume full achievement of these in considering if a project effect is likely to be significant. Furthermore, the potential likely significant effects reported within our PEIR have been assessed prior to the implementation of secondary mitigation measures. For the majority of the identified likely significant environmental effects it is considered likely that the primary and tertiary mitigation will be sufficient at ES stage such that no secondary mitigation will be required. Where secondary mitigation is already under consideration for potential significant environmental effects, this is detailed below.

9.7.5.2 In order to reduce the magnitude of significant effects, a Historic Environment Management Plan (HEMP) is proposed. This comprises a written scheme of investigation (WSI) document detailing secondary mitigation measures. Measures could include strip, map and sample, bespoke archaeological excavation, geoarchaeological investigation and palaeoenvironmental sampling, and archaeological monitoring.

9.7.5.3 Further design is needed to mitigate effects on heritage. For example, the setting of some heritage assets and elements of historic landscapes may be negatively affected by the project. Stage 3 of the setting study will lay out steps where this can be avoided or reduced through further iteration of the design where possible.

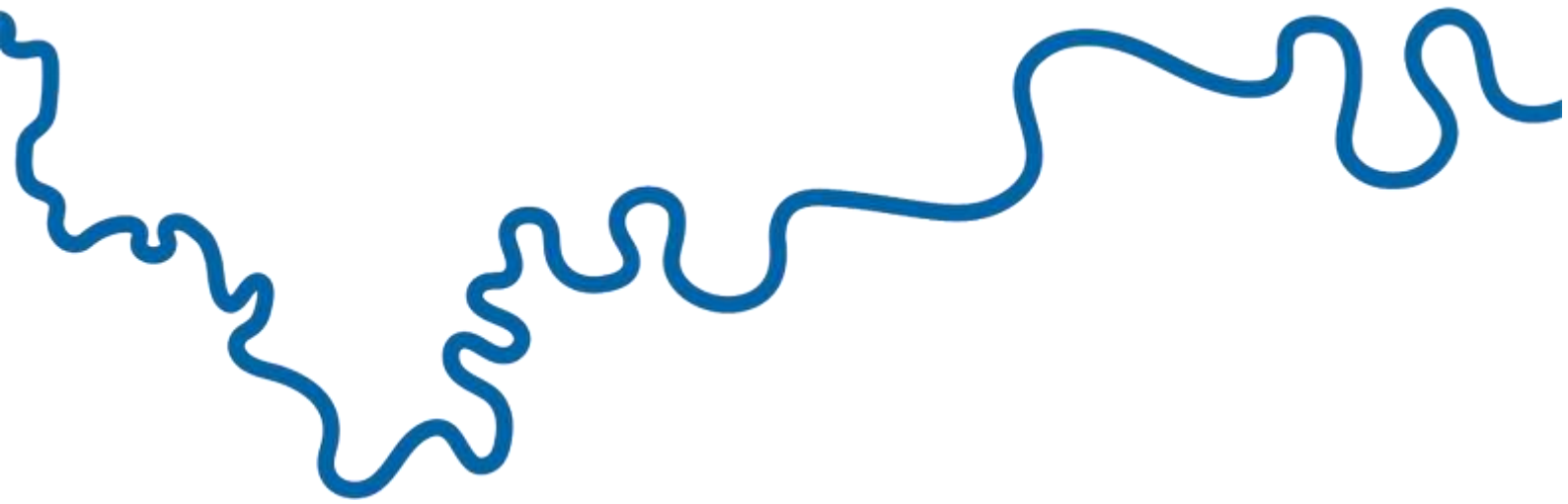
9.8 Further Work for the EIA

9.8.1.1 The staged approach to archaeological investigations will continue throughout 2023/2024 to further inform the baseline data. Stage 1 and 1a works are planned at Land South of Wraysbury Reservoir, Abbey River, Grove Farm, Land South of Chertsey Road and Land Between Desborough Cut and Engine River. Stage 2 trial trenching works are currently planned at the former Laleham Golf Course. As design progresses, areas of high archaeological potential which could be affected by intrusive works, compression or changes in groundwater levels and which have not been assessed, would also be subject to the staged approach. Locations where this is not possible, for example where access or water levels do not permit investigation, would be identified and covered by the HEMP.

9.8.1.2 The 2022 setting assessment identified heritage assets which would potentially be affected during the construction and operational phases and preliminary consideration of this has informed this PEIR. The setting study will be refined to consider final design, ZTV analysis and issues such as type of lighting that could give rise to likely significant effects to heritage assets. As assessments will be further progressed, this will also take into account baseline assessments regarding noise and haul routes.

9.8.1.3 Buildings are proposed to be demolished at the upstream end of the Runnymede Channel and potentially also at Sheepwalk. An initial assessment using aerial photography and maps has shown that these are modern buildings with no historic value. This will be checked on the ground during the next phase of the setting study.

9.8.1.4 We consider that the further development of the project design and mitigation measures which will be reflected in the ES and DCO application, will enable a reduction in the scale of identified negative likely significant effects set out in this chapter.



SURREY COUNTY COUNCIL

Environment Agency

The River Thames Scheme represents a new landscape-based approach to creating healthier, more resilient and more sustainable communities by reducing the risk of flooding and creating high quality natural environments.

River Thames
Scheme