Preliminary Environmental Information Report

Volume 4
Appendix 4.1

Responses to Scoping Opinion

Contents

Responses to Scoping Opinion

1 PINS Scoping Opinion and RTS project responses

Table 1-1: RTS project responses to PINS Scoping Opinion

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
2.1.1	The Scoping Report proposes to scope out impacts from general maintenance, which are described in Scoping Report section 4.3.2 and across multiple Chapters. However, the long-term maintenance activities required to ensure that the design profile is maintained are not described and the Inspectorate considers that this could include activities such as dredging or structural work which have potential to give rise to significant pollution and hydromorphological effects. In the absence of further details regarding the extent and nature of such effects, the Inspectorate does not consider that this matter may be scoped out. The ES should explain the likely maintenance activities and provide an outline of the operational maintenance plan, demonstrating how this would mitigate any likely significant effects.	Overarching	Maintenance of the channel to restore the design profile was originally scoped into the Biodiversity and Water Environment topics, and has now also been scoped into the Climatic Factors, Flood Risk, Health, Landscape and Visual, and Materials and Waste topics as per the PINS scoping response. The ES and supporting Application material will clearly set out the Applicant's approach to the maintenance regime(s) to be put in place for each of the flood channel, new green open spaces, and priority habitat areas however, effects from general maintenance activities remain scoped out.
2.1.2	The ES should explain how it has accounted for the comments relating to design and functionality from the Environment Agency's response appended to this Scoping Opinion.	Overarching	Noted - responses have been provided in response to the Environment Agency Sustainable Places Team. These will be reported in the ES as appropriate.
2.2.1	Decommissioning of the Proposed Development is not anticipated, even in the unlikely event that the Proposed Development is not required, therefore this matter is proposed to be scoped out. Based on the nature of the scheme, the Inspectorate is content to scope out consideration of decommissioning effects from the ES.	EIA Methodology and Scope of assessment	Noted. Decommissioning of the RTS will remain scoped out.
2.2.2	The Inspectorate agrees to scope out a separate Chapter on major accidents and disasters on the basis that a long list of potential major accidents and disasters has been considered (Appendix D) and likely significant potential effects will be considered in the climate change, flooding and human health Chapters in the ES (Scoping Report paragraph 5.4.6.9).	EIA Methodology and Scope of assessment	Noted. Major accidents and disasters will remain scoped out. Likely significant potential effects will be considered in the climate change, flooding and human health chapters in the ES.
2.2.3	The Inspectorate agrees to scope out impacts from transportation and handling of hazardous waste from the major road network to placement at appropriate facilities offsite, on the basis that waste will be handled by a licensed waste carrier and will be disposed of in line with relevant permits. The ES should be accompanied by an outline Construction Environmental Management Plan (CEMP), which demonstrates that appropriate measures are in place to manage the storage and handling of such waste on site.	EIA Methodology and Scope of assessment	The recommendation to include a CEMP with appropriate mitigation measures is also agreed and will be developed by the D&B contractor based on the EAP for the ES. The CEMP which will demonstrate that appropriate measures are in place to manage the storage and handling of such waste on site.

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2.2.4	The Inspectorate on behalf of the SoS has considered the Proposed Development and concludes that the Proposed Development is unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State. In reaching this conclusion the Inspectorate has identified and considered the Proposed Development's likely impacts including consideration of potential pathways and the extent, magnitude, probability, duration, frequency and reversibility of the impacts. The Inspectorate considers that the likelihood of transboundary effects resulting from the Proposed Development is so low that it does not warrant the issue of a detailed transboundary screening. However, this position will remain under review and will have regard to any new or materially different information coming to light which may alter that decision. Note: The SoS' duty under Regulation 32 of the 2017 EIA Regulations continues throughout the application process. The Inspectorate's screening of transboundary issues is based on the relevant considerations specified in the Annex to its Advice Note Twelve, available on our website at http://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes	EIA Methodology and Scope of assessment	Noted. Potential transboundary effects are unlikely to be significant and are therefore proposed to be scoped out, however, this position will remain under review and be reported in the ES.
3.1.1	Limited information has been provided in the Scoping Report regarding NRMM therefore the Inspectorate does not agree that this matter can be scoped out. The ES should determine the type, number, location (including proximity to receptors) and operational hours of NRMM and quantify emissions; significant effects should be assessed where they are likely to occur.	Air quality	An assessment of NRMM emissions will be undertaken for the ES. Impacts will initially be screened and then quantified using dispersion modelling where necessary. Regardless of whether screened or included in modelling, the ES will determine the type, number, location (including proximity to receptors) and operational hours of NRMM; and quantify emissions.
3.1.2	The Inspectorate does not agree that impacts to air quality from vehicle movements transporting hazardous waste and materials can be scoped out; these movements should be considered as part of the construction traffic vehicle movements and emissions.	Air quality	Vehicles transporting hazardous waste on roads from site will be considered within the construction vehicles emissions assessment within our PEIR and ES.
3.1.3	Effects from use of the recreational areas is not included in the potential effects on air quality. As multiple options remain for these areas, the potential air quality impact is unknown during operation and a worst-case scenario is not proposed. The ES should describe a worst-case scenario during operation of the recreational areas and include any potential impacts to air quality in the operational assessment where effects are likely to be significant.	Air quality	Screening of an operational worst case will be undertaken for the design to be assessed for the ES (and dispersion modelling will be undertaken where necessary).
3.1.4	The Inspectorate disagrees with the proposed screening process set out in Scoping Report paragraph 6.2.3.19: Focus should not be solely on Special Areas of Conservation, Special Protection Areas and Ramsar sites and sites such as (but not limited to) Sites of Special Scientific Interest, Local Wildlife Sites and National Nature Reserves should be included as receptors. Habitats known to not be sensitive to NOx or nitrogen deposition are proposed to be	Air quality	Impacts on designated ecological sites from dust and particulate matter generated from construction related activities will be assessed using the hybrid construction dust method outlined in Appendix 6.2. This assessment will consider multiple applicable variables in line with relevant guidance (such as meteorological conditions, receptor sensitivity) to inform an assessment of impacts on those designated sites. Potential impacts on ecological receptors in terms of annual mean NOx concentrations,

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	screened out of assessment, however, there are multiple other emissions that have potential to impact habitats such as dust, particulates and ammonia, therefore, sites with potential to be impacted by any changes in air quality should be included in the ES assessment. The exceedance of 1,000 Annual Average Daily Traffic (AADT) does not take into account the vehicle type, speed or cumulative traffic. The ES should use multiple applicable variables (in line with relevant guidance) to inform an assessment of impacts on ecological receptors.		nitrogen deposition, acid deposition and concentrations of ammonia resulting from vehicle exhaust emissions associated with construction or operation of the project will be assessed, in relation to emissions from vehicles and, for construction, project-derived NRMM (subject to reliable emissions data being available for the NRMM). At the ES stage, designated ecological sites will be screened; and if necessary, ecological receptors will be included within the dispersion modelling assessment. Where the impact of the project on air quality (both alone and, where applicable, in-combination with live plans and projects), caused either the critical load or critical level to exceed 1% at ecological receptors, the impacts and effect caused to the qualifying features within the designated ecological site will be determined. Depending on the type of habitat, this will be used to inform the ES Chapter and HRA.
3.1.5	Ammonia is not considered as a potential pollutant. The ES should assess impacts from this pollutant or demonstrate that the vehicle traffic associated with the Proposed Development is unlikely to give rise to significant effects from ammonia emissions.	Air quality	Assessment of potential impacts on designated ecological sites will be undertaken in terms of annual mean ammonia concentrations resulting from vehicle exhaust emissions from construction and operation of the RTS. It will also be considered in the assessment of impacts generated as a result of nitrogen and acid deposition.
3.1.6	Scoping Report paragraph 6.4.1.1 only mentions human receptors in relation to demolition of buildings. For clarity, this should also include impacts on ecological receptors.	Air quality	The impacts on designated ecological sites will be considered within the qualitative dust risk assessment for the construction phase of the RTS (in relation to fugitive dust from construction activities) in accordance with the appropriate IAQM guidance (see PEIR Appendix 6.2). This has been reported in the PEIR and will be included in the ES.
3.1.7	The Scoping Report states use of electric or low-emission fleet vehicles could be prioritised as secondary mitigation for effects arising from air quality changes. The ES should explain any assumptions made in the assessment about use of such vehicles for the purposes of establishing residual effects.	Air quality	The ES will explain any assumptions made in the assessment about use of such vehicles for the purposes of establishing residual effects.
3.1.8	Effort should be made to agree the final monitoring sites to be used for model verification and sensitive receptor locations with relevant consultation bodies, including the local authorities. The ES should include plan(s) showing the location of human and ecological receptors within the air quality study area.	Air quality	Further consultation will be undertaken with the local authorities at the ES stage to agree which monitoring sites will be used for model verification and sensitive receptor locations; as well as regarding emissions factors and background pollutant concentrations. These cannot yet be selected as the air quality model study areas (for construction and operation) is presently unknown. The ES will include plans showing the location of human and ecological receptors within the air quality model study area.
3.1.9	The Scoping Report describes potential changes in air quality from movements on the road network but does not include emissions from boats although the potential for use of the river/ barges during construction is described in Chapter 17. Should boats be used during construction and/or operation, the ES should describe the number and routing of movements and vehicle type and assess potential air quality effects from these vessels where they are likely to be significant. Any associated mitigation should be described and secured through the Development Consent Order (DCO) i.e. reducing waiting times at locks.	Air quality	Further detail will be provided in the ES on the number of river transport movements predicted as a result of the RTS and the class of vessels to be used. Their potential for air quality effects will be screened, and where required a detailed air quality assessment may be undertaken using the ADMS-Roads dispersion model (ADMS being the commercial name for the Atmospheric Dispersion Modelling System). If required, appropriate mitigation will be proposed in the ES, describing how this will be secured.

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3.2.1	The Inspectorate agrees that with the provision and submission of an appropriate INNS management plan for the construction period, that effects from transportation and movement of potentially hazardous materials including INNS, can be scoped out of the assessment. However, this should incorporate management for the potential interconnections and spread of INNS between the new flood channel and existing lakes.	Biodiversity	The INNS management plan will include management for the potential interconnections and spread of INNS between the new flood channel and existing lakes.
3.2.2	The Inspectorate agrees that given established measures exist to manage storage of chemicals and fuels, and subject to the provision of a CEMP containing appropriate measures to control and avoid accidental spills, that this matter can be scoped out of the assessment.	Biodiversity	No further action required.
3.2.3	The Inspectorate considers that there is insufficient evidence provided in the Scoping Report to establish the likely scale and nature of these effects and the specific receptors that could be affected by these changes. The ES should contain an assessment of potential hydromorphological changes caused by capacity changes at weirs on ecological receptors where significant effects are likely to occur.	Biodiversity	This comment is in reference to scoping out the operational effects on River Thames weir pools associated with capacity improvement works to weirs - Paragraph 7.5.2.1 in the Scoping Report, bullet point 1. This states that the following effect will be scoped out "...changes to conditions arising from the RTS works are expected to be within the scale of natural changes caused by major flow events (a review of historical bathymetric surveys conducted between 2002 and 2015 for the RTS reveals that slight changes in depth occur around these features". We consider that the effect should remain scoped out of the assessment as when the new gates are in operation it is likely to lead to only subtle changes in the pattern of scour and deposition in the immediate downstream. These changes are expected to be localised and within the scale of changes that might occur during a particularly large flow event as per the baseline. Any changes in velocity are predicted to be slight and would not cause increased erosion of coarser material or river bed features. As the existing weir structures and operation to maintain standard head water level for navigation are already present, these already dictate normal flow conditions. The increased capacity will only be used in larger flood events, therefore there will be affect to the water body in normal conditions. As such any changes to hydromorphology are expected to be within the normal range of baseline variance of existing flood flow conditions. Given the limited likely change to the water environment, no effects on supporting species are anticipated. We will be working with the Environment Agency to get their written confirmation that they agree to this approach.
3.2.4	The Inspectorate agrees this matter can be scoped out on the basis that appropriate measures are described and secured within an Operational Maintenance Plan to avoid/reduce effects from failure of flow control structures for the Proposed Development.	Biodiversity	Comment refers to Paragraph 7.5.2.1 with respect to soil and water quality effects on biodiversity. This matter remains scoped out.
3.2.5	Please see box 2.1.1 of this Scoping Opinion	Biodiversity	Maintenance of the channel to restore the design profile is already scoped into the biodiversity topic.

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3.2.6	The Inspectorate agrees that designated sites beyond 2km from the project boundary (except for those containing mobile species or where hydrological connectivity exists) can be scoped out of the assessment.	Biodiversity	No further action. Designated sites beyond 2km of the project boundary (except for those containing mobile species or where hydrological connectivity exists) remain scoped out.
3.2.7	Consideration of the effects of piling on fish spawning and migration should be scoped into the assessment. This should include assessment of any seasonal timing mitigation measures needed to address likely significant effects.	Biodiversity	Noted - these effects have been assessed in the PEIR and will be assessed further in the ES.
3.2.8	The ES should assess the effects of the installation of the new channels on patterns of fish migration. This should include consideration of the effects of different flow regimes on fish habitat and fish passage and the potential for effects on sensitive fish shoals at Chertsey weir.	Biodiversity	Noted - these effects have been assessed in the PEIR and will be assessed further in the ES.
3.2.9	The Inspectorate notes that Windsor Great Park is within the 2km buffer from the project boundary, but the designations covering this site have been omitted from the list of sites considered in the assessment. The SAC is also identified within the 2km buffer from the project boundary shown within the HRA Screening Assessment in Appendix N of the Scoping Report. The ES should include these sites in the list of designated sites considered in the assessment, where significant effects are likely to occur.	Biodiversity	Great Windsor Park is not within the 2km buffer of the RTS. However, it is partially within the extent of the 1 in 100 year flood extent so has been added to the list of designated sites reported in the PEIR as this is the study area. Likely effects on this site have been included in the PEIR.
3.2.10	Ancient woodland and veteran trees are not described in the baseline in Scoping Report section 7.3 and have limited reference in the future baseline section although they are known to be located in the study area. They are also not scoped into the assessment in Scoping Report paragraph 7.4.3.2. The ES should establish the baseline for veteran trees and ancient woodland, including locating these and other Habitats of Principle Importance on a figure, and assess significant effects on these receptors where they are likely to occur.	Biodiversity	The known baseline for ancient woodland has been reported in the Preliminary Ecological Appraisal (PEA). Further tree surveys will be undertaken for the scheme to establish if there are any veteran trees present. These are included in the scope of the assessment as part of the woodland and trees receptors.
3.2.11	The Scoping Report proposes to assess impacts to ‘certain fish species’. The ES should explain which fish species have been assessed and provide reasons for the selection, demonstrating that the approach has been agreed with relevant consultation bodies where possible.	Biodiversity	The fish species receptors for assessment will be set out in the ES following surveys being completed in 2023. We will engage with consultation bodies on fish species to be considered.
3.2.12	The ES should differentiate between measures required to address significant environmental effects and those proposed to deliver biodiversity net gain. Where biodiversity net gain is relied upon as mitigation, this should be stated in the ES.	Biodiversity	These will be clearly distinguished in the DCO application documents.
3.2.13	The ES should assess whether significant effects are likely from changes in nutrients (such as changes and mixing of low nutrient to high nutrient conditions) on riverine fauna and flora and hydrologically connected sites (designated or functionally linked land) where they are likely to occur.	Biodiversity	The HRA will consider the potential impacts of increased nutrients entering the South West London Waterbodies SPA & Ramsar sites and their FLL. The assessment is proposed to be informed by modelling carried out for the WFD assessment and evidence from comparable sites/projects.

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3.2.14	As the Proposed Development has potential to impact the environment below the Mean High Water Springs downstream of Teddington weir, benthic invertebrate assemblages should be included as a receptor in the ES assessment.	Biodiversity	Terrestrial and aquatic invertebrates (including benthic invertebrates) are scoped in as features and have been included in the PEIR and will be assessed within the ES.
3.3.1	The Scoping Report explains that effects such as construction of compounds, vehicle use for embankment construction, processing materials, transportation of hazardous materials/waste to licensed sites will be managed through the CEMP and licenses, and that an assessment should be scoped out on this basis. It is unclear why such activities should be excluded from the carbon footprint assessment. Scoping Report paragraph 8.7.1.4 quotes the threshold for exclusion from page 19 of the Institute of Environmental Management and Assessment (IEMA) guidance, Assessing Greenhouse Gas Emissions and Evaluating their Significance, 2nd edition, 2022; where sources of emissions are not expected to contribute >5% of the total emissions from the Proposed Development. The ES should quantify the emissions from activities and compare them against appropriate thresholds to demonstrate whether significant effects are likely to occur.	Climatic Factors	We will expand our assessment to include construction activities in the climate change mitigation assessment. This is reported in our PEIR and will be reported in the ES.
3.3.2	Scoping Report paragraph 8.7.2.1 states it is not anticipated there will be impacts during construction due to the associated short relative timescales. Whilst the Inspectorate acknowledges that the timescales are short, the nature of the Proposed Development means that it is likely to be readily influenced by climate related effects e.g. increased drought or flood frequency. The Inspectorate considers that the ES should address this risk and identify relevant mitigation where significant effects are likely. The Inspectorate notes that Appendix D does not address the risk of major flooding events, when referencing Chapter 8 Climate Change. The ES should set out the necessary mitigation required to address a significant flooding event during construction where significant effects are likely.	Climatic Factors	We will expand our assessment to include the climate change risks, resilience and adaptation for the construction phase of the project. Major flooding events will also be included within the Climatic Factors assessment. This is reported in our PEIR and will be reported in the ES.
3.4.1	The Scoping Report proposes to scope out effects of transportation of non-hazardous material as this material would have minimal heritage or archaeological potential. In the absence of detailed construction traffic routing information, it is unclear whether such vehicle movements could impact on the setting of heritage features. The ES should explain likely construction traffic routing and address whether this is likely to affect the setting of any designated heritage assets.	Cultural heritage	Stages 1 and 2 of a setting study (Appendix 9.1 of the PEIR) 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 ES.
3.4.2	Scoping Report paragraphs 9.1.1.2 and 9.3.10.1 reference historic landscapes as matters for consideration in Chapter 9, however, historic landscape areas identified in Scoping Report Chapter 12 (LVIA) are not discussed in Chapter 9. Chapter 12 also states that there will be differences in approach and conclusions between the LVIA and cultural heritage assessments when considering historic landscape character, but these are not clearly explained. The ES should explain the methodology for assessing	Cultural heritage	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.

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	impacts to historic landscape character and assess impacts to where significant effects are likely to occur.		
3.4.3	The Inspectorate notes the potential for buildings and other structures to be demolished as a result of the Proposed Development. It is not stated whether they have any historic interest. The ES should determine if demolition of these buildings is likely to impact historic receptors and if so, the ES should assess significant effects where they are likely to occur.	Cultural heritage	Buildings at the northern 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.
3.4.4	The Inspectorate notes that 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.	Cultural heritage	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.
3.4.5	The Inspectorate notes that the baseline has identified areas of potentially high archaeological value that could be of national importance. The ES, and any mitigation strategy, should describe the approach that will be taken in the event of that potentially nationally important archaeological discoveries are made. This should include addressing the potential for discoveries that could require preservation in-situ.	Cultural heritage	All areas considered to be of high archaeological value will be evaluated to determine character, date and significance. Site-specific WSIs are agreed with local Archaeological Advisors and appropriate mitigation (within principles secured within a GWSI as part of DCO submission) will be in place. This will include how to deal with potentially nationally important archaeological remains. The LPA Project Group is satisfied with the approach to archaeology.
3.4.6	Appendix G, paragraph 7.4.8 identifies that archaeological potential remains in the ‘blank’ areas of the desk-based assessment. These are not discussed in the Scoping Report. Surveys should be undertaken to establish the baseline for these areas or else a worst-case scenario should be adopted. The ES should assess impacts to these areas where significant effects are likely to occur. Any associated mitigation should be described and secured via the DCO. Effort should be made to agree the approach with the relevant consultation bodies.	Cultural heritage	This paragraph refers to the possibility that buried remains may not be picked up by methods such as geophysics (therefore leaving "blank" areas), which is why the evaluation strategy also includes borehole survey and trial trenching. It should be noted that the 'blank' areas do not correlate with low/negligible potential on the map.
3.5.1	Please see box 2.2.3 in this Scoping Opinion	Flood risk	Noted. No further action required
3.5.2	Dewatering of lakes is covered by licence and relevant consents and permits are proposed to be acquired including a flood risk activity permit to ensure surface water is managed appropriately. Impacts from dewatering are proposed to be scoped into the Biodiversity (7.4.1.1) and Water Environment (18.4.1.1) Chapters. Therefore, the Inspectorate agrees to scope these matters out.	Flood risk	No further action required. These matters remain scoped out.
3.5.3	The Scoping Report proposes that works will be secured through the CEMP and flood risk activities permit and will be informed by more detailed hydraulic modelling. The Inspectorate does not agree to scope this matter out without further information on the required mitigation to evidence that this would not lead to a likely significant effect. The ES should describe and secure the proposed mitigation based on the most up to date hydraulic modelling and explain how this reduces/avoid effects. Any potential	Flood risk	Noted. This has been considered in the PEIR and will be assessed within the ES and proposed mitigation described

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	impacts from the proposed mitigation should be assessed where significant effects are likely to occur.		
3.5.4	The project is not anticipated to cause physical damage to reservoirs or alter the flood risk to and from reservoirs (Scoping Report paragraph 10.3.2.8). On this basis, the Inspectorate is content to scope this matter out.	Flood risk	No further action required. This matter remains scoped out.
3.5.5	Considering the locations of canals in relation to the Proposed Development and that a good safety record for canals is maintained through maintenance and monitoring (Scoping Report paragraphs 10.3.1.23 to 10.3.1.24), the Inspectorate agrees that the risk of flooding to and from canals can be scoped out of the ES.	Flood risk	No further action required. This matter remains scoped out.
3.5.6	The ES should assess impacts/effects from flood risk to third party land from the storage of materials on site where significant effects are likely to occur. Should any related mitigation be required this should be detailed in the ES and secured via the DCO.	Flood risk	We have already included within the EIA scope construction stage flood risk resulting from temporary changes in land levels, in particular for stockpiles and processing areas (see sections 10.4.1.1 and 10.7.3.2 of the Scoping Report). Section: 10.7.3.2 of the Scoping Report states: “A quantitative assessment will be completed of the potential effect of temporary increased flood risk to properties, infrastructure and existing operations (e.g. businesses) in the study area as a result of the project during construction. This will be done by reviewing hydraulic modelling of predicted flood risk for different construction scenarios (for example partially built channels, phasing of the project in terms of land raising), and what effects there will be on flood risk to receptors within the study area.”
3.5.7	Mitigation will be embedded in the design of the Proposed Development to achieve the goal of reducing flood risk impacts. The Scoping Report states that the Flood Risk Assessment (FRA) will assess relevant effects from changes to flood flows downstream of the channels. Scoping Report Table 10-2 states that any increase in flood risk would be an impact of high magnitude suggesting it is possible for an increased flood risk at receptors. As this impact is dependent on the outcomes of the sediment and hydraulic modelling, the Inspectorate does not have enough information to scope this matter out. The ES should assess significant effects from flood risk during operation where they are likely to occur.	Flood risk	As noted in Section 10.7, the RTS will have a significant positive effect on flood risk during operation, through significant reductions in flood levels and extents. There will be no increase in fluvial flood levels during operation at any location in any flood conditions and we therefore consider that effects on flood flows downstream can remain scoped out of the EIA. The Flood Modelling Report Non-Technical Summary (WBi, 2023) and detailed report issued as part of our materials for statutory consultation explain the fluvial hydraulic modelling that verifies this.
3.5.8	The Scoping Report states that sediment modelling will be used to inform the design of the channels and where appropriate mitigation will be employed. The ES should present the results of sediment modelling and where mitigation is required, this should be described and secured through the DCO.	Water environment	Sediment modelling has been undertaken and a fluvial audit being progressed. The results will be presented alongside the ES.
3.5.9	The ES should describe how the scheme alters drainage patterns and flood risk from all sources across the study area, with reference to hydraulic modelling in the FRA. Any significant effects arising from these changes should be reported in the ES	Flood risk	Our FRA will address all relevant sources of flooding posed to and from the project for all stages of the project (including operation) for the intended lifetime of the RTS; this will be NPPF and PPG compliant. The FRA will be presented alongside the ES.

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3.5.10	Please see box 2.1.1 of this Scoping Opinion ("The Scoping Report proposes to scope out impacts from general maintenance, which are described in Scoping Report section 4.3.2 and across multiple Chapters. However, the long-term maintenance activities required to ensure that the design profile is maintained are not described and the Inspectorate considers that this could include activities such as dredging or structural work which have potential to give rise to significant pollution and hydromorphological effects. In the absence of further details regarding the extent and nature of such effects, the Inspectorate does not consider that this matter may be scoped out. The ES should explain the likely maintenance activities and provide an outline of the operational maintenance plan, demonstrating how this would mitigate any likely significant effects.")	Flood risk	Maintenance of the channel to restore the design profile has been scoped into this topic in response to the PINS scoping opinion. An outline of the operational maintenance plan will be provided alongside the DCO application.
3.6.1	Please see box 2.2.3 in this Scoping Opinion (The Inspectorate agrees to scope out impacts from transportation and handling of hazardous waste from the major road network to placement at appropriate facilities offsite, on the basis that waste will be handled by a licensed waste carrier and will be disposed of in line with relevant permits. The ES should be accompanied by an outline Construction Environmental Management Plan (CEMP), which demonstrates that appropriate measures are in place to manage the storage and handling of such waste on site)	Health	Agree with PINS view to scope out impacts from the transportation and handling of hazardous waste from the major road network to placement at appropriate facilities offsite. The recommendation to include a CEMP with appropriate mitigation measures is also agreed and will be developed by the D&B contractor based on the EAP for the ES.
3.6.2	The ES should describe how the scheme alters drainage patterns, based on modelling, and how this alters flood risk from all sources across the study area. Likely significant effects on health from altered flood risk should be set out in the ES where they are likely to occur.	Health	Changes in flood risk will be detailed in the Flood Risk Assessment (FRA) accompanying the DCO application as well as in the ES. The likely significant effects considered in this chapter include changes to flood risk during construction and operation.
3.6.3	The Inspectorate agrees to scope this matter out on the basis it will be assessed and mitigated in an appropriate Public Safety Risk Assessment that will inform the design of the Proposed Development and will be submitted with the application.	Health	A PSRA will be prepared and included in the DCO application. It is not covered in the health assessment in the PIER.
3.6.4	Scoping Report paragraph 11.5.2.1 states that mitigation for light pollution will be embedded in design through consultation with the relevant authorities and lighting will be designed in accordance with the planning practice guidance. Lighting may include up to 12m stadium lighting in open green spaces. It is noted that consideration of light pollution is scoped into the landscape and visual assessment. On this basis, the Inspectorate agrees a separate assessment is not required.	Health	Noted. The scope of the Lighting Assessment has been provided as Appendix 12.1 to the PEIR.
3.6.5	The Scoping Report suggests that this matter should be scoped out on the basis that either no public open space is affected, or replacement public open space would be provided as part of the Proposed Development design. The ES should demonstrate how any loss of public open space has been adequately mitigated to avoid a significant effect. The value of any existing open space to be lost should be explained.	Health	There may be some minor temporary losses of public open space during the construction period, for example for access or working areas. Details are to be confirmed and will be considered in the ES, including the value of open spaces. For the PIER, a precautionary approach has been taken.

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
3.6.6	Please see box 2.1.1 of this Scoping Opinion ("The Scoping Report proposes to scope out impacts from general maintenance, which are described in Scoping Report section 4.3.2 and across multiple Chapters. However, the long-term maintenance activities required to ensure that the design profile is maintained are not described and the Inspectorate considers that this could include activities such as dredging or structural work which have potential to give rise to significant pollution and hydromorphological effects. In the absence of further details regarding the extent and nature of such effects, the Inspectorate does not consider that this matter may be scoped out. The ES should explain the likely maintenance activities and provide an outline of the operational maintenance plan, demonstrating how this would mitigate any likely significant effects.")	Health	Maintenance of the channel to restore the design profile has been scoped into this topic in response to the PINS scoping opinion.
3.6.7	The Inspectorate notes that the baseline year is 2021 during the pandemic. Covid-19 may have influenced human health indices, for example, reduced vehicle emissions may skew associated health indicators such as rates of asthma. Where it is possible and appropriate to do so, such datasets should be validated, and the ES should explain the limitations and assumptions made in relation to 2021 being used as a baseline.	Health	The pandemic certainly changed patterns of behaviour which could well have implications for health determinants such as air quality. However, there will be a considerable time lag before effects like this filter through into changes in health outcomes which are then reflected in health indicators, and it is unlikely that the Covid-19 pandemic will have affected health indicators published during 2021. It is considered that using 2021 as the baseline year for the assessment provides consistency with the recently published data from the 2021 Census which was not available for the preparation of the EIA Scoping Report.
3.7.1	Please see box 2.2.3 in this Scoping Opinion ("The Inspectorate agrees to scope out impacts from transportation and handling of hazardous waste from the major road network to placement at appropriate facilities offsite, on the basis that waste will be handled by a licensed waste carrier and will be disposed of in line with relevant permits. The ES should be accompanied by an outline Construction Environmental Management Plan (CEMP), which demonstrates that appropriate measures are in place to manage the storage and handling of such waste on site.	Landscape and Visual	Noted. No further action required.
3.7.2	Please see box 2.1.1 of this Scoping Opinion ("The Scoping Report proposes to scope out impacts from general maintenance, which are described in Scoping Report section 4.3.2 and across multiple Chapters. However, the long-term maintenance activities required to ensure that the design profile is maintained are not described and the Inspectorate considers that this could include activities such as dredging or structural work which have potential to give rise to significant pollution and hydromorphological effects. In the absence of further details regarding the extent and nature of such effects, the Inspectorate does not consider that this matter may be scoped out. The ES should explain the likely maintenance activities and provide an outline of the operational maintenance plan, demonstrating how this would mitigate any likely significant effects")	Landscape and Visual	Maintenance of the channel to restore the design profile has been scoped into this topic in response to the PINS scoping opinion. An operational maintenance plan will be provided at ES stage.
3.7.3	The ES should confirm the location of any TPOs that could be affected by the Proposed Development and identify any required mitigation measures which should be	Landscape and Visual	TPOs will be identified through the Tree Survey which will inform the ongoing design process and be provided in support of the DCO. This will include appropriate mitigation (e.g. Tree Protection Plans).

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
	secured through the DCO. Effort should be made to agree the approach with the relevant Local Authority.		
3.8.1	Scoping Report paragraph 4.2.3.1 indicates that four dwellings and one outbuilding are proposed to be demolished. The Inspectorate agrees that this matter can be scoped out of the ES on the basis that only a small number of buildings will be demolished and waste generation as a result will be limited.	Materials and waste	Noted. We do not envisage this changing as a result of additional buildings being identified for demolition since EIA Scoping in the Sheepwalk area.
3.8.2	The Scoping Report states that there could be potential "adverse effects of waste management at established third party facilities" but seeks to scope these out on the basis that such facilities "will be operating under relevant planning and permitting authorisations." The Inspectorate agrees this matter can be scoped out on the understanding that these potential effects would relate to management of the facility, i.e. noise, air quality, odour and stockpiling rather than facility capacity, which is proposed to be scoped in to the ES (13.4.1.1).	Materials and waste	Noted. This matter will remain scoped out.
3.8.3	Please see box 2.1.1 of this Scoping Opinion ("The Scoping Report proposes to scope out impacts from general maintenance, which are described in Scoping Report section 4.3.2 and across multiple Chapters. However, the long-term maintenance activities required to ensure that the design profile is maintained are not described and the Inspectorate considers that this could include activities such as dredging or structural work which have potential to give rise to significant pollution and hydromorphological effects. In the absence of further details regarding the extent and nature of such effects, the Inspectorate does not consider that this matter may be scoped out. The ES should explain the likely maintenance activities and provide an outline of the operational maintenance plan, demonstrating how this would mitigate any likely significant effects.")	Materials and waste	Maintenance of the channel to restore the design profile has been scoped into this topic for the PEIR/ES in response to the PINS scoping opinion. An outline of the operational maintenance plan will be provided alongside the DCO application.
3.8.4	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that these are elements beyond the geographical scope of the Proposed Development, associated with external parties and practices.	Materials and waste	Noted. This will remain scoped out.
3.8.5	The Scoping Report states that, at time of writing, the exact quantity and type of material that will be excavated during construction of the Proposed Development and from maintaining the design capacity of the flood channel during operation is unknown. It is stated that a materials management feasibility study and materials management plan (MMP) are being developed in parallel to the DCO application to provide clarity with regard to construction. The Inspectorate advises that the ES should clearly describe the predicted volume, type and end use of all excavated construction materials and sediment removal during operation, as well as the predicted cut and fill balance. Where assumptions are made, these should be explained.	Materials and waste	A Materials Management Strategy (MMS) will be developed alongside the ES, which will provide information on waste volumes and uses including from maintenance sediment removal during operation. The waste assumptions are detailed in the project description Chapter of the PEIR.

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
3.8.6	In addition to the receptors listed, consideration should also be given to existing mineral infrastructure, Preferred Areas for mineral extraction and Areas of Search in the assessment of effects to mineral resource.	Materials and waste	These have been considered as receptors within the PEIR and will be in the ES, as well as being reflected in the baseline information.
3.9.1	Please see box 2.2.3 in this Scoping Opinion ("The Inspectorate agrees to scope out impacts from transportation and handling of hazardous waste from the major road network to placement at appropriate facilities offsite, on the basis that waste will be handled by a licensed waste carrier and will be disposed of in line with relevant permits. The ES should be accompanied by an outline Construction Environmental Management Plan (CEMP), which demonstrates that appropriate measures are in place to manage the storage and handling of such waste on site.")	Noise and vibration	This comment has been noted. The recommendation to include a CEMP with appropriate mitigation is agreed and will be developed based on the Environmental Action Plan produced for the ES. This will include measures to manage the storage and handling of waste on site, including those required to mitigate for potential noise and vibration effects.
3.9.2	The Scoping Report states that significant effects are not expected from use of new open spaces and landscape works as the “design will be respectful of surrounding receptors and considered against their appropriateness within the countryside (for example events with amplified music are not anticipated).” The Inspectorate notes that a range of recreational facilities remain under consideration, as described at paragraph 4.1.5.1, and that some proposed locations are in close proximity to noise sensitive receptors. Paragraph 14.6.3.1 describes that secondary mitigation might be required to control noise impacts from these activities. On this basis, the Inspectorate does not agree to scope this matter out and the ES should include an assessment or otherwise explain how the use(s) would be designed and controlled to avoid significant effects.	Noise and vibration	This effect will be scoped in. The ES will include an assessment or otherwise explain how the use(s) would be designed and controlled to avoid significant effects from noise from the use of new open spaces.
3.9.3	The Scoping Report states further assessment is unlikely to be required as “heavy road traffic would only be expected to lead to potentially significant vibration levels if it is within 5 to 10m distance from the sensitive receptors and the roads are in poor condition.” It is proposed to review construction routes and receptors to ascertain whether this is likely. The Inspectorate considers that this approach is acceptable; the outcome of the review should be reported in the ES.	Noise and vibration	This comment has been noted. The ES will present the outcome of the review of construction routes and receptors to ascertain whether vibration effects are likely.
3.9.4	Paragraph 14.1.1.4 of the Scoping Report states that there is overlap between Chapter 14, Noise and Vibration, and Chapter 7, Biodiversity, but no further reference is made to ecological receptors within Chapter 14. The ES should present noise and vibration baseline information at relevant sensitive ecological receptors and appropriate cross-referencing to where the assessment is presented in the ES.	Noise and vibration	This information will be clearly presented in more detail in the ES, with the assessment documented in the Biodiversity chapter.
3.9.5	Non-residential receptors considered in the assessment should include existing and proposed green spaces and recreational areas and impacts on use of those sites. Effort should be made to agree suitable assessment location(s) with relevant consultation bodies	Noise and vibration	As indicated in paragraph 14.7.1.9 of the Scoping Report the ES will assess potential noise impact on tranquil outdoor spaces. In preparation of the PEIR, local authorities have been asked to identify quiet spaces and spaces prized for their tranquillity for the assessment. Responses have been received from Spelthorne and Runnymede Councils and as a result Thorpe Hay Meadow, Sunbury Walled Gardens and Chertsey Meads Local Nature Reserve have been added as receptors within the assessment.

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
			Activities associated with the provision of the new green open spaces and other landscape works have the potential for adverse noise effects on residential and non-residential receptors. Likely significant effects as a result of this will be assessed according to the methodology presented in section 14.7.4 of the Scoping Report.
3.10.1	The Inspectorate does not agree to scope this matter out as not enough evidence has been provided. Scoping Report paragraph 15.5.1.1 states that the amount of personnel required is unlikely to be significant however, the number of construction personnel required for the construction period is not quantified. The ES should provide quantitative estimates of the number of construction staff required throughout the construction programme and describe how they would be accommodated. The ES should assess significant effects where they are likely to occur.	Socio-economics	The number of site personnel required throughout the construction programme is not known at this time. Therefore this effect will now be scoped in. Further detail on indicative numbers of site personnel required will be provided in the ES and assessed as appropriate.
3.10.2	The Inspectorate agrees that in the absence of direct effects on Common Land, an assessment of such effects may be scoped out. The ES should address the potential for indirect effects to arise, where they are likely to be significant.	Socio-economics	Indirect effects such as reduced flood risk to areas of Common Land (including Runnymede Common, Staines Common and Thames Meadow) will be assessed within the wider assessment of the project on socio-economic receptors.
3.10.3	On the basis that the FRA and ES demonstrate that flood risk is reduced to Common Land areas during operation, the Inspectorate is content to scope this matter out.	Socio-economics	No further action required. As described above, the reduction of flood risk to common land will be assessed within the wider assessment of the project on socio-economic receptors.
3.10.4	Please see box 2.2.3 in this Scoping Opinion	Socio-economics	Noted. No further action required.
3.10.5	The Inspectorate agrees that, considering the nature and potential extent of the impact, this is not likely to lead to significant effects and can be scoped out.	Socio-economics	Noted. No further action required.
3.10.6	The Scoping Report states only a ‘small number’ of residential dwellings will be required through agreement or compulsory acquisition (CA). The Inspectorate agrees this can be scoped out although the ES should quantify and locate the properties to be acquired and describe whether this is to be achieved through agreement or CA.	Socio-economics	Details of number and method of acquisition of residential dwellings to be provided in the Project Description within the ES or other relevant location. No further action for Socio-economics assessment.
3.10.7	Scoping Report paragraph 15.5.2.1 states that provision of new road bridges is not likely to be a significant enhancement to the current network. The Inspectorate considers that the ES should explain how the provision of new accesses to communities and businesses will affect the operation of the existing road network.	Socio-economics	The provision of new road bridges is not likely to be a significant enhancement to the current network as new road bridge locations will reinstate the existing road network over the new channels reducing potential for severance but not enhancing traffic connections. Any existing accesses to local communities or businesses which would be disrupted by the scheme would be reinstated or reconnected to the existing road network. No new accesses to local communities or businesses are anticipated to be included as part of the scheme design.
3.10.8	The Scoping Report states that 17 locations where NMUs are either intersected or affected by the Proposed Development have been used for survey counts however, these locations are not identified. The ES should identify the locations of these surveys on a Figure.	Socio-economics	A NMU Survey Report, including all details requested, has now been completed and is provided in PEIR Appendix 15.2.

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
3.11.1	The Inspectorate agrees to scope this matter out from further consideration on the basis of the nature of the Proposed Development and that survey results and a desk-based assessment suggest that radon potential for the area is generally low.	Soils and land	Noted. No further action required. This remains scoped out.
3.11.2	These activities are proposed to be managed through implementation of standard best practice measures and guidance secured via the CEMP including a Soil Resource Management Plan or similar. The Inspectorate considers not enough information has been presented to scope this matter out as best practice measures have not been identified; these are not set out in Scoping Report section 16.6.2. The ES should describe what measures will reduce/avoid potential significant effects and secure them through the DCO.	Soils and land	Noted, greater description of measures to avoid effects is included in 5.4.3.6 of the scoping report to justify scoping out of effect. Details of these best practice measures will be included in the ES.
3.11.3	The Inspectorate agrees that further consideration of accidental spillages may be scoped out on the basis that measures to avoid or control accidental spillages are included in the CEMP, such as safe storage, use of drip trays, availability of emergency spills kits and toolbox talks. An outline CEMP should accompany the ES.	Soils and land	The DCO application will be accompanied by an outline Construction Environmental Management Plan (CEMP), which will demonstrate that appropriate measures are in place to manage the storage and handling of such waste on site.
3.11.4	Please see box 2.2.3 in this Scoping Opinion ("The Inspectorate agrees to scope out impacts from transportation and handling of hazardous waste from the major road network to placement at appropriate facilities offsite, on the basis that waste will be handled by a licensed waste carrier and will be disposed of in line with relevant permits. The ES should be accompanied by an outline Construction Environmental Management Plan (CEMP), which demonstrates that appropriate measures are in place to manage the storage and handling of such waste on site.")	Soils and land	The DCO application will be accompanied by an outline Construction Environmental Management Plan (CEMP), which will demonstrate that appropriate measures are in place to manage the storage and handling of such waste on site.
3.11.5	Mitigation such as bank protection works and profiling of channels to safe measurements and support from sheet piling is proposed to reduce the potential for operational failures occurring. An emergency plan for operational failures should also be submitted with ES. On the basis these measures are described in the ES and secured through the DCO, the Inspectorate is content to scope this matter out.	Soils and land	An emergency plan for operational failure will be produced and included within the ES and secured through the DCO.
3.11.6	Water level control structures are proposed to maintain existing groundwater levels in areas around the proposed channels. The Inspectorate considers this is part of the design through the improvement of the weirs (Scoping Report paragraph 4.2.1.1). Therefore, provided this is secured through the DCO, the Inspectorate agrees that this matter can be scoped out.	Soils and land	Agreed. Note that the water level control structures (that will be secured through the DCO) that will maintain existing groundwater levels are associated with the channel itself, as opposed to capacity improvements on downstream weirs on the River Thames. See 'flow control structures' under section 4.1.3 of the EIA Scoping Report.
3.11.7	Although the sediment regimes are anticipated to return to normal once the weir structures are in place, there is potential for a time lag for this to take effect. The ES should confirm if this is the case and assess the potential for significant effects to occur due to an altered regime.	Soils and land	Noted. Sediment regimes, including in relation to weir structures, are being considered in Chapter 18: Water Environment and will be included in the ES
3.11.8	Scoping Report paragraph 16.4.1.1 identifies the potential for permanent loss to soils as a result of land take. The methodology set out in Scoping Report section 16.7.1	Soils and land	Noted. The scoping report states "Earthworks and general construction activity have the potential to cause significant effects resulting from the permanent loss to soils as a result of

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
	only focuses on assessing contamination. The ES should assess potential loss and/or reprofiling of land/soils and the impact on the ecosystem services soil provides and describe the method for assessing significant effects where they are likely to occur.		land take to construct the flood channels and other project components". Erosion of soils is covered in soils scope (and other assessments). Need to consider if more detailed soil loss assessment is needed. Review IEMA land and soils in environmental impact assessment. The impact of erosion of soil is presented in the PEIR LSE summary tables. Ecosystems services losses are reported in the biodiversity chapter of the PEIR.
3.11.9	Section 16.7.2 of the Scoping Report does not include agricultural land as a receptor (including best and most versatile) although the grading is reported in paragraph 16.3.1.22. The ES should assess the potential for significant effects due to agricultural land take.	Soils and land	Temporary and permanent effects on agricultural land are scoped in under Section 15.4.1.1 bullet 5 and Section 16.4.2.1 bullet 2 of the EIA Scoping Report and have been considered in the PEIR. A project specific Natural Capital Assessment is being undertaken that considers the ecosystem services that soil provides and will be reported on alongside the ES.
3.11.10	Considering the reprofiling of land has potential to cause land instability, the ES should assess significant effects where they are likely to occur.	Soils and land	Land instability from earthworks, creation of site compounds, temporary material processing sites and temporary storage of excavated material etc. have been scoped in and included within the PEIR.
3.12.1	The Inspectorate does not agree that impacts to traffic and transport from vehicle movements transporting hazardous waste and materials can be scoped out; these movements should be considered as part of the construction traffic vehicle movements in the ES assessment.	Traffic and transport	These movements will be considered as part of the construction traffic vehicle movements in the ES assessment.
3.12.2	The Inspectorate agrees that this matter may be scoped out on the basis that works to the weirs will be phased and temporary in duration, navigation will be maintained throughout construction, and materials movements will be controlled through a CEMP to reduce impacts	Traffic and transport	A CEMP with appropriate mitigation measures will be developed by the D&B contractor based on the EAP for the ES.
3.12.3	The Inspectorate agrees that this matter can be scoped out as the Scoping Report describes that proposed new road bridges locations will reinstate the existing road network over the new channels reducing potential for severance but would not enhance traffic connections and therefore are not likely to result in significant effects	Traffic and transport	Noted. This remains scoped out.
3.12.4	The Inspectorate agrees that this matter may be scoped out of the ES as improvements are not anticipated to lead to a significant mode shift from those travelling by car although it will be designed to encourage use of Public Rights of Way.	Traffic and transport	Noted. This remains scoped out.
3.12.5	The Inspectorate agrees that this matter is unlikely to result in significant effects as the number of boat users on the River Thames is unlikely to increase/decrease significantly as a result of the Proposed Development.	Traffic and transport	Noted. This remains scoped out.
3.12.6	Additional large fowl may be attracted to the area increasing risk of bird strike with aircraft associated with Heathrow airport. Consultation has already taken place to identify avoidance measures which will be accommodated and assessed through ongoing design of the Proposed Development. On the basis that these measures demonstrate that bird strike will not pose a risk to Heathrow aircraft, and are secured	Traffic and transport	Evidence of agreement with Heathrow will be provided in the ES.

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
	through the DCO, the Inspectorate agrees to scope this matter out; evidence of agreement with Heathrow should be provided in the ES.		
3.12.7	The Scoping Report states that options will be explored "to maximise river and rail transport opportunities to reduce trips via road." The ES should explain any assumptions made in the assessment about use of rail or river, including a description of the expected number of movements via these routes and the available capacity within the networks for such movements. The ES should include an assessment of the worst-case scenario for construction phase traffic and transport effects.	Traffic and transport	The ES will include an assessment of the worst-case scenario for construction phase traffic and transport effects. The continued expectation is that justification for using or not using rail/water will need to be prepared.
3.12.8	The Scoping Report does not make reference to any potential abnormal indivisible loads (AIL). The ES should confirm whether there will be any AILs and where there are, associated impacts should be assessed where significant effects are likely to occur.	Traffic and transport	The assessment of AILs and the probability of these loads being involved in a collision will be incorporated into the assessment of effects from construction traffic on both the local and strategic road network. Suitable routes of AILs will be identified and agreed with Surrey County Council. The impact of this will be assessed in the ES Chapter.
3.13.1	Please see box 2.2.3 in this Scoping Opinion	Water environment	Noted. No further action required.
3.13.2	On the basis that the impacts of sheet piling on ground water quality, due to the creation of hydraulic pathways for contaminated water to migrate, will be assessed in the piling risk assessment and mitigated through the methodology, the Inspectorate is content to scope this matter out.	Water environment	Noted. No further action required. This remains scoped out.
3.13.3	Surface water run-off from site compounds, processing and material storage is proposed to be managed through the construction surface water management plan secured via a DCO requirement. On this basis, the Inspectorate is content to scope this matter out.	Water environment	Noted. No further action required. This remains scoped out.
3.13.4	Construction is proposed to follow cofferdam guidance and to be built in line with the CEMP. Provided this method is secured through the DCO for all weir improvements, the Inspectorate is content to scope this matter out. The Inspectorate notes that this mitigation is not included in Scoping Report paragraph 18.6.2.1.	Water environment	Accepted. It was considered that following cofferdam guidance was either embedded mitigation or tertiary mitigation.
3.13.5	Not enough evidence has been provided to demonstrate there are no pathways for sediment and contaminants to enter the water column during construction. The ES should identify the construction activities that have potential to lead to sediment disturbance and spill contamination and explain what mitigation measures will be employed to reduce/avoid effects. These measures should be secured through the DCO.	Water environment	At scoping, there was a lack of known information of the specific activities which may lead to the disturbance of sediment or contaminants. In addition, a land contamination conceptual site model (CSM) will be developed for the project using the above information to identify any sources of contamination, ground gas, pathways, and receptors present within the study area. The CSM will assess the likelihood of existing contamination being encountered during the construction process, such that it could cause significant environmental harm or adverse health effects if not addressed adequately at the construction and/or operational stages. It will also be used to identify potential construction and operational effects. This will be reported within the ES. Furthermore, the source of contaminants and sediments via augmented flow (including at low flow/drought conditions) will be considered. Further modelling work will assess this, and

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
			also provide information to feed into the management of the augmented flow to enable a balance of environmental quality between the River Thames and the new channels. In addition, any works within or affecting landfills or involving waste will be subject to the requirement for an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016. As part of the permitting process, a range of risk assessments will be required to be undertaken, which will be subject to scrutiny by the Environment Agency's National Permitting Service to ensure that they are robust.
3.13.6	The CEMP is proposed to set out measures for appropriate storage of chemicals and liquids on site including bunding and drip trays and use of biodegradable lubricants and materials where possible. On the basis this is secured via the DCO, the Inspectorate agrees to scope this matter out	Water environment	Noted. No further action required. This remains scoped out.
3.13.7	The ES should assess impacts/effects on hydrology from mitigation used during construction e.g. changes in flow from use of coffer dams where significant effects are likely to occur.	Water environment	Accepted. The effects of mitigation measures will also be considered for their impacts to hydrology during construction. These will be addressed within the ES. Pertaining to cofferdams, it is noted that under PINS ID 3.13.4 to scope out cofferdams where their use is in line with cofferdam guidance and the CEMP.
3.13.8	The Scoping Report identifies that such changes are anticipated to be within the scale of natural changes from major flow events based on historic bathymetric surveys and that measures are embedded to avoid main weir pools and maintain operational flow so that weir structures are appropriately designed. These measures are currently not described therefore the Inspectorate does not agree to scope this matter out. The ES should describe the measures to be employed and secured to reduce the potential effects from weir upgrades on downstream hydromorphological change and assess significant effects where they are likely to occur or explain how measures reduce/avoid such effects.	Water environment	The existing operational regime of the weir structures maintains a standard head water level for navigation; therefore, this dictates normal flow conditions through the weirs. The increased capacity will only come into effect in larger flood events. The new gates at each weir will not be operated until all the existing weir gates have already been fully opened as per the current operational requirements. When they need to be opened, the flood in the River Thames will be well developed and the tailwater level downstream of each weir will be much higher than the normal level in non-flood conditions so the additional water added from opening the new gates will have no impact on non-flood condition levels. The modification of the direction of water flow by the new weir gates when in operation with the new gates, is likely to lead to only subtle changes in the pattern of scour and deposition immediately downstream. These changes are therefore localised and within the scale of changes that already occur during a particularly large flow event. As such, any changes to hydromorphology are expected to be within the normal range of baseline variance of existing flood flow conditions. The main weir pools at Sunbury and Teddington are upstream of the proposed new structures; therefore no downstream hydromorphological changes can affect these. Whereas the Molesey main weir pool is approximately 250m downstream of the weir. Impacts to hydromorphology at weirs within the section bypassed by the flood channel remains scoped in and will be assessed. In addition, impacts from augmented flow and depleted water level to low flow habitats such as weir pools will be assessed. It should be noted that additional operational effects on aquatic habitat and notable and protected species from the RTS are to be assessed in the EcIA, see Chapter 7: Biodiversity. We will seek agreement from the EA/LPA regarding this matter.

PINS ID	PINS Comment in Scoping Opinion	EIA Topic	RTS Project Response
3.13.9	The Inspectorate agrees to scope these matters out on the basis that operation and maintenance will be embedded in the design of the Proposed Development. The ES should also describe and secure operational maintenance and monitoring plans for these structures to ensure their safe and continual operation.	Water environment	Noted. The ES will describe and secure operational maintenance and monitoring plans for these structures to ensure their safe and continual operation.
3.13.10	Please see box 2.1.1 of this Scoping Opinion.	Water environment	The effects of channel maintenance to restore the design profile is scoped into this topic. See Scoping Report 18.4.2.1 final bullet.
3.13.11	Sheet piling and concrete capping is proposed where previous landfill sites may interact with the proposed flood channels. Provided the locations where the new channels would interact with previous landfill sites are identified, and the proposed mitigation is secured and implemented at all identified location interactions, the Inspectorate agrees this matter can be scoped out.	Water environment	Noted. The locations where the new channels will interact with the previous landfill sites will be identified and mitigation will be provided and reported within the ES to ensure this can remain scoped out
3.13.12	Impacts on water quality and subsequently other receptors (such as ecology) from linking lakes into the riverine system are not proposed to be assessed although this has potential to alter dissolved oxygen and result in pollution transfer into the new channels. The ES should assess significant effects from bringing lakes 'online' during construction and operation where significant effects are likely to occur. This should cross refer to other assessments where they overlap e.g. biodiversity.	Water environment	Yes, this will be included within the ES. This potential impact is included under 18.2.4.1 "Introducing an augmented flow and operational water into the flood channel and intersected waterbodies has the potential to result in adverse effects in terms of .... water quality of WFD and non-WFD lakes and watercourses from the introduction of River Thames water (in normal conditions and during floods) to previously unconnected waterbodies".
3.13.13	The ES should demonstrate that augmented flow can be maintained at all times, even in extreme weather conditions e.g. at times of drought, and explain how this may impact on groundwater flows. Significant effects should be assessed in the relevant Chapters where they are likely to occur. Please see the Environment Agency's scoping consultation response for further detail on this matter.	Water environment	The ES will assess the expected impacts of using an augmented flow under extreme weather (flood and drought). The impacts of the augmented flow on the lakes and channels is being modelled further under a range of scenarios. It is currently being determined whether augmented flow needs to be maintained at all times and this will be considered further in the ES.
3.13.14	As the augmentation mechanism is currently unknown, the potential for changes in sedimentation is also unknown. The ES must quantify the sediment/silt baseline in lakes and describe how this would change during construction and operation. This must include identification of potential additional inputs/outputs. Where mitigation is required, this should be described in the ES and secured via the DCO.	Water environment	Agreed. The ES will include a sediment baseline; modelling has recently been completed to determine sediment movements through the lakes and new channels during operation. Fluvial audits / geomorphological reconnaissance are being undertaken and will also input towards the sediment baseline, through identifying potential sources and sinks of sediment; and locations for potential mitigations.
3.14.1	No matters have been proposed to be scoped out of the assessment.	Cumulative effects	Correct, in the CEA in the Scoping Report we did not propose any matters to be scoped out.

2 EIA Scoping comments from the LPA project group (Surrey County Council, Runnymede Borough Council, Elmbridge Borough Council and Spelthorne Borough Council) and RTS project responses

2.1 General

Table 2-1: EIA Scoping comments from the LPA project group and RTS project responses to the Non-Technical Summary

Page	Reference	Comment	RTS Project Response
Scoping Non-Technical Summary	RTS Vision	The increase in the number and size of flood events due to climate change is a concern to SBC. Future flood events will be expected to have increasingly severe environmental and health impacts if no intervention is made regarding flooding.	Noted. A key project goal is reduction in flood risk.
Scoping Non-Technical Summary	Existing Environmental conditions	Shepperton is missing from the settlements list.	This is made clear in PEIR NTS.
Scoping Non-Technical Summary	Existing Environmental conditions	Land uses paragraph at bottom of pg. v infers that landfills are raised, this is not the case, fill has taken place around the lakes left by mineral workings and there will be fill below ground level.	This is made clear in PEIR NTS.
Scoping Non-Technical Summary	Existing Environmental conditions	There is a location to the northeast of the lake identified in Figure 4-1 Sheet 2 as Littleton North where Middlesex County Council Committee records indicate that experimental tipping of household waste to a wet pit/lagoon may have taken place in the early 1960s.	Noted. Relevant to the Materials and Waste topic.

Table 2-2: EIA Scoping comments from the LPA project group and RTS project responses to the Project Description and Alternative Options Considered

Page	Reference	Comment	RTS Project Response
22	4.1.2.2	Will the maintained water level in the channel for purposes of preventing fish death for example after a flood event, be the only means of control to prevent fish death or will oxygen level monitoring and if necessary, aeration of the channel be considered during adverse conditions? This query is raised as fish death can lead to foul odour, pest issues and if carcases are left without clearance, they can become a potential public health concern particularly during hot weather.	Monitoring of dissolved oxygen has been ongoing to inform the baseline and will continue once the channel is operational. It is anticipated that dissolved oxygen will be used as a trigger with regard to the augmented flow (if it drops below a certain threshold it would trigger the need for an increase in flow).
26	4.1.2.14	Reference is made to potential re shaping of smaller lakes and to shallowing of the existing lake banks to reduce their gradients. Reference is also made to the redistribution of silts due to the operation of the RTS. What testing regime will be applied to these materials bearing in mind the flow regime may have carried contaminants from nearby landfill which could be present in silts? Will this be assessed in the source-receptor-pathway models for soils and water? There may be public access to the reshaped lake margin, for example for angling.	A comprehensive SI has been completed. All material placement will need to be appropriate and risk assessed. Placement will also reflect intended end uses.

Page	Reference	Comment	RTS Project Response
26	4.1.2.16	Information is given regarding the Abbey Meads Floodway, however no corresponding information is given for the Brett Aggregates land/lake on the opposite bank which is a lake that is part of the RTS and has culverts beneath the M3 through to the former Lavenders pit area referred to as Littleton South on Figure 4-1 Sheet 2.	More detail will be included in ES project description.
33	4.1.4.2	Regarding bed lowering within the Thames and excavations along the channel route in an area with high ground water levels. What will happen to the waste silt and dredging arisings? Will there be any onsite dewatering on land and if so what methods of odour and silt control/mitigation will be applied for example sludge de-watering bags/membranes? The Project Group expect such measures to be secured within a Construction Environmental Management Plan (or similar).	Material removed during bed lowering of the River Thames will be transferred to the EA's depot in Sunbury before road transport to its final destination. There will be processing sites within the project boundary for processing of materials excavated during channel construction and dewatering on land is being considered. We have identified tertiary mitigation associated with odour and surface water management which will form part of the CEMP.
37	4.1.5.7	The use of excavated arisings on site for constructions/ landscaping where materials is chemically and geotechnically suitable, and in accordance with the MMPs and necessary permits, is welcomed by the Project Group. Where will the geochemical parameters that are considered suitable for use be published/ secured?	More detail to be included in ES and / or waste permitting materials.
45	4.2.4.1	There will be extensive re-use of site won soils – what testing will be applied to soils for which end use? Will placed soils (including any imported soils), be tested and at what frequency? How will the testing be secured?	A comprehensive SI has been completed. All material placement will need to be appropriate and risk assessed and tested. Any works within or affecting landfills or involving waste will be subject to the requirement for an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016. As part of the permitting process, we will be required to undertake a range of risk assessments, which will be subject to scrutiny by the Environment Agency's National Permitting Service to ensure that they are robust. We will also have to propose and put in place suitable measures to mitigate effects on the environment to an acceptable level, which the Environment Agency will review and scrutinise in terms of their adequacy and appropriateness for mitigating the risks and impacts identified.
40	4.1.9 – Environmental Mitigation	The Project Group welcomes the Applicant's commitment to embedding the Waste Hierarchy within the design of the RTS development (to minimise waste and maximise reuse) as one way of mitigating the environmental impacts of the development (paragraph 4.1.9.1). The MWPA agrees that sustainable waste management will save resources and reduce traffic and vehicle emissions which will in turn have wider economic and environmental benefits.	Noted.
45	4.2.4 – Materials Management	Paragraph 4.2.4.2 of the scoping report sets out that (where possible) excavated material will be stored at materials processing sites within the DCO application project boundary and then re-used for features identified as part of the landscape and green infrastructure works. The Minerals and Waste Planning Authority (MWPA) would advise that excavated material used elsewhere as part of the RTS development should be fit for purpose, suitable and limited to the minimum volume requisite.	Noted.
45	4.2.4 – Materials Management	At paragraph 4.2.4.4 the scoping report explains that the applicant is in the process of determining the possible use of sites outside of the project boundary for EIA scoping for placement of non-hazardous material. The MWPA would welcome clarification as to what is meant by 'placement' in this context. The applicant should be aware that the deposit of waste on land is a material change of use of that land and that a material change of use of land requires the benefit of planning permission. Consequently, the applicant should ensure that any sites outside of the development boundary and used for the purposes of 'placing' waste benefit from a lawful use or express consent for the temporary or permanent storage of waste.	We have confirmed that there is sufficient capacity to accommodate non-hazardous waste from the RTS at licenced sites within 16km of the project boundary. This is noted in the PEIR project description.

Page	Reference	Comment	RTS Project Response
		The MWPA will be pleased to work with the applicant to ensure that any sites identified are suitable in this regard.	
45	4.2.4.3	How will measures to prevent the cross contamination of soils be secured where potentially contaminated site won soils are stored, but may not be classed as hazardous waste?	A summary of materials management during construction is provided in section 2.2.6 of the PEIR. Mitigation associated with soils is covered in the soils and land topic chapter of the PEIR.
45	4.2.5	The Project Group would request that Environmental Health at the Host Authorities are consulted regarding the haul routes in order to provide information regarding areas that are sensitive in terms of air quality and noise.	Engagement with Surrey County Council and EHOs is ongoing in relation to HGV routes for excavated materials.
45	4.2.5	Has the alternative of routing traffic directly to the scheme construction areas via a dedicated entry/exit point from the M3 motorway in Spelthorne been considered/scoped? This would prevent some of the HGVs from contributing to poor air quality at the Sunbury Cross junction, on the Upper Halliford Bypass and along the A308. Given the scheme is so close to the M3 motorway at Shepperton and the long duration of the construction program a temporary works area with access to the motorway would allow HGVs to route directly to the scheme and then along the scheme route reducing traffic on local roads which would reduce cumulative impacts on congestion, air quality and noise.	A series of options is under investigation for limiting the effects of HGV movements on the local road networks, including conveyor systems under the M3 and short-haul water based transport on the Thames. The construction duration, cost and land take associated with a temporary motorway junction outweigh the benefits in this instance. This will be reported in the ES.
45	4.2.5	Areas of poor air quality in Spelthorne are strongly associated with the strategic road network and the junctions used to access that network therefore the strategy of using main thoroughfares and arterial roads to focus traffic on A roads alone will not be as effective as direct routing from the M3 to the scheme during the construction phase.	A series of options is under investigation for limiting the effects of HGV movements on the local road networks, including conveyor systems under the M3 and short-haul water based transport on the Thames. The construction duration, cost and land take associated with a temporary motorway junction outweigh the benefits in this instance.
47	4.2.9	For noise and construction dust purposes as well as safety regarding storage of materials the compounds should not be located adjacent to residential properties, and consideration of the wind direction from which the strongest wind speeds arise and also the predominant wind direction should be given when selecting the locations. This information can be determined from Heathrow Airport meteorological data.	Noted. The frequencies of the wind speed in each direction will be considered and are calculated based upon meteorological data for five years from a representative meteorological station (i.e. Heathrow Airport). Mitigation relating to noise and dust is considered in the PEIR and will be further assessed as part of the design and ES (including siting of compounds).
47	4.2.9	Note that the use of Heras fencing with debris netting is discouraged by the Project Group as this fencing is not sufficient to prevent dust migration from storage areas and construction compounds. A solid boundary fence/site hoarding is more effective at preventing dust migration.	Noted.
47	4.2.9	The Applicant should consider the following best practice guidance: • IAQM Air Quality Monitoring in the Vicinity of Demolition and Construction Sites. • IAQM & EPUK Guidance on land-use planning and development control: Planning for air quality. • IAQM Assessment of dust from demolition and construction 2014.	This guidance will be considered.
48	4.3.1	Has the scenario whereby surrounding land could become flooded and overtop into the channel been considered? Or will this be prevented by the design and elevations. SBC raise this as the effectiveness of the sheet piling in preventing water in the channel being contaminated by soils from the surrounding land may be compromised in that scenario.	Yes. In the largest flood magnitudes, the floodplain will be inundated and water will flow into the flood channel overland in some places which would potentially bring contamination from the surrounding land; the risk of contamination exists in the largest flood scenarios already. This mechanism is represented in the flood model used to develop the flood channel design.
48	4.3.1	Will there be an assessment of whether there is any increased risk of flooding to the landfills that are currently further back from the Thames, for example on Littleton Lane?	One of the key aims of the River Thames Scheme is to respond to the challenges of flooding. Our assessments show that the project will not increase flood risk at any location in any flood conditions.

Page	Reference	Comment	RTS Project Response
51	4.3.2.9	Will the annual Public Safety Risk Assessment (PSRA) review consider water chemistry, the potential for the presence of microorganisms for example blue green algae regarding areas where the public can access the water's edge and the quality of drinking water at abstraction points/supplies?	Content of PSRA is to be confirmed and reported at ES stage.
51	4.3.2.9	The Project Group's Environmental Health Team should be consulted on the PSRA.	Noted.
60	4.5.3.19	It is noted that the route presented does not include the Littleton South Lake or Old Littleton Lane Lake, although the Littleton South Lake is linked by culvert to the Littleton North Lake. Will the impact of the scheme on the Littleton South Lake and Old Littleton Lane Lake be assessed in terms of soils, flood risk and water environment?	The northern part of Littleton South is within the project boundary - effects on the lake will be considered within the EIA. Old Littleton Lake falls outside of the project boundary and is unlikely to be affected but will be considered as appropriate within the Water Environment chapter of the ES following detailed modelling.

Table 2-3: EIA Scoping comments from the LPA project group and RTS project responses to the Approach to EIA

Page	Reference	Comment	RTS Project Response
64	5.2.1.3	*"The EIA Scoping Opinion will further inform the data gathering and survey requirements to inform the detailed assessment that will be presented within the ES."* As well as the EIA Scoping Opinion, data gathering and survey requirement should also be confirmed through further engagement and consultation with the Host Authorities and other statutory bodies to support the detailed assessment of the EIA.	Agreed. Engagement section of scoping report makes clear that ongoing engagement will be important in refining scheme / EIA. Engagement has been ongoing for the PEIR and in the lead up to statutory consultation.
67	5.4.1	Additional guidance to consider: The Institute of Environmental Management & Assessment (IEMA) proportionate EIA strategy and best practice (e.g. Delivering Proportionate EIA (IEMA, 2017) and the EIA Guide to Delivering Quality Development (IEMA,2016))	5.4.1 is an introductory section which talks about the EIA Regulations and PINS guidance only. 'Delivering Quality Development' was used to develop the approach to mitigation. 'Delivering Proportionate EIA (IEMA 2017)' was also used e.g. in our approach to not present an unmitigated and then mitigated project (noted in section 5.4.3.10 of the scoping report). This guidance will be followed as part of the ongoing EIA process.
68	5.4.3.1 (third bullet)	"*Tertiary (best practice): Actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or* actions that are considered to be standard or best practices used to manage commonly occurring environmental effects." Best Practice could be defined as the requirement for a Construction Environmental Management Plan (CEMP) or a Code of Construction Plan (CoCP). A CEMP and/or a CoCP should be defined as Primary (embedded mitigation) or Secondary (additional) mitigation. Tertiary mitigation is defined as standard sectoral practices like the Considerate Contractors Practices and would not be assessed as part of the EIA. IEMA's Environmental Impact Assessment Guide to: Delivering Quality Development (2016).	The definition of tertiary mitigation provided in Scoping Report paragraph 5.4.3.1 (third bullet) is taken from page 16, '*Annex A: Classifying the three types of Environmental Impact Assessment mitigation*' of IEMA's Environmental Impact Assessment Guide to: Delivering Quality Development (2016). Paragraph 5.4.3.4 is in line with Annex A as the example used (dust mitigation during construction) refers to these best practice means being controlled within an overall CEMP. In line with the comment about not assessing tertiary mitigation as part of the EIA, this is what we suggest and explain in paragraphs 5.4.3.5 and 5.4.3.10.

Page	Reference	Comment	RTS Project Response
69	5.4.3.4	A CEMP would not be considered as Tertiary mitigation. In accordance with IEMA's Environmental Impact Assessment Guide to: Delivering Quality Development (2016) (statement on tertiary mitigation): *"It is helpful, but not strictly necessary, to include tertiary mitigation related to construction activities, within a draft Construction Environmental Management Plan (CEMP) (or similar) included in the ES, to ensure that these actions are highlighted to the principal contractor."* Such as • *"Applying emission controls to an industrial stack to meet the requirements of the Industrial Emissions Directive (Directive 2010/75/EU).* • *Considerate contractors' practices that manage activities which have potential nuisance effects)"* Standard sectoral practices that could be included in a CEMP are considered tertiary mitigation, not the CEMP itself.	Paragraph 5.4.3.4 of the Scoping Report refers to dust control on construction sites as best/standard practice and tertiary mitigation. The reference to the CEMP is noting that the dust control measures would likely be included within a CEMP (in line with the IEMA Guidance quoted). It is not stating that we view the CEMP as tertiary mitigation.
69	5.4.3.5	*"Primary and tertiary mitigation are considered to form part of the RTS, and therefore have been considered when determining if a project effect is likely to be significant."* As part of the EIA, Primary and Secondary mitigation should be considered within the assessment, not Tertiary (see above for explanation). IEMA's Environmental Impact Assessment Guide to: Delivering Quality Development (2016)"	The definition of primary mitigation given in IEMA 2016 is: *"Modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project, and do not require additional action to be taken."* Because they are an inherent part of the project (embedded) the environmental assessment is completed assuming they are already in place. Primary mitigation measures will be detailed in the PEIR/ES to demonstrate how iterative design has avoided effects in line with EIA best practice. The definition of tertiary mitigation given in IEMA 2016 is: *"Actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects."* Because they will occur with or without input from the EIA the environmental assessment is completed assuming they are already in place. See para 5.4.3.10 of the Scoping Report which provides further clarification: *"significant effects in the ES will not be presented as an unmitigated and then mitigated scheme as primary mitigation and tertiary mitigation form part of the RTS and will be considered in the assessment. Likely significant effects arising from the RTS (with primary and tertiary mitigation assumed to be in place) will be presented initially. Any further (secondary) mitigation that may be required to address any remaining significant adverse effects will be identified and residual effects assessed with such additional secondary mitigation in place as a second stage of the assessment."* This approach has been taken by other projects going through the DCO process.
70	5.4.3.6	The examples given in the bullet point list for typically expected management plans secured through the DCO as a Requirement are a mixture of Secondary and Tertiary mitigation. This is confusing to the reader, Tertiary mitigation such as Handling of soils in accordance with good construction practice and relevant guidance (such as BS3882) would not be secured via a DCO Requirement as is industry best practice.	We will review this text as part of the ES, and updated text has been provided as part of the PEIR.
N/A	Summary	Mitigation section – This section is generally confusing due to the incorrect use of terminology. As stated in IEMA's Environmental Impact Assessment Guide to: Delivering Quality Development (2016)) - A key principle of secondary mitigation is *"Best managed through an environmental management plan."*	We will review this text as part of the ES, and updated text has been provided as part of the PEIR.

2.2 Air Quality

Table 2-4: EIA Scoping comments from the LPA project group and RTS project responses to Air Quality (General)

Page	Reference	Comment	RTS Project Response
N/A	General	The Project Group are concerned that construction HGVs travelling through the strategic road junctions has the potential to further impact poor air quality in the area and also cumulative impacts with other construction works and mineral extraction/landfill traffic locally. A direct access/egress from the M3 to a scheme compound would be beneficial, if possible, to reduce impacts at the strategic road junctions, where there are nearby sensitive receptors (for noise and air quality).	A series of options is under investigation for limiting the effects of HGV movements on the local road networks, including conveyor systems under the M3 and short-haul water based transport on the River Thames. The construction duration, cost and land take associated with a temporary motorway junction outweigh the benefits in this instance.

Table 2-5: EIA Scoping comments from the LPA project group and RTS project responses to Air Quality (Data/Survey)

Page	Reference	Comment	RTS Project Response
79	6.2.1.9	In accordance with IAQM 2014 guidance for a scheme of this size, appropriate dust / PM monitoring would be required where there is a risk of dust impacts during the construction phase. It is recommended that monitoring is undertaken at least 3 months prior to construction in order to obtain a baseline for comparison. The monitoring methodology should take into account IAQM 'Guidance on Monitoring in the Vicinity of Demolition and Construction Sites' (2018).	This is accepted and will be incorporated into mitigation measures proposed in the Code of Construction Practice and/or other appropriate documentation.
81	6.2.2.8	If the qualitative odour assessment indicates that moderate or substantial adverse impacts on receptor locations are likely, dispersion modelling of odour impacts would be expected.	The odour assessment method has been updated to include dispersion modelling of odour effects where moderate or substantial adverse impacts are identified following the qualitative assessment.

Table 2-6: EIA Scoping comments from the LPA project group and RTS project responses to Air Quality (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
84, 85 and 86	6.2.3.3, 6.2.3.9 and 6.2.3.12	Houseboats should be included as relevant human receptor locations when assessing construction dust, as well as construction and operational odour and road traffic impacts.	Houseboats will be considered for selection as sensitive receptors equal to permanent residences.
87	6.2.3.16	Roads where the RTS results in a reduction in traffic should be included within the assessment if they are within 200m of a receptor which has been included due to an increase in traffic on any adjacent roads.	Agreed.
87	6.2.3.18	It is agreed that the screening criteria referenced in the EPUK – IAQM guidance should be used to determine the study area.	Noted.
87	6.2.3.19	In addition to European designated sites, Sites of Special Scientific Interests (SSSI), National Nature Reserves, Local Nature Reserves, Ancient Woodland and Local Wildlife Sites should also be considered in the assessment of air quality	We will consider SACs, SPAs, Ramsar Sites, SSSIs, NNRs, LNRs, Ancient Woodland, LWSs and Sites of Nature Conservation Interest (SNCIs).

Page	Reference	Comment	RTS Project Response
		impacts on ecological receptors, in accordance with the IAQM's 'A guide to the assessment of air quality impacts on designated nature conservation sites' (2020).	

Table 2-7: EIA Scoping comments from the LPA project group and RTS project responses to Air Quality (Approach to Mitigation)

Page	Reference	Comment	RTS Project Response
96	6.6.2	Best practice measures in relation to Non-Road Mobile Machinery (NRMM) should be taken into account such as: • Committing to ensuring that equipment is maintained in accordance with the manufacturer's instructions and requirements particularly regarding the use of filters to ensure emissions of air pollutants are minimised. • Where practicable, low emission NRMM or a recent Euro engine specification should be sourced to ensure emissions are minimised.	This is accepted and will be incorporated into mitigation measures proposed in the Code of Construction Practice and/or other appropriate documentation.
96	6.6.2.2	If contractors are being housed in local hotels and accommodation would there be an opportunity to provide low emissions minibus transport to site where hotels are situated beyond walking/cycling distance. Alternatively, accommodation could be selected near to public transport routes.	This is accepted and will be incorporated into mitigation measures proposed in the Code of Construction Practice and/or other appropriate documentation.
97	6.6.2.7	As previously mentioned, the dust and air quality management plan should cover adequate boundary dust monitoring where there are receptors downwind of a compound or areas of excavation. The plan should cover mitigation measures during prolonged dry weather, such as during the summer months, when dust control is most challenging.	This is accepted and will be incorporated into mitigation measures proposed in the Code of Construction Practice and/or other appropriate documentation.
97	6.6.2.7	Suitable wheel wash facilities should also be specified to reduce trackout of dust onto the highway.	This is accepted and will be incorporated into mitigation measures proposed in the Environmental Action Plan and/or other appropriate documentation.
97	6.6.2.8	Securing a communications plan for subjects like odour, dust and spills would be advised so that there is a well-defined communications channel between the site and the community, and the site and the local authorities.	This is accepted and will be incorporated into mitigation measures proposed in the Code of Construction Practice and/or other appropriate documentation.

Table 2-8: EIA Scoping comments from the LPA project group and RTS project responses to Air Quality (Assessment Methodology)

Page	Reference	Comment	RTS Project Response
94	6.4.1	Whilst impacts from river transport emissions resulting from the RTS, such as those associated with construction material movement by use of barge, particularly during capacity improvement construction works, are unlikely to be significant, further detail should be provided in the Air Quality Chapter of ES on the number of river transport movements predicted as a result of the RTS and the class of vehicles to be used.	Further detail will be provided in the ES on the number of river transport movements predicted as a result of the RTS and the class of vessels to be used. Their potential for air quality impacts will be screened, and where required a detailed air quality assessment may be undertaken using the ADMS-Roads dispersion model.
95	6.4.2.1	Air quality impacts on future users of green open space proposed as part of the RTS and any Habitat Creation Areas as part of the proposed plans, particularly in proximity to the M3, should be considered.	As above, the EPUK-IAQM guidance criteria will be used to determine the size of the study area. This will include Habitat Creation Areas and areas of green open space.

Page	Reference	Comment	RTS Project Response
98	6.7.1.1	The IAQM 2014 guidance is accepted as appropriate as a basis for the construction dust assessment. However, should excavation and / or processing exceed 200,000 tonnes per annum (tpa), the IAQM 2016 'Guidance on the Assessment of Minerals Dust Impacts' would be more suitable.	Our Scoping Report provided justification in 6.2.2.3 to 6.2.2.6 explaining why this guidance is not appropriate and the IAQM 2014 (now IAQM, 2023) guidance should be used. However, an assessment will be undertaken in the ES using a hybrid approach making use of both documents (which were developed in accordance with the same broad principles). The method used is described in Appendix 6.2.
100 / 103	6.7.1.21 / 6.7.2.2	Further consultation should be undertaken with the Project Group once the traffic data forecast years and model study area are known in order to agree monitoring sites to be used for model verification, sensitive receptor locations, emission factor and background data years to be used in the assessment.	Assessment methodology and monitoring scope was provided to LPA EHOs for comment.
100 / 103	6.7.1.21 / 6.7.2.2	As peak hour congestion is likely to be present in the model study area, a diurnal profile to account for changes in traffic flow weighting throughout the day will be important for producing realistic predictions and should be included in the dispersion model.	A diurnal profile can be used. A national proxy profile may be used in lieu of a local profile if needed.
101 / 103	6.7.1.23 / 6.7.2.3	The traffic data scenarios should be defined in the Air Quality ES chapter. It is considered that 2019 is accepted as being a suitable year for model verification, and adjustment purposes.	Noted.
101	6.7.1.25	The latest version of the Defra emission factor toolkit at the time of the assessment should be used.	Agreed.
101	6.7.1.25	Traffic congestion should be taken into account in the dispersion modelling, particularly a reduction of speeds on the approach to junctions.	The dispersion modelling will account for a reduction in speed at junctions, which is considered to adequately describe "congestion" as proposed by the LPAs.
101	6.7.1.26	Heathrow Airport meteorological data is considered to be suitable for use in the assessment.	N/A
101	6.7.1.27	Multi-zonal verification factors may be required to improve model performance rather than one single factor being calculated across the entire model area.	Agreed.
102	6.7.1.31	The EIA Scoping Report indicates that the PM2.5 limit value of 20 µg/m3 will be used for comparison against predicted concentrations at human receptors. Given Elmbridge Borough Council's and the Mayor of London's target to achieve annual mean PM2.5 concentrations of less than 10 µg/m3 across their administrative areas by 2030, an annual mean of 10 µg/m3 should be used when assessing impacts on PM2.5 concentrations at human receptor locations.	Assessing effects against receptors derived from the EPUK-IAQM guidance is accepted. However, where this would result in impacts, we may also undertake a comparison against the 20ug/m3 criterion. The application should not be determined against targets.
102	6.7.1.32	Acid deposition and concentrations of ammonia resulting from road traffic emissions and their contribution to nitrogen deposition should also be considered in relation to impacts on ecological receptors.	Assessment of potential impacts on designated ecological sites in terms of annual mean ammonia concentrations resulting from vehicle exhaust emissions associated construction of the project will be undertaken in the ES.

2.3 Biodiversity

Table 2-9: EIA Scoping comments from the LPA project group and RTS project responses to Biodiversity (General)

Page	Reference	Comment	RTS Project Response
N/A	N/A	As mentioned in the Scoping Report, the project presents an opportunity to deliver net gains in biodiversity. It is advised that the Applicant differentiates clearly in the ES between design elements/mitigation required to mitigate significant effects to biodiversity receptors, and those required to deliver net gains in biodiversity.	Noted, this will be clearly set out in the DCO application documents.

Table 2-10: EIA Scoping comments from the LPA project group and RTS project responses to Biodiversity (Data/Survey)

Page	Reference	Comment	RTS Project Response
112	7.3.1.34	The ES should clearly state where species are listed Species of Principal Importance in England.	Noted, these will be listed.
117-118	7.3.1.9	When discussing species which habitats support, the ES should include reference to relevant sections rather than stating further detail is provided below.	Noted paragraph references will be used.
123	7.3.1.38	There are a few inconsistencies with the use of scientific names and common names. Some sections only reference commons names others have both scientific names and common names. The ES should provide a standardised approach.	Noted, a standardised approach will be used. Our approach will be to state the common name with the Latin name in italics the first time and then use the common name from then on.
124	7.3.1.41	Within the ES, the desk study findings should be drawn out and some commentary on whether these were confirmed in the field. Or include number identified through desk study and then in subsequent field surveys.	Noted, the ES will provide baseline set out on a receptor by receptor basis providing desk study and field study narrative.
124	7.3.1.42	Reference to top mouth gudgeon but no other invasive non-native species (INNS) fish such as zander. The ES should confirm if other fish INNS were recorded or are absent.	Fish INNS surveys are being completed in 2023 to establish the baseline.
125	7.3.2	The Future Baseline used to inform the ES should take into account changes brought about through climate change.	This is being considered in the PEIR and ES.

Table 2-11: EIA Scoping comments from the LPA project group and RTS project responses to Biodiversity (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
115	7.2.3.2	The study area for habitats and flora currently includes the area within the project boundary. It is recommended that this is extended to include all habitats which may be subject to effects from the Project, including those outside the boundary.	No change to the study area for habitats has been made. Sites of interest for nature conservation (designated and non-designated) within 2km or the 1 in 100 year flood extent whichever is greater are scoped into the assessment. These sites have been selected for their nature conservation interest so key habitats where significant effects are likely will be identified. Any indirect effects from RTS on these sites (and their habitats) will be included in the assessment.

Page	Reference	Comment	RTS Project Response
128	7.4.1	The ES should include a detailed assessment of potential effects to sensitive species (including Special Protection Area (SPA) birds)) from noise, vibration, lighting and visual disturbance during the construction phase. This may need to include baseline monitoring and modelling of noise and vibration levels in locations where sensitive receptors, such as SPA birds, are found.	Noise levels from construction activities will be considered in the ES and HRA documentation. Noise monitoring has been ongoing for the scheme, and further supplementary monitoring is proposed for later in 2023 and modelling will be used, where appropriate. Locations of further noise monitoring will be dependent on findings of ongoing ecology surveys (e.g. confirmation of bat roosts).
128	7.4.1	The ES should include all potential construction and operational effects to aquatic fauna such as isolation of fish during construction activities, or alterations to navigational channels.	Comments addressed in 7.4.1.1 - Bed lowering and river bank lowering have the potential to cause adverse effects on protected and notable aquatic species and habitats due to disturbance of river bed and river banks.
129	7.4.2	The ES should include a detailed assessment of potential effect to sensitive species (including SPA birds) from recreational disturbance from new users of public spaces during the operational phase.	The HRA documentation will consider the potential impacts of additional recreation disturbance on designated features, taking into account where new public access is improved, where current access is restricted, and existing types and levels of disturbance. The EcIA will also assess this effect on other receptors.
128	7.4.1	The EIA scoping report acknowledges the value of Open Mosaic Habitat (OMH) present within the site in a number of locations, including Manor Farm. The ES should fully assess potential effects to OMH from both construction effects such as habitat loss, and through operational effects such as recreation and dog walking.	Effects on open mosaic habitat will be considered under the following scoped in items: Construction Effects 7.4.1.1 Potential adverse effect on statutory designated and non-designated sites, habitats, trees, protected and notable species during construction due to vegetation clearance, soil compaction, reduction in the availability of foraging and commuting habitat, resting or breeding sites, habitat severance and fragmentation or direct injury / death of species; Operation Effects 7.4.2.1 Provision of new areas of open green space and landscaping works could cause disturbance of designated and non-designated habitats and protected and notable species through increased public access.

Table 2-12: EIA Scoping comments from the LPA project group and RTS project responses to Biodiversity (Scoped in / out topics)

Page	Reference	Comment	RTS Project Response
132	7.4.3.2	Mole Gap to Reigate Special Area of Conservation (SAC) is mentioned in Section 7.3. If this SAC is not taken forward to assessment stage the ES should present full justification for this.	The ES will clearly set out the justification for European sites being scoped out of further assessment in the ES and HRA documentation.
132	7.4.3.2	Fish (certain species) listed but eels listed separately. The ES should clearly state which fish will be included within the assessment.	Noted, there will be a clearly defined list of fish receptors present in the baseline provided in the ES.
133	7.4.3.4	It is agreed that none of the biodiversity features should be scoped out from the EIA.	No response required.
133	7.5.11	Given secondary mitigation measures are required to ensure potential effects from transportation of INNS and pollution from stored chemicals or fuel are avoided, these potential effects should be scoped into the EIA.	PINS agreed that this could be scoped out of EIA. Effects will be addressed through best construction practices that are unlikely to require specific secondary mitigation.

Page	Reference	Comment	RTS Project Response
134	7.5.2.1 (3rd bullet)	Where mitigation measures are required to avoid/minimise operational effects to designated sites, to a level where they would be not significant, this should be fully assessed and captured within the ES.	The third bullet point states *"Damage to habitats and disturbance to designated sites and protected and notable species from general maintenance activities. It is considered that good practice measures, including sensitive timing, will be implemented to avoid effects and are therefore able to be scoped out"*. Maintenance of the channel to restore the design profile is already scoped into the biodiversity topic of the EIA and will be defined in the DCO application.

Table 2-13: EIA Scoping comments from the LPA project group and RTS project responses to Biodiversity (Mitigation)

Page	Reference	Comment	RTS Project Response
135	7.6	Mitigation measures should follow the overarching principles of the Mitigation Hierarchy.	Noted, the hierarchy will be applied and will be described within the EcIA methodology for clarity.
135	7.6	The design of green and blue infrastructure including Habitat Creation Areas should be undertaken in full consultation with Host Authorities (including the Project Group), Natural England, Environment Agency, and other consultees.	Active engagement with LPAs continues to occur in relation to the L&GI and environmental design.
135	7.6	Mitigation required to avoid significant effects to European sites or qualifying species, should be informed by the requirements of the Habitats Regulation Assessment (HRA).	Mitigation required will be informed by the requirements of the HRA.
135	7.6	Timing restrictions for works in proximity to watercourses should be discussed and agreed with the EA.	Discussions on construction sequencing are ongoing.
135	7.6.3	Mitigation to offset potential operational effects may need to include strategic measures to mitigate effects to designated sites or qualifying features from likely increased recreational activities as a result of the RTS.	Noted.
135	7.6.2	Where protected species will be affected, details of mitigation requirements should be provided, along with the mechanism to secures licenses where required. The Applicant may wish to produce draft protected species license applications and agree these with Natural England.	Details of mitigation will be provided in the ES and agreed with statutory bodies as required. Draft species licence applications will also be prepared where necessary to secure Letters of No Impediment.
135	7.6.2	Measures to remove fish from working areas in rivers and other waterbodies to be considered as part of the assessment and appropriate licenses and/or mitigation sought.	Construction effects on fish are included in the scope of the EcIA. Required mitigation will be included in the ES to reduce the significance of the effect identified. Licences to be obtained during the construction phase.
135	7.6.2.1 and 7.6.3.1	There is potential to facilitate the migration of aquatic INNS which are present in the local stretch of the Thames into the proposed lakes along the RTS through Spelthorne, particularly as each lake is designated a Site of Nature Conservation Importance. Paragraph 7.4.2.1 states the potential benefits to fish and mobile aquatic species through the creation of fish passages, but these same mechanisms will enable undesirable species to transit too. Crassula helmsii and Himalayan Balsam are frequent in the area and will require strong control measures to prevent them spreading along new corridors or swamping habitat features created as part of	"The effect of INNS spread as a result of the RTS will be assessed within the EcIA. HRA documentation will consider the potential impacts of INNS on the lake ecosystems and the ability of lakes to continue to support SPA/Ramsar site features.

Page	Reference	Comment	RTS Project Response
		the RTS. It appears the Applicant is consulting with the EA on an INNS management plan and that secondary mitigation for INNS is mentioned in Paragraph 7.6.2.1 and 7.6.3.1. It is expected that this is to be robust to prevent changes to the lake ecosystems which may stop the lakes being used by the overwintering birds for which the SNCIs are primarily valued.	

Table 2-14: EIA Scoping comments from the LPA project group and RTS project responses to Biodiversity (Assessment Methodology)

Page	Reference	Comment	RTS Project Response
139	7.7.1.6	The scope of the HRA should be agreed with Natural England. It is suggested this could be done through an HRA Evidence Plan (see Advice Note 11 – Annex H Evidence Plans for Habitats Regulations Assessments of Nationally Significant Infrastructure Projects (The Planning Inspectorate, 2017)).	The scope of the HRA will be agreed with Natural England. The need for evidence plans is being reviewed.
138	7.7	This section suggests that the CIEEM EcIA methodology will be used alongside the assessment methodology used in the wider ES. If this approach is taken, it is recommended that the assessment presents the conclusions from both, stating whether effects are significant or not significant at the relevant geographical level of importance.	To confirm, we will only use the CIEEM methodology and cross-referencing to wider ES for context.
138	7.7	The ES should include details of all relevant planning policy against which the application will be assessed.	Noted.

2.4 Climatic Factors

Table 2-15: EIA Scoping comments from the LPA project group and RTS project responses to Climatic Factors (Data Sources)

Page	Reference	Comment	RTS Project Response
148	8.2.1.3	The ES should set out the emission factor data used in the assessment and set out why those selected are appropriate for use in the EIA.	This will be completed in the ES.
148	8.2.1.3	Any assumptions made on activity data, material and on-site activities should be clearly stated in the ES. There is no mention of sourcing construction and operation transport data or the study area for the affected road network. This should be obtained from the transport model for the affected road network.	This will be completed in the ES.
149	8.2.1.5	This section does not confirm the source of the future climate projections that are referred to; however it is noted that later on in the EIA Scoping Report reference is made to the Met Office UKCP18 projections. Clarification is required.	RCP 8.5 will be used as worst case, from the Met Office UKCP18 projections.

Table 2-16: EIA Scoping comments from the LPA project group and RTS project responses to Climatic Factors (Baseline)

Page	Reference	Comment	RTS Project Response
150	8.2.3.1	This paragraph states that during operation, changes in trip generation for roads in the local area will not be significant to require additional assessment for greenhouse gases (GHGs). This should be confirmed through review of traffic data at PEIR and ES stage before this can be scoped out of further assessment.	Traffic data to be reviewed at PEIR and ES stage to confirm scope.
151	8.3.1.1.	It's not clear how 'material emissions' has or will be defined. This is key to understanding the scope of the GHG assessment.	Embedded GHG emissions will be calculated based on the Inventory of Carbon and Energy (ICE) embodied energy and carbon coefficients. These factors are available for a range of construction materials, including aggregate, cement, concrete and metals, and are provided as kilograms of GHGs per kg of material.
152	8.3.1.6	The assessment should consider relevant publications, including more recent information published by the Met Office than the 2016 climate profile of Southern England alone, to aid in establishing a more up to date baseline.	Met office 2018 data has been used, which was the most up to date when accessed in March 2023.
152	8.3.2.2 – 8.3.2.5	It's agreed that RCP8.5 is an appropriate emissions scenario and this should be used to establish the future baseline. No other information is provided on the UKCP18 data that will be used to establish the future baseline. The ES should clearly set out the model selected (e.g. probabilistic 25km, regional 12km or local 2.2km) and provide the rational for this. The assessment should be based on the 50th percentile and account for the uncertainties that exist around climate projections. Lifecycle stages should be assessed in the short, medium, and long term (i.e., 2030s, 2050s and 2080s). The climatic baseline should consider extremes in short-term weather events, such as heatwaves; long-term climatic variability, such as seasonal changes in precipitation; and average climate norms, such as ambient temperature.	The model selected will be clearly set out in the ES along with rational. The assessment is to be based on the 50th percentile and will account for uncertainties that exist around these projections. The range of climatic baseline extremes is noted and will be included within the assessment, along with a short, medium and a long term lifecycle assessment.

Table 2-17: EIA Scoping comments from the LPA project group and RTS project responses to Climatic Factors (Effects Scoped in / out)

Page	Reference	Comment	RTS Project Response
156	8.5.1.1	It is not clear what has been scoped out for construction phase GHG effects. Some movement of plant and materials appears to be scoped out with little evidence as to why. Further justification should be provided.	All effects from construction (including movement of plant and materials) will be scoped in to the climate change mitigation and climate change resilience and adaptation assessments.

Table 2-18: EIA Scoping comments from the LPA project group and RTS project responses to Climatic Factors (Mitigation)

Page	Reference	Comment	RTS Project Response
157	8.6.2.3	The mitigation is welcomed, although it's noted that no primary mitigation has been identified. Other opportunities for mitigation should be explored, for example, the use of floating photovoltaics. Further information of mitigation and how it will be secured should be set out in the ES.	Primary mitigation will be explored with the design team. Further information will be addressed within the ES, including methods to secure this in the long term.

Table 2-19: EIA Scoping comments from the LPA project group and RTS project responses to Climatic Factors (Assessment Methodology)

Page	Reference	Comment	RTS Project Response
159	8.7.1.3	The ES should set out the inventory of GHG emissions for each life cycle stage, as defined in PAS 2080.	Noted.
159	8.7.1.4	It's difficult to understand the full scope of assessment without further information on the emissions that are to be excluded. Further engagement is required on this topic. In line with IEMA guidance and PAS 2080, emissions should only be excluded where expected emissions are less than 1% of total emissions and where all such exclusions total a maximum of 5% of total emissions; all exclusions should be clearly stated.	It is proposed to scope in all operational and construction phase effects, until further assessment clarifies those that are not within the IEMA guidance for requiring assessment.
159	8.7.1.3	There is no reference to the life span of the project within the Climate Change Mitigation assessment methodology and, while it's noted that the project is anticipated to have a long term design life, the assessment should consider the net impact of GHGs over its life time. This may be done by selecting an appropriate time frame of, for example, 60 years. It is unclear how the GHGs for the scheme will be assessed against the future baseline set out in section 8.3. The ES should clearly set out the assessment scenarios, temporal boundaries and how the scheme's emissions may be projected forward to a future year.	The lifetime GHG emissions will make a number of assumptions, led by Government data and strategies about decarbonisation of key emission sources such as energy and transport. These will be clearly laid out within the ES. It should be noted that a time frame of 60 years is standard and this timeframe (at least) will be addressed within the GHG assessment.
160-161	8.7.1.8 - 8.7.1.12	The methodology for determining significance in this chapter is very unclear and sets out two contradictory approaches. The PEIR should confirm the approach to be adopted in the ES along with the rationale for this.	The PEIR provides detail of the methodology for determining significance, which will be adopted in the ES.
162	8.7.2.1	It is not clear if the construction stage is being scoped out of further assessment in the Climate Change Adaptation assessment. It is not scoped out in section 8.5, however there a several references to *"not envisioning climate will have any effect on the project during the construction phase"*. No justification is given to support this statement. If the construction stage is being proposed to be scoped out, further justification is required given that there is an abundance of evidence that climate change is having impacts already and the construction period will go into the next decade.	All effects from construction (including movement of plant and materials) will be scoped in to the climate change mitigation and climate change resilience and adaptation assessments, although it is noted that climate effects in comparison to the baseline will not greatly differ. This is reported in our PEIR and will be reported in the ES.
162	8.7.2.2 - 8.7.2.4	No information is provided on how significance will be determined, or how the risk-based approach will be undertaken. This makes it difficult to comment if the methodology is appropriate. The PEIR and ES should clearly set out how this has been done.	Paragraph 8.7.1.12 of the EIA Scoping Report states how significance will be determined for the climate change mitigation assessment. For the climate change resilience assessment this is based on professional judgement based on the susceptibility and vulnerability of a receptor to future climate change impacts.

2.5 Cultural Heritage, Archaeology and Built Heritage

Table 2-20: EIA Scoping comments from the LPA project group and RTS project responses to Cultural Heritage, Archaeology and Built Heritage (General)

Page	Reference	Comment	RTS Project Response
166-206	General - Cultural Heritage Overview	There are concerns regarding monitoring potential hydrological changes caused by the RTS and how these might impact the designated archaeological sites in particular. It is noted that there is not a lot in the EIA Scoping Report about the	Discussions are ongoing and cultural heritage is a strand in the design of priority areas for habitat creation, enhancement or mitigation.

Page	Reference	Comment	RTS Project Response
		location and nature of the proposed Habitat Creation Areas in relation to cultural heritage. It is assumed that Habitat Creation Areas are still at an early stage and that there will be more discussion, therefore, further engagement will be required.	
166-206	General - Cultural Heritage Overview	The County Council's Historic Environment Planning Team look forward to archaeological prospection works continuing within the study areas to inform the EIA and any required mitigation.	Discussions are ongoing and cultural heritage is a strand in the design of priority areas for habitat creation, enhancement or mitigation.
166-206	General – Archaeology	The RTS runs through a landscape which previous investigations have demonstrated has a high potential to contain significant archaeological and paleoenvironmental deposits, particularly from the prehistoric and medieval periods. This archaeological sensitivity is acknowledged by the decision to scope in archaeology within the EIA.	Noted. No further action required.
166-206	General – Archaeology	The EIA Scoping Report contains a chapter on Cultural Heritage, Archaeology and Built Heritage that identifies that the RTS will have an impact on potentially sensitive and significant archaeological deposits and sets out a summary of the baseline work carried out to date by York Archaeology as well as identifying appropriate methods of further investigations and mitigation works that will be taken forward in the EIA.	No further action required.
166-206	General – Archaeology	A comprehensive suite of investigations has been carried out since 2016 including desk based research, geophysical and LIDAR survey and geoarchaeological and archaeological evaluation. This work has produced a good understanding of the likely impact of the proposals on below ground deposits and enabled areas of particular sensitivity to be identified and evaluation strategies designed accordingly.	No further action required.
166-206	General – Archaeology	Some areas have not been subject to physical investigation due to logistical reasons and some further work remains to be carried out but we can confirm that the work undertaken so far, together with the approach set out in the EIA Scoping Report confirms best practice and will allow all significant effects that the development will have on cultural heritage to be identified and allow appropriate measures to be put in place to mitigate any adverse impact on the archaeological resource.	The current approach will continue using the approach set out.
166-206	General – Built Heritage	It is noted that the Applicant is intending to scope in the impact on built heritage as part of this scheme.	Stage 1 and 2 of Setting Study has now been prepared and is appended to the PEIR
166-206	General – Built Heritage	In paragraph 9.4.1.1 (p.194) the Applicant makes clear they will consider the impact on the setting of heritage assets as part of construction effects. In paragraph 9.4.2.1 (p.196) the Applicant states they will consider the impact on the setting of heritage assets as part of operational effects. As there is no direct impact on built heritage assets as part of this scheme the County Council's Historic Buildings Officer is content that this will be sufficient to allow the scheme to be properly assessed.	Noted. Impact on setting will form part of the ES.
166-206	General – Built Heritage	It is agreed that the impact of general maintenance activities, or the removal of non-hazardous materials (not including construction traffic) is scoped out of the EIA as outlined in Paragraph 9.5.1.	No further action required on removal of non-hazardous materials.

2.6 Flood Risk

Table 2-21: EIA Scoping comments from the LPA project group and RTS project responses to Flood Risk (General)

Page	Reference	Comment	RTS Project Response
207-235	General	The Applicant should be made aware of the following: Where proposed works affect an Ordinary Watercourse, Surrey County Council as the Lead Local Flood Authority should be contacted to obtain prior written Consent. More details are available on our website.	Noted. Relevant permissions have been identified in our consents and permits strategy.
210	10.2.2.4	A Flood Risk Assessment (FRA) will be produced to comprehensively assess flood risk and would form an appendix to the ES	We will engage with the LLFA on this topic, but the Applicant expects to disapply the need for such consents through the DCO.
48	4.3.1.2	It is noted that a peak flow value of 150m3/s has been stated as a design value for the new channel. It is not clear what return period is the scheme being designed to / protect against (if applicable)?	The River Thames Scheme does not have a specific design standard - the benefit provided varies depending on location. The flood channel will work most effectively in moderate flood magnitudes such as the 1:20 year annual chance flood, which is similar to the observed 2003 and 2014 floods. However, the channel will continue to reduce flood depths and extent in much more extreme floods.
212	10.2.2.13	Level for level floodplain compensation should be provided for any loss of floodplain storage capacity.	There will be no loss of floodplain storage overall. Flood compensation will be incorporated where more localised needs are identified by the hydraulic modelling and the FRA process and mitigation is required.
211	10.2.2.11	Evidence should be provided within the FRA that the components of the RTS are located in appropriately compatible Flood Zones as per PPG Table 2.	The FRA will demonstrate how the most up to date flood risk policy has been addressed for all aspects of the RTS.
223	10.4.2.1	Will the FRA include analysis of sensitivity testing of structures (i.e. blockage scenarios of any new bridge crossings/culverts etc)? Will changes in channel capacity due to sedimentation (possibly due to changes in velocity of the water and altering the channel capacity) also be included in the sensitivity testing?	The FRA will include appropriate sensitivity testing for the infrastructure used for the RTS.
N/A	N/A	How will the Flood Zones be defined? (i.e. as the definition ignores the presence of formal defences, will the baseline flood zones remain as the pre-construction scenario or will a new baseline be defined post construction e.g. based on a reduced scheme operation?	The RTS will result in a defended flood outline (area that benefits from the RTS) which is a common approach when new flood infrastructure is completed and the performance verified. The planning flood zones will not change as a result. The relevant process will be followed as per any change to the flood mapping undertaken in consultation with the relevant authorities.
214	10.3.1.4	It is noted that the EA are considering the updated definition of Flood Zone 3b Functional Floodplain of the 1 in 30 annual probability flood event (rather than 1 in 20). It is assumed this change would only formally take place once the revisions have passed through local planning policy documents (i.e. SFRA).	The EA has confirmed that we should address the 1in30year, which therefore by default already includes the 1in20year. This difference to the published SFRA's is not considered to be a conflict or non compliance but provides a greater worse case hence is compliant. The SFRA's would be updated using the final approved flood model of the EA and it is at the discretion of the council in producing their SFRA if they use the EA's 1in30year or if they apply a different approach to designating their functional floodplain in accordance with the guidance on preparing SFRA's as updated in March 2022.

Table 2-22: EIA Scoping comments from the LPA project group and RTS project responses to Flood Risk (Data/Survey)

Page	Reference	Comment	RTS Project Response
208	10.2.1.2 - 10.2.1.3	Lower Thames 1D-2D Flood Mapping Model (EA, 2019) is to be used as a basis for the assessment, locally refined and run for the baseline and post-development scenario. Important to consider if any phases of construction will result in constraint to flow/potential detrimental impact.	Construction stage effects on flood risk have been included in the assessment, particularly in relation to stockpiles and processing areas, etc. See Section: 10.7.3.2 of the Scoping Report: *"A quantitative assessment will be completed of the potential effect of temporary increased flood risk to properties, infrastructure and existing operations (e.g. businesses) in the study area as a result of the project during construction. This will be done by reviewing hydraulic modelling of predicted flood risk for different construction scenarios (for example partially built channels, phasing of the project in terms of land raising), and what effects there will be on flood risk to receptors within the study area."* This will also be covered in the FRA for sources of flooding in accordance with PPG / NPPF.
234	10.8.2.1	It is noted that the post development will be subject to an independent review in-line with the EA's standard review process.	Agreed.

Table 2-23: EIA Scoping comments from the LPA project group and RTS project responses to Flood Risk (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
212	10.2.3.1	The study area is stated as the 'upstream and downstream boundaries of the 1 in 100 annual probability floodplain to be affected by the project' as defined in Figure 10.1. This should include climate change impacts.	The study area was set to accord with the planning flood zones - i.e. the Flood Zone 3 planning extent is defined by the 1:100 year floodplain. RTS is also assessing the effects of climate change on flood risk (the 1:100 year floodplain + 35% climate change allowance is shown in Figure 5.11). This has to be understood in the context of how a flood alleviation scheme of this nature works: we are making space for water and reducing the severity and frequency of the more frequent and lower magnitude floods, significantly reducing the likelihood of flooding. Climate change is being included to meet the EA's required up to date requirements and will be continually updated as climate scenarios are updated.

Table 2-24: EIA Scoping comments from the LPA project group and RTS project responses to Flood Risk (Baseline)

Page	Reference	Comment	RTS Project Response
213	10.3.1.5	Will this connectivity be considered in terms of the mobility of contaminants? The Littleton South Lake is situated to the south of the connected to the north lake by a culvert under the M3 for example, so although not part of the scheme water can flow between the two lakes.	Not a flood risk topic concern. Contamination covered in water quality / biodiversity / soils and land.

2.7 Health

Table 2-25: EIA Scoping comments from the LPA project group and RTS project responses to Health (General)

Page	Reference	Comment	RTS Project Response
N/A	N/A	The comments provided within this review do not include comments on air quality, noise, and other environmental health hazards, as these have been covered by the comments provided elsewhere in this EIA Scoping Response.	Understood and noted.

Table 2-26: EIA Scoping comments from the LPA project group and RTS project responses to Health (Data/Survey)

Page	Reference	Comment	RTS Project Response
236	11.2.1.1	The EIA Scoping Report identifies the baseline year to be used in the assessment as 2021. There were pandemic restrictions throughout this year, and the Applicant should consider if there are any associated implications with using 2021 as opposed to 2019 or 2022 without such restrictions as a base year, for example activity levels may have varied due to workplace restrictions and disruptions to commuting etc. Due to the reductions in air pollution associated with decreased traffic flows in 2021 the health data for asthma, heart attacks and other air pollutant linked health conditions may not reflect a more normal traffic flow year. This should be noted in limitations where relevant.	We have used 2021 as the baseline year for demographic / population related datasets. However, given this comment, a 2019 base year is used for human health indicators, to avoid issues related to skewed datasets influenced by the Covid-19 pandemic i.e. linked to reduced traffic / air pollution levels and increased asthma and respiratory disease. It is important to note, that other technical chapters have used different baseline years.
239	11.2.2.9	Engagement list does not include Local Authority Environmental Health Departments but rather is through the County Public Health Team. In order to reach specialists in air quality and noise it would be prudent to also consult the Senior Environmental Health Managers for the Project Group.	Environmental Health Officers have been engaged in relation to air quality and noise effects and informed assessment methodologies for these topics. A separate workshop for the health assessment has not been undertaken to date but is planned.
239	11.2.2.9	In addition to understanding the baseline characteristics, engagement with local authority public health officers should include discussion of local health priorities and how the Scheme can support these. The Applicant should seek the public health officer's local knowledge of vulnerable groups, to be considered in the assessment.	LPA equalities officers were consulted via a workshop that took place on 20th July 2023 as part of the Equality Impact Assessment (EqIA) process for the DCO. This session provided valuable local intelligence on vulnerable groups in the study area. We are planning a similar workshop with LPA health officers.
242	11.3.1	The health baseline should include data that is relevant to the potential impacts of the RTS, where available. For example, in Paragraph 11.4.1.1 the Applicant identifies a potential impact during construction to be temporary adverse effects on air quality. The baseline studies should therefore identify the percentage of the community with respiratory diseases/ chronic obstructive pulmonary disease and deaths from respiratory disease. This data is available from the Office for Health Improvement & Disparities health profiles, Fingertips public health data, and National General Practice Profiles. In Paragraph 11.4.2.1 the Applicant identifies that the RTS could provide a beneficial effect by encouraging more outdoor recreation. The baseline should therefore set out the current activity levels of the population in the Study Area, for example using Sports England Active Lives data tables. The assessment should then identify how the RTS could influence this baseline.	Understood and noted. A revised baseline to include wider health data will be provided in the ES.

Page	Reference	Comment	RTS Project Response
256	11.7.1.5	Through the baseline studies, key vulnerable groups should be identified who may be disproportionately affected by the RTS. The Wales Health Impact Assessment Support Unit (WHIASU) provides a list of potential vulnerable groups that should be reviewed to ensure all potential groups are captured. Consideration should be given to relevant vulnerable groups in the assessment and during consultation, and any specific mitigation to reduce impacts on vulnerable groups should be identified.	Noted. The PEIR includes consideration of these potential vulnerable groups within the updated methodology.

Table 2-27: EIA Scoping comments from the LPA project group and RTS project responses to Health (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
240	11.2.3	As noted in Paragraph 11.3.1.4 and within the limitations section, geographies do not always align with health datasets required to complete the health baseline. There are instances where ward level data is not always available for relevant health determinant data. It is advised that the Applicant use the Middle Super Output Area (MSOA) level data, as health data is aggregated at this level. This would allow for more direct comparisons between datasets. Furthermore, MSOA level data are more stable over time compared to wards.	The PEIR addresses this query by revising the health study area, which now comprises of 23 MSOAs. The baseline at Appendix 11.1 has been updated with an average of the MSOA data for the study area.

Table 2-28: EIA Scoping comments from the LPA project group and RTS project responses to Health (Scoped in/out topics)

Page	Reference	Comment	RTS Project Response
249	11.4	The EIA Scoping Report identifies potential creation of jobs and training opportunities. The assessment should set out how the Applicant will prioritise local job creation in the first instance and how this can be secured e.g. preparation of an Employment and Skills Plan. This should include consideration for apprentice provision.	The Socio-economics chapter has scoped in the potential creation of jobs and training opportunities, with the following likely effects: • Material excavation has the potential to benefit the economic and social development of the area by facilitating the extraction of natural resources (i.e. sharp sands and gravel) and thereby contributing to the economy, through the provision of raw materials, and employment opportunities; • Influx of site personnel and job creation has the potential temporary beneficial effect of additional income generation for local businesses and communities during the construction period. There are also potential effects associated with potential employment generation and effects on businesses in the construction supply chain, including the potential for additional skills and training; Therefore, we feel this consideration is best placed within the socio-economics chapter.
252	11.5.1.1	The transport of hazardous materials is scoped out, yet this will generate emissions to air from the HGV vehicle exhausts, so should be scoped in with regards to air quality. The vehicles will also contribute to noise levels. Permits covering the processing and treatment of materials are unlikely to consider the impacts of the vehicles transporting the material on local air quality and noise so health impacts could be missed regarding the associated vehicles.	Effects of transportation of hazardous and non-hazardous materials to the major road network have been scoped into the EIA. Effects of transporting materials from the major road network and placement at their destination is scoped out.

Page	Reference	Comment	RTS Project Response
253	11.5.2.1	The EIA Scoping Report notes potential adverse effects from light pollution and states that this potential effect will be 'designed out'. Consideration should be given to the role that lighting may provide in reducing crime/ fear of crime, especially in areas of the RTS which may not benefit from natural surveillance. The lighting and open space design should be considered with the principles set out in the Secured by Design initiative and included with the Design Principle or Design and Access Statement (or similar) with the DCO application. This could also be raised during consultation with the local police force, which the Applicant has stated they will do in Paragraph 11.2.2.9.	The consideration of landscape design and personal security, specifically for people with protected characteristics, will be covered as part of the EqIA process and not considered further in the health chapter.
255	11.6.2.1	Will there be a dedicated scheme ground gas risk assessment to secure appropriate monitoring and mitigation concerning ground gas migration?	Yes, this will be tertiary mitigation.
255	11.6.3.1	Consideration should be given to how vulnerable groups will be considered within the consequent stages of the RTS's design and consultation. For example, shading and suitable paving along active travel routes, and provision of benches and a range of seating areas will help to ensure the elderly, pregnant women and those with pre-existing health conditions can benefit from the RTS, these provisions should be included in any future consultations/engagement. The mitigation section of the ES should set out how these elements will be considered and secured during the detailed design phases.	This information will be included in the EqIA process for RTS, which helps ensure that the design, construction and operation of the scheme does not disadvantage these groups.
256	11.7.1.4	The magnitude of effect should also consider whether any vulnerable groups are likely to be affected by the impact, and whether the impact is linked to a local public health priority/ objective. The scientific literature/ strength of evidence base linking the aspect of the RTS to health outcomes should also be considered. The Human health: ensuring a high level of protection (International Association of Impact Assessment, 2020) paper sets out how contextual considerations should support a robust reasoned conclusion on significance.	These magnitude criteria are taken from UKHSA's "Advice on the content of Environmental Statements accompanying an application under the Nationally Significant Infrastructure Planning Regime". Therefore, further discussions are required to understand how effects on vulnerable groups can be included within the existing UKHSA guidance on the magnitude of change related to vulnerable groups.
257	11.7.1.5	The EIA Scoping Report states that an Equalities Impact Assessment (EqIA) will be undertaken. The purpose of the EqIA is to ensure the RTS promotes equality and does not discriminate against people with any of the nine protected characteristics as set out in the Equality Act 2010. It is advised that the EqIA should be prepared at the earliest stages of the design development so that the design can be modified should any impacts on protected characteristic groups be identified.	Agreed. An Equalities Impact Assessment (EqIA) will be created alongside this application. The EqIA will not be an ES chapter but it will be developed in parallel with the ES topics.
258	11.7.2	The Applicant has referenced the Healthy Urban Development Unit (HUDU) rapid HIA toolkit (2019) within Chapter 23 References, however it's not clear how the toolkit will be utilised in the health assessment. The toolkit can help identify determinants of health likely influenced by the RTS. Given the scale of the RTS, the HUDU Healthy Urban Planning Checklist (2017) may provide a more comprehensive analysis of all potential health and wellbeing impacts. The Applicant should review the Checklist to ensure all potential health and wellbeing impacts are captured. The methodology should clearly set out which determinants of health have been scoped into the assessment and why, and those that have been scoped out, and why.	The HUDU Healthy Urban Planning Checklist (2017) will not be used as the main basis for this assessment. Therefore, reference to the HUDU rapid HIA toolkit (2019) will be removed within Chapter 23. The main guidance used for this ES chapter will still remain to be both UKHSA's "Advice on the content of Environmental Statements accompanying an application under the Nationally Significant Infrastructure Planning Regime" and Highway England's DMRB 'Population and Human Health. We will also draw on the latest IEMA guidance published in November 2022 on the scoping of health in EIA, along with the separate guidance on determining the significance of health effects in EIA. https://www.iema.net/resources/blog/2022/11/17/launch-of-the-eia-guidance-for-considering-impacts-on-human-health

Page	Reference	Comment	RTS Project Response
259	11.8.1.1	As noted above, a key limitation is that the impacts of the covid-19 pandemic are still emerging and may not be reflected in the health baseline, especially if the only data available for some health determinants is prior to 2020. This should be acknowledged where relevant in the limitations and baseline. The covid-19 pandemic has also highlighted the need for local, high quality green open space. Impacts of the covid-19 pandemic should be considered in the assessment where relevant.	Noted. This will be considered within the Human Health PEIR/ ES chapter.

2.8 Landscape and Visual Amenity

Table 2-29: EIA Scoping comments from the LPA project group and RTS project responses to Landscape and Visual Amenity (General)

Page	Reference	Comment	RTS Project Response
261-295	General	The Project Group is broadly content with the proposed scope, baseline information and methodology for the Landscape Visual Impact Assessment, although it is noted that the scheme design development is ongoing and further consultation will take place, including as part of the PEIR. The further design development will include the landscape (including new landforms) and biodiversity design elements. Once the scheme design is fixed a finalised Zone of Theoretical Visibility (ZTV) will need to be produced and the study area for the LVIA confirmed. Viewpoints will also need to be finalised and confirmed with the Host Authorities and further consultation will be required to enable appropriate technical input to this process.	Agreed. A ZTV will be produced once project elements are finalised and this will assist in confirming the study area. Viewpoint consultation with the host authorities has been undertaken to discuss the proposed final viewpoint locations.
261-295	General	Commentary within Chapter 12 states that the effects of lighting will be considered within the LVIA which is welcome. Lighting should be assessed within the landscape and visual effects assessments and consideration should be given to the need for night-time viewpoint photography, particularly for key sensitive receptors / key representative viewpoints.	It is thought unlikely that night time viewpoint photography will be necessary, but it will be considered in relation to sensitive locations once further design detail/location is understood. A separate light assessment will be completed, in accordance with the approach set out in Appendix 12.1.
261-295	General	With regard to proposed viewpoint photography and visualisations, Paragraph 12.7.1.4 states that where possible, photography will be undertaken in both summer and winter months. This is welcome, however for the avoidance of doubt, the Project Group would expect that for a scheme of this significance, as a minimum winter photography for all agreed viewpoints should be undertaken to demonstrate the worst- case scenario. It is also stated that visualisations will illustrate the project at Year 1 and Year 15.	Agreed.
261-295	General	Consideration should be given to producing visualisations for any predicted significant construction effects, for example, in relation to large construction compounds and infrastructure including tall plant, as the construction phase is likely to be present in the landscape and within views for a significant period of time. Baseline photography and visualisations should accord with Landscape Institute Technical Guidance Note 06/19 – Visual representation of development proposals. For a scheme of this significance Type 4 visualisations are likely to be the most appropriate.	Noted. We will consider any significant construction effects once further detail of type/elements and location is understood.

2.9 Materials and Waste

Table 2-30: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (General)

Page	Reference	Comment	RTS Project Response
296-329	General	The Project Group agrees that the proposed scope of the EIA should include the topics of materials and waste (Chapter 13). These matters are particularly relevant to the remit of the Minerals & Waste Planning Authority (MWPA) which includes ensuring a steady and adequate supply of minerals and the provision of sufficient facilities to manage Surrey's waste.	Noted.
296-329	General	It is noted (Paragraph 4.2.1.1 of the EIA Scoping Report) that enabling works relating to the RTS are proposed to commence in mid-2026 and construction should be completed by early-2032 (some 6- years).	Noted.

Table 2-31: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Policy Framework)

Page	Reference	Comment	RTS Project Response
296-329	Policy Framework	Key policy documents that will need to be considered in relation to materials and waste: • Surrey Waste Local Plan 2019 - 2033 • Surrey Minerals Plan Core Strategy 2011 - 2026 • Surrey Minerals Plan Primary Aggregates DPD 2011 - 2026 • Surrey Minerals Plan Site Restoration SPD 2011 - 2026 • Surrey Aggregates Recycling Joint DPD 2013 - 2026. Appropriate considerations should be given to emerging minerals and waste policy during the DCO process. Notwithstanding the above, the MWPA is preparing the county's first joint minerals and waste local plan which will seek to provide for a minerals and waste development framework for a period of 15-years (2024 to 2039). To this end a Reg18 Issues and Options public consultation was undertaken between November 2021 and March 2022, and the MWPA is presently preparing the associated Reg 18 Preferred Options public consultation which is set to take place in June 2023. Further public consultations and an examination in public will be held before the Minerals and Waste Local Plan (MWLP) is adopted by SCC at the end of 2024. Upon adoption the MWLP will supersede the existing DPDs and SPD listed in Appendix M.	All relevant policy has been considered in the PEIR and will be considered further for the ES (for example to account for updates in the interim period).

Table 2-32: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Stakeholder Engagement)

Page	Reference	Comment	RTS Project Response
297-300	13.2.2 – Stakeholder Engagement	It is noted at Paragraph 13.2.2.3 of the EIA Scoping Report that the materials management feasibility study and Materials Management Strategy (MMS) that are being developed in parallel to the DCO process and that these initiatives will provide further clarity on the waste management proposals and waste streams relating to the development including the exact quantity and types of material to arise from the proposal and how any surplus will be utilised. It is also noted (Paragraph 3.2.2.9) that consultation with Environment Agency's contaminated land and waste technical specialists and its National Permitting Service regarding material re-use, effects to landfills and waste recovery permits and applications is ongoing; and that, in consultation with the Environment Agency, a 'Contamination and Waste' advisory group will be formed to guide the project design and the MMS. The Applicant's commitment (Paragraph 13.2.2.11) to additional engagement with stakeholders prior to the submission of the DCO, in order to fully understand baseline characteristics, significance of effect and potential approaches to mitigation and management for materials and waste, and the consenting approach is welcomed.	Noted.

Table 2-33: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Study Area)

Page	Reference	Comment	RTS Project Response
300-301	13.2.3 – Study Area	The approach set out in relation to the study area (Paragraphs 13.2.3.1 and 13.2.3.2) for the purposes of waste management and primary materials and waste is agreed.	Noted.

Table 2-34: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Permitted Landfill Site in Surrey)

Page	Reference	Comment	RTS Project Response
309-310	Table 13-2 – Permitted Landfill Sites in Surrey	It should be noted that Harlington Gravel Pit is not within the administrative boundary of Surrey or Spelthorne, it is located within the London Borough of Hillingdon.	Noted. This will be re considered at the ES stage. It does not change the PEIR Assessment.
299	13.2.2.6	The proposed landscape beacons will require suitable validation testing by an appropriately qualified person in accordance with the LCRM regime, to ensure that placed soils are geochemically suitable for the end land use and do not present a health hazard to the public using the facilities and landscapes provided by the scheme and necessary permits sought.	Noted, this is scoped into the Soils assessment and will be secured via waste permits.
300	13.2.2.10	Has information from the Esso Southampton to London Pipeline scheme which was required to undertake ground investigations, within the RTS Application Boundary, under the granted DCO, been incorporated where relevant (including regarding the Soils chapter)?	This has been reviewed for the PEIR, only a small section of Esso pipe interacts with the RTS though limited information is available. Pertinent information may be included (if relevant) in the RTS GI interpretive reports. For the purpose of the PEIR and ES, the Esso pipeline will be treated as 'future baseline' as it is expected to be complete prior to construction of RTS.

Table 2-35: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Key Environmental Considerations and Opportunities)

Page	Reference	Comment	RTS Project Response
314	13.3.3 – Key Environmental Considerations & Opportunities	The environmental considerations and opportunities in relation to materials and waste as set out in Paragraphs 13.3.3.1 and 13.3.3.2 are agreed.	Noted.

Table 2-36: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Construction Effects)

Page	Reference	Comment	RTS Project Response
314-315	13.4.1 – Construction Effects	The likely significant effects arising from construction as set out in Paragraph 13.4.1.1 are agreed. However, Paragraph 13.4.1.2 appears to require further consideration. The proposed route of the RTS development appears to (largely) pass through previously worked and infilled land and is therefore likely to have limited potential as an incidental source of primary material (windfall over and above mineral resources within Preferred Areas for mineral extraction as set out in the Surrey Minerals Primary Aggregates DPD). Where minerals have been previously worked, the relevant land should also be restored or otherwise reclaimed. In this regard it is more likely that the RTS would enhance or compliment previous restoration/reclamation efforts as opposed to contributing to the reclamation of historic landfills. Nevertheless, it is not clear how the excavation of closed landfills and removal of previously deposited waste (thereby reducing the volume of landfill material) would provide for significant beneficial effects in and of itself. A large proportion of historic landfill material (particularly hazardous waste, contaminated waste, local authority collected waste, and commercial and industrial waste) is unlikely to be suitable for recycling or recovery and so would need to be re-disposed of either at an operational landfill elsewhere or through thermal treatment. Any incidental excavation of minerals to facilitate the RTS is unlikely to have adverse effects on the MWPA as a local planning authority. It is more likely to influence the local market for primary minerals (sharp sand and gravel) in the context of supply and demand. However, given the limited potential for mineral extraction this influence is not likely to be material. In this respect, unless windfall material is discarded, it is likely that incidental extraction of minerals from areas outside Preferred Areas for mineral extraction (as set out in the Surrey Minerals Plan Primary Aggregates DPD) will have a neutral/positive effect in that it would substitute for minerals that would otherwise have been extracted elsewhere and transported to and used as part of the RTS.	No action required here. The positive permanent effect is due to excavation through landfill and associated processing and disposal contributing to landfill reclamation, reducing the volume of landfilled material waste in the project boundary, and releasing this land for change of use to flood channel. Suitable recovered waste will be processed for use recovery within the project boundary where appropriate.

Table 2-37: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Operational Effects)

Page	Reference	Comment	RTS Project Response
315-316	13.4.2 – Operational Effects	In relation to Mineral Safeguarding Areas (MSA) and the likely significant operational effects detailed in Paragraph 13.4.2.1, different land uses are classified according to their flood risk vulnerability as per Table 2 of the Planning Practice	Noted.

Page	Reference	Comment	RTS Project Response
		Guidance (Paragraph: 079 Reference ID: 7-079-20220825) with development classified as: essential infrastructure; highly vulnerable; more vulnerable; less vulnerable; and water compatible. Sand and gravel working is classified as a 'water compatible' use of land as per Annex 3 of the National Planning Policy Framework 2021. As a water compatible land use, sand and gravel working is considered appropriate in all Flood Zones subject to, at application stage, a site- specific flood risk assessment for development proposals in Flood Zones 2 and 3. Consequently, although the scope for mineral extraction may be reduced (by virtue of standoffs, severance, or access for example), the existence of flood channels in themselves is unlikely to prevent future working of minerals within these areas. In respect of other project components that arise from the RTS, future mineral development within MSAs could compliment or enhance such features through carefully designed restoration and long-term management schemes particularly where a landscape based approach is adopted.	

Table 2-38: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Effects not requiring Assessment)

Page	Reference	Comment	RTS Project Response
316-317	13.5 – Effects not requiring Assessment	It is agreed the construction and operational effects as set out in Paragraphs 13.5.1.1 and 13.5.2. do not require an assessment.	Noted.

Table 2-39: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Approach to Mitigation)

Page	Reference	Comment	RTS Project Response
317-318	13.6 – Approach to Mitigation	In respect of mitigation, the Applicant's commitment to embedding the Waste Hierarchy within the design of the RTS development as one way of mitigating the environmental impacts of the development (Paragraph 4.1.9.1) should be considered a primary mitigation measure. The secondary mitigation measures under consideration for the construction phase of the RTS development (Paragraph 13.6.2.1) are agreed. However, emphasis should be placed on waste prevention over reuse, recycling, and recovery.	Noted. An agreed, proposed approach has been adopted in the PEIR. Refer to paragraph 2.2.6.1 of the project description.
317-318	13.6.2.1	Please explain how verification will be secured. Presumably though the MMP, which will be secured as a DCO Requirement?	Assumed MMP will be DCO requirement.

Table 2-40: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Significance Criteria)

Page	Reference	Comment	RTS Project Response
318-325	13.7.1 – Significance Criteria	The significance criteria set out in Paragraphs 13.7.1.1 to 13.7.1.19 is agreed.	Noted.

Table 2-41: EIA Scoping comments from the LPA project group and RTS project responses to Materials and Waste (Assessment of Effects)

Page	Reference	Comment	RTS Project Response
326-328	13.7.2 – Assessment of Effects	In respect of the assessment of effects, receptors listed at Paragraph 13.7.2.2 should, in addition to Minerals Safeguarding Areas, include existing mineral infrastructure, Preferred Areas for mineral extraction and Areas of Search as identified in the Surrey Minerals Plan Primary Aggregates DPD and emerging planning policy. Approved restoration scheme requirements for mineral workings should also be given consideration in the context of the supply and availability of suitable restoration material. Otherwise, the operational and construction effects set out in Paragraphs 13.7.3.1 to 13.7.5.2 are agreed.	Noted, these are included in the PEIR, and will be included in the ES.
238	13.7.5.1	Note that any hub site attracting traffic to retrieve materials to be used on other sites, should be subject to an air quality assessment to account for the additional traffic.	Covered by air quality assessment.
329	13.8.1.9	Where will the scope of the waste classification testing be secured?	WAC testing has been undertaken during the recent GI to gain an overview of potential waste going off-site. Further WAC testing is likely to be required during construction when detailed types and volumes of waste being disposed off-site will be known.
329	13.8.1.9	Will testing include geochemical testing to determine whether materials are suitable for the land end use where they will be re-used?	Yes, via the two-stage Generic Qualitative Risk Assessment. This will be a requirement as part of the waste permitting applications for excavation within areas of landfill. Any works within or affecting landfills or involving waste will be subject to the requirement for an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016. As part of the permitting process, we will be required to undertake a range of risk assessments , which will be subject to scrutiny by the Environment Agency's National Permitting Service to ensure that they are robust. We will also have to propose and put in place suitable measures to mitigate effects on the environment to an acceptable level, which the Environment Agency will review and scrutinise in terms of their adequacy and appropriateness for mitigating the risks and impacts identified.
491-495	General	The MWPA can confirm that it has been previously engaged in advising the RTS with respect to EIA scoping and through the provision of pre-application advice. The MWPA will continue to engage and work with the applicant as the scheme progresses through the DCO process.	Noted.
68-72	5.4.3 - Approach to Mitigation	The Project Group welcomes the Applicant's commitment (paragraph 5.4.3.6 of the scoping report) to the preparation of a Site Waste Management Plan (SWMP) as part of a MMS. This plan should seek to demonstrate how waste will be minimised and recycling and recovery of waste that does arise from the RTS development will be maximised (on or off-site). The SWMP should be prepared as a living document and be in place before any enabling works relating to the development commence.	Noted. Further detail is presented in the PEIR, and details will be included in the ES.

2.10 Noise and Vibration

Table 2-42: EIA Scoping comments from the LPA project group and RTS project responses to Noise and Vibration (Data/Survey)

Page	Reference	Comment	RTS Project Response
345	14.2.1.10	The results of the noise survey are included in a separate noise survey report, although this report has not been provided at this stage and therefore no comments with respect to measurements undertaken to-date are provided.	This information will be provided in the PEIR.

Table 2-43: EIA Scoping comments from the LPA project group and RTS project responses to Noise and Vibration (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
348	14.3.1.1	The classification of temporary accommodation receptors (including traveller sites and houseboats), if any exist within the study area as non-residential should be justified within the ES, if they are considered to be non-residential. Parks/outdoor amenity areas are not included within the list. Any existing or proposed parks/outdoor amenity areas within the study area should also be outlined within the PEIR and assessed within the ES.	The assessment will include houseboats/traveller communities etc. which will be considered residential if permanently occupied. As indicated in paragraph 14.7.1.9 of the Scoping Report the ES will assess potential noise impact on tranquil outdoor spaces. In preparation of the PEIR, local authorities have been asked to identify quiet spaces and spaces prized for their tranquillity for the assessment. Responses have been received from Spelthorne and Runnymede Councils and as a result Thorpe Hay Meadow, Sunbury Walled Gardens and Chertsey Meads Local Nature Reserve have been added as receptors within the assessment. Activities associated with the provision of the new green open spaces and other landscape works have the potential for adverse noise effects on residential and non-residential receptors. Likely significant effects as a result of this will be assessed according to the methodology presented in section 14.7.4 of the Scoping Report.
348	14.3.1.1	The ES should include a detailed assessment of potential effects to sensitive species (including SPA birds) from noise and vibration. This may need to include baseline monitoring and modelling of noise and vibration levels in locations where sensitive receptors, such as SPA birds, are found.	This information will be clearly presented, with the assessment located in the Biodiversity chapter.

Table 2-44: EIA Scoping comments from the LPA project group and RTS project responses to Noise and Vibration (Scoped in/out topics)

Page	Reference	Comment	RTS Project Response
346	14.2.2.2	An indication of duration of exposure to construction noise and vibration should also be considered within the ES and considered within the assessment of significance. The assessment methodology should be confirmed within the PEIR and an indication of working hours provided for the construction methodology.	Duration will be considered as stated in 14.7.1.7. Duration of construction and the working hours for the construction periods will be identified in the PEIR and ES.
351	14.3.3.1	If outdoor amenity areas are proposed, there is an opportunity to provide outdoor amenity areas with suitable noise levels. The suitability of outdoor amenity space and suitability of footpaths should have consideration for noise levels experienced in these areas. The assessment should be outlined within the PEIR and the assessment should be provided within the ES.	As indicated in paragraph 14.7.1.9 of the Scoping Report the ES will assess potential noise impact on tranquil outdoor spaces. In preparation of the PEIR, local authorities have been asked to identify quiet spaces and spaces prized for their tranquillity for the assessment. Responses have been received from Spelthorne and Runnymede Councils and as a result Thorpe Hay Meadow, Sunbury Walled Gardens and Chertsey Meads Local Nature Reserve have been added as receptors

Page	Reference	Comment	RTS Project Response
			within the assessment. Activities associated with the provision of the new green open spaces and other landscape works have the potential for adverse noise effects on residential and non-residential receptors. Likely significant effects as a result of this will be assessed according to the methodology presented in section 14.7.4 of the Scoping Report.
352	14.5.2.1	Operational noise effects on and the suitability of new green spaces should be considered in terms of impact on human receptors and wildlife receptors. The assessment should be outlined within the PEIR and assessed within the ES.	As indicated in paragraph 14.7.1.9 of the Scoping Report the ES will assess potential noise impact on tranquil outdoor spaces. In preparation of the PEIR, local authorities have been asked to identify quiet spaces and spaces prized for their tranquillity for the assessment. Responses have been received from Spelthorne and Runnymede Councils and as a result Thorpe Hay Meadow, Sunbury Walled Gardens and Chertsey Meads Local Nature Reserve have been added as receptors within the assessment. Activities associated with the provision of the new green open spaces and other landscape works have the potential for adverse noise effects on residential and non-residential receptors. Likely significant effects as a result of this will be assessed according to the methodology presented in section 14.7.4 of the Scoping Report.
352	14.5.2.1	Noise generating activities on new green spaces should be considered within the ES. Their anticipated use types should be considered and assessed for their suitability with respect to noise generation.	The ES will include an assessment or otherwise explain how the use(s) would be designed and controlled to avoid significant effects from noise from the use of new open spaces.
356	14.7.3.1	Noise impacts arising from the use of construction compounds and any haul routes as part of the construction work should be assessed within the ES.	These will be assessed in the ES.
360	14.7.3.14	This paragraph states that both the do minimum and do something scenarios include growth and committed development traffic, whereas Paragraph 14.3.2.1 advises that the baseline will be used without committed development traffic (to ensure a worst-case assessment). Best practice would be to include growth and committed development traffic within the assessment. The approach should be confirmed within the PEIR/ES as these paragraphs appear to conflict.	To clarify, the assessment of effects from construction on site noise will be based on comparison to baseline survey data. This will not be corrected for future changes in growth and committed development traffic unless there indicates that this approach is not worst case (e.g. traffic flows are likely to decrease in the future). For the assessment of noise from offsite construction traffic; this will be based on traffic data and that will include growth and committed development traffic.
360	14.7.3.14	It is not confirmed which construction year is being assessed. The assessment within the ES should consider and assess impacts during the peak construction year, as a minimum.	Peak construction year will be confirmed within the ES.
360	Table 14-5	Any change in the resultant Leq,16hour, for roads with traffic flows below 1000 should also be considered within the ES.	Roads with traffic flows under 1000 AAWT will be considered in the ES.
361	14.7.3.16	Based on this paragraph, vibration from offsite construction traffic is to be assessed by reviewing road conditions and distances to receptors. The assessment should be presented within the ES.	The ES will present the outcome of the review of construction routes and receptors to ascertain whether vibration effects are likely.
361	14.7.3.16	The impact of vibration and underwater noise on the impact on aquatic wildlife should be assessed within the ES.	Information related to impacts on aquatic wildlife receptors will be presented, within the Biodiversity chapter
361	14.7.4.1	DMRB LA 111 paragraph 3.51 advises that the following scenarios should be assessed: 1) Short term: DMOY compared against the DSOY; 2) Long-term: DMOY compared against the DSFY;	Potential noise impact from traffic movements (including those associated with use of Public Open Spaces) will be evaluated in accordance with DMRB traffic noise effect criteria as stated. There is confusion from using the term 'future year' in the

Page	Reference	Comment	RTS Project Response
		3) Non-project noise change: do-minimum future year (DMFY) compared against the DMOY. Based on guidance within DMRB LA 111, effects should be assessed due to the change between the opening year do minimum and future year do something, rather than the future year do minimum and do something, which the scoping report proposes. The assessment of significance should also consider guidance within Table 3.60 of DMRB LA111. The assessment should consider the proposed LOAEL and SOAEL values for traffic noise presented within DMRB LA 111.	scoping report paragraph not in the same way that DMRB uses it. This will be clarified in the ES and the DMRB guidance will be followed.
361	Table 14-6	Any change in the resultant Leq,16hour, for roads with traffic flows below 1000 should also be considered within the ES.	Roads with traffic flows under 1000 AAWT will be considered in the ES.
362	14.7.4.6	The uses of the new green open spaces should be identified and confirmed in the ES to ensure the activities are appropriate for the local areas. An assessment of noise impact from use of the flood alleviation channels, including the flow of water, should be considered where appropriate.	These will be assessed in the ES.

2.11 Socio-economics

Table 2-45: EIA Scoping comments from the LPA project group and RTS project responses to Socio-economics (General)

Page	Reference	Comment	RTS Project Response
352	15.1	It is acknowledged that a separate Economic Appraisal, Equality Impact Assessment and Natural Capital Assessment is being prepared to accompany the DCO application. The Socio-Economic chapter should cross-reference these documents and their findings, where appropriate.	Agreed, this will be done where appropriate.
354	15.2.2.2	Despite Surrey County Council requesting a standalone socio-economic technical report (in 2019) rather than part of the EIA process, it is acknowledged that the previously proposed Population Chapter has been split and a separate Socio-Economic chapter and Health Chapter is now proposed as part of the PEIR/ES. The proposed approach is supported and allows for each chapter to specifically address the relevant issues.	Noted. No further action.
374	15.7	The EIA Scoping Report does not specify whether the assessment of socio-economic effects will be quantitative or qualitative. Where possible, the assessment should be quantitative, for example stating how many jobs will be created, how much Gross Value Added (GVA) will be created etc., rather than just qualitatively stating it will support economic growth.	Agreed. Where quantitative data is available this will be used in the assessment of effects.

Table 2-46: EIA Scoping comments from the LPA project group and RTS project responses to Socio-economics (Data/Survey)

Page	Reference	Comment	RTS Project Response
353	15.2.1.1	2011 Census data is cited as being one of the data sources used to inform the socio-economic baseline. The Socio-Economic assessment in the PEIR/ES should ensure that the 2021 Census data is used, if published and available at the time of writing.	Since the publication of the Scoping Report, detailed data from the 2021 Census has been released and this has been used to inform our PEIR and will be used for our ES.
356	15.3	Need to ensure that the source of all baseline data is referenced accordingly, including the year it relates to when the PEIR/ES is produced. The EIA Scoping Report does not do this consistently.	The baseline will be reviewed and updated for the ES using the most up to date data sources available. As noted above the data from the 2021 Census has informed the baseline for our PEIR. While more up to date GVA data is available the proportion of the economy of south east England made up by Surrey remains at 16% as reported in 15.3.1.11 of the EIA Scoping Report.
358	15.3.1.12	Need to ensure that the most up to date baseline data is used in the assessment. For example, GVA data for the year 2016 is reported in the EIA Scoping Report. This is not the latest data available (2020 estimates are available from the ONS). Similarly, population data is reported from the 2011 Census. This is over 10-years old and therefore is considered to under report the population of the Study Area. Mid- Year Population Estimates (MYPE) published by the ONS or 2021 Census data should be used as the source of population data.	The baseline will be reviewed and updated for the ES using the most up to date data sources available. As noted above the data from the 2021 Census has informed the baseline for our PEIR. While more up to date GVA data is available the proportion of the economy of south east England made up by Surrey remains at 16% as reported in 15.3.1.11 of the Scoping Report.
356	15.3	Total resident population is reported. The assessment should also consider the age profile of the population to identify key life stage cohorts in the Study Area's population (for example, children, working age and older persons).	The baseline will be reviewed and updated for the ES and this detail will be added.
N/A	Figure 15-1 Appendix A	Figure 15-1 identifies the socio-economic receptors. For the PEIR/ES details of the individual receptors should be incorporated (i.e. in table format) and the distance of each individual receptor from the RTS reported. This will enable quantification of the number of places of worship, education establishments etc. that have the potential to be affected.	This would produce a very large dataset (of approximately 45,000 residential and 2,500 non-residential receptors) and therefore we considered that this would not provide a proportionate way of representing the data. Appendix 15.1 does however provide an overview and quantification of different receptor types within the study area.
367	15.3.2.1	The future population of the Study Area should be reported in the future baseline using the ONS Sub- National Population Projections.	Further consideration of population projections and associated demographics will be provided within the ES.
367	15.3.2	The future baseline currently presented references different years (mid-2030, 2039 and 2045). The future baseline should be consistent and represent the completion year where possible.	The baseline will be reviewed and updated for the ES. Where possible future baseline years will be consistent and in line with year of completion.
N/A	15.3	The baseline should report on the number of homes in the Study Area (and each of the respective local authority boroughs).	The baseline already provides these figures. Baseline data will be reviewed and updated where necessary for the ES (the ES will include split by LPA).

Table 2-47: EIA Scoping comments from the LPA project group and RTS project responses to Socio-economics (Scoped in/out topics)

Page	Reference	Comment	RTS Project Response
N/A	N/A	The previous EIA Scoping Report (2017) identified the potential for temporary adverse effects during the construction phase on air quality and odour with potential implications for the health of the local communities and associated effects on livelihoods of commercial businesses. It is appreciated that the health of local	The effects on the health of local communities will be assessed in the Health ES Chapter. Effects on commercial businesses are already covered in existing identified potential significant effects in the Socio-economic chapter.

Page	Reference	Comment	RTS Project Response
		communities will be covered within the separate Health ES Chapter. However, the socio- economic assessment should include an assessment on the associated effects on livelihoods of commercial businesses.	
N/A	N/A	Similarly, the previous EIA Scoping Report (2017) identified the potential for an adverse effect on local residents by overlook from the 'beacons' to private residential properties but this Is not mentioned in the latest EIA Scoping Report. Such effects should be scoped into the assessment.	This effect will be considered within the Landscape and Visual Amenity ES Chapter.
N/A	N/A	Surrey County Council requested the inclusion of noise and vibration effects on the amenity of nearby residential properties to be considered. This does not appear to have been scoped into the EIA but should be included even if just through cross-reference to the Noise assessment and subsequent findings.	This effect will be considered within the Noise and Vibration ES Chapter, a cross reference to this assessment will be included in the Socio-economic ES Chapter.

2.12 Soils and Land

Table 2-48: EIA Scoping comments from the LPA project group and RTS project responses to Soils and Land (General)

Page	Reference	Comment	RTS Project Response
380	16.1.1.2 & 16.1.1.4	It is noted that this paragraph indicates that effects from contamination on water quality is covered in this section, and then Paragraph 16.1.1.4 contradictorily indicates that the assessment of groundwater and surface water quality in relation to land potentially affected by contamination is covered in Chapter 18:Water Environment. This is acceptable providing the interaction between land potentially affected by contamination and the impacts and effects on water quality are adequately covered in Chapter 18: Water Environment and adequately cross referenced in this chapter. The assessment should also include potential impacts and effects on private water supplies within the study area. In Chapter 18 - It is noted that the suite of testing determinands for the groundwater monitoring, referred to in Reference 18.2.1.11 is not described or justified. Groundwater baseline monitoring must be carried out, covering a range of appropriate determinands that are agreed with the Host Authorities and the EA. An appropriate hydrogeological risk assessment of the potential impacts on groundwater quality from the project including the potential to mobilise existing contamination and create new pathways for contamination must be carried out in accordance with appropriate best practice, to a scope agreed with the Host Authorities and the EA.	Chapter 18 of the PEIR (Water Environment) deals with assessment of groundwater and surface water quality in relation to land potentially affected by contamination. Interaction between land potentially affected by contamination and the water environment are considered covered in Chapter 18 of the PEIR and the preliminary WFD compliance assessment appended to this. Further consideration will be given in the ES and detailed WFD compliance assessment. Between 2012 and 2015, groundwater levels and quality monitoring was undertaken approximately every two months at 24 boreholes across the project area. This included recording of field parameters, pH, conductivity, dissolved oxygen and temperature, along with various analytes. Since 2016, bi-annual monitoring has been undertaken from up to 33 boreholes across the project area. Since February 2022, level and quality monitoring has been carried out and is ongoing at 23 locations across the study area. 111 determinands are monitored quarterly and 31 determinands are monitored bi-annually. Determinands include those that have legislative requirements for monitoring and those recommended following source pathway receptor modelling. This monitoring data, alongside data collected for over 150 determinands analysed in soil, sediment and leachate as part of a recent ground investigation, will be used to inform a hydrogeological risk assessment which will be carried out according to best practice as agreed with the Host Authorities and the EA.
381	16.2.1.1	The baseline methodology is indicated to have been informed by a Desk Based Assessment (DBA). The DBA has not been submitted with the EIA Scoping Report and therefore cannot be commented upon at this stage.	Noted. The DBA can be provided as an appendix to the ES.
405	16.8.1.4	The stakeholders should be defined and include the LA's and the EA where controlled waters are concerned.	Noted.

Page	Reference	Comment	RTS Project Response
N/A	General	The EIA Scoping Report identifies that there is agricultural land of quality grades 2 and 3 (very good and good to moderate) within the study area. Agricultural land of grades 2 and 3a is defined by Natural England as the Best and Most Versatile (BMV). It is not entirely clear whether Soils as a resource, and agricultural land are proposed to be scoped into the ES, although it may be that Reference 16.4.1.1 (1) and (2) are intended to convey that, but it in any case we consider that Soils as a resource, and agricultural land are scoped into the ES. This should include, as previously requested by NE, an assessment that takes account of the ecosystem services they provide as a resource. The Scoping Report does not set out the methodology by which any assessment of soils and agricultural land will be undertaken, and we advise that this must be completed in accordance with best practice and measures to protect soil resources should be in accordance with the 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites' (Defra 2009).	Soils as a resource will be assessed in the PEIR / ES.
N/A	General	The Geology and Soils chapter of the EIA Scoping Report does not make any reference to land stability and/or geological hazards. It is advised that a preliminary land stability risk assessment should be undertaken, with the findings used to inform the EIA.	The effects of the project on structure and stability of soils will be assessed in the PEIR / ES. A Preliminary Land Stability Risk Assessment will inform the ES.

Table 2-49: EIA Scoping comments from the LPA project group and RTS project responses to Soils and Land (Data/Survey)

Page	Reference	Comment	RTS Project Response
381 & 382	16.2.1.2	The EIA Scoping Report refers to historical ground investigations, however the locations and therefore coverage of the scoping boundary has not been submitted and the adequacy of the coverage cannot be commented on. It is incumbent on the Applicant that the GI coverage is adequate to inform a robust ES, Engagement with the Host Authorities on this topic is required.	Noted. A ground model of all the historical ground investigations is currently under development for the ES. Engagement with LPAs is ongoing and will continue in the ES phase.
381 & 382	16.2.1.2	It is noted that further baseline surveys are proposed to inform the ES. The scope and methodology of such surveys should be agreed with the Host Authorities and EA before the works are undertaken. There is likely to be relevant ground condition information available in the public domain for some areas of the project, associated with the Esso Southampton to London Pipeline scheme – which was required to undertake ground investigations as part of the DCO.	Noted. Ongoing ground investigation scope to be communicated. This has been reviewed for the PEIR, only a small section of Esso pipe interacts with the RTS. It was not considered useful to Scoping/PEIR. Pertinent information may be included (if relevant) in the RTS GI interpretive reports.
382	16.2.1.4	The EIA Scoping Report describes that sources of potential land contamination have been identified within the land quality study area, that there are likely significant effects relating to land contamination, and that 'remediation of contaminated land will be considered where appropriate' (Reference 16.6.2.1 (1)).	Noted.
382	16.2.1.4	We advise that as the project could give rise to significant environmental effects in relation to land contamination, the full process of ground investigation, risk assessment, options appraisals and preparation of a mitigation and/or remediation strategy (as appropriate) will be needed to support the DCO application and inform	Noted. This will be part of the Materials Management Strategy and best practice (including LCRM) mitigation.

Page	Reference	Comment	RTS Project Response
		the EIA. This process must be undertaken in accordance with that set out in Land Contamination Risk Management (LCRM), published by the Environment Agency.	
382	16.2.1.4	The need for further baseline surveys is noted. We advise that in accordance with Stage 1 risk assessment (LCRM) the Applicant will be required to provide a Phase 1 desktop study and walkover for the entire land quality study area. This should include a preliminary risk assessment that identifies and evaluates all potential sources and impacts of land and/or groundwater contamination relevant to the site. This should comply with BS10175: Investigation of potentially contaminated sites code of practice and be undertaken by a competent person. It is acknowledged that a DBA is indicated to have been carried out – however this has not been submitted with the EIA Scoping Report. It is advised that the Phase 1 desktop study must include all potential sources of contamination (including ground/landfill gas) at the time of preparation and be informed by data as up to date as practicable.	Noted. Historic DBAs will contain stage 1 risk assessments. The relevant guidelines are set out in Appendix M of the Scoping Report, This sets out guidance used to inform the assessment, it included BS:10175. The relevant British Standards will be applied as part of the ongoing GI works and the Water Permitting process.
382	16.2.1.4	Landfill information has been provided for licensed activity and we advise that details regarding unlicensed activities should also be provided.	Noted, potential contamination issue from non licensable activities will be included in the baseline if relevant and the information is available.
382	16.2.1.4	Given the nature of the project and anticipated ground conditions within the scoping boundary, a Phase 2 intrusive investigation is likely to be required to fully and effectively characterize the nature and extent of any land and/or groundwater contamination and provide information for a detailed assessment of the risks to all receptors that may be affected. This should include ground gas and a ground gas risk assessment, as appropriate. As a minimum Tier 2 Generic quantitative risk assessment is anticipated but it may also be necessary, depending on the outcome of the Tier 2 GQRA, to undertake Tier 3 Detailed quantitative risk assessment (DQRA). This should comply with guidance provided by LCRM and be undertaken by a competent person (whose details should be included in the ES).	Noted. Phase 2 investigations ongoing in accordance with the relevant guidelines.
382	N/A	Depending on the findings of the Stage 1 risk assessment (LCRM), Stage 2 options appraisal (LCRM) may be required to address any contamination linkages. The results of the Phase 2 intrusive investigation and detailed risk assessment should be used to prepare the options appraisal and remediation strategy. It should provide full details of the remediation measures required, how they are to be undertaken and a plan for how they will be verified and reported. It should also identify the need for any longer term monitoring of pollutant linkages, maintenance and arrangements for contingency action. The options appraisal and remediation strategy will need to be agreed in writing by the LPA and EA prior to commencement and implemented to the satisfaction of the LPA and EA, by a competent person (whose details should be included in the ES).	Noted. This will be developed following phase 2 investigations with the Materials Management Strategy in accordance with the relevant guidelines.
382	N/A	The reports produced at the various stages of risk assessment must be appended to the ES.	Noted, they will be appended where relevant.
382	N/A	There is potential for direct impacts on ground conditions and both groundwater and surface water quality arising from implementation of any remediation strategy. Therefore, the mitigation and / or remediation strategy will need to be developed to the stage where the environmental impacts of implementing the strategy can be assessed as part of the EIA. In addition, there may be inter topic effects from the implementation of the remediation strategy, including in relation to dust, noise,	Noted, details of remediation measure will be included in detail at the ES stage, this would include inter topic effect if relevant.

Page	Reference	Comment	RTS Project Response
		traffic, waste etc, and therefore the impacts of the remediation strategy must also be considered within the assessment of other relevant ES topics as appropriate.	
405	16.8.1.6	Notwithstanding that further GI will be required to inform design – sufficient GI must be undertaken to inform the ES. The GI must itself be informed by the Phase 1 desktop study and preliminary risk assessment based on all current and historical land uses where there is potential for contamination sources. Geoenvironmental sampling and testing of soils must be appropriate to the anticipated ground conditions based on the current and historical land uses e.g. including PFAS testing in landfill areas.	Noted. The ongoing and historical GI works and interpretive reporting will be used to develop the baseline in the ES stage. The conceptual source, pathway, receptor model will be available as the ES stage to inform the assessment. PFAS / PFOA testing to be undertaken/on going.

Table 2-50: EIA Scoping comments from the LPA project group and RTS project responses to Soils and Land (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
384	16.2.3.4	The study area for Land potentially affected by contamination is proposed to be 250m. In the context that the scope of this chapter is described as being limited to soils (Reference 16.1.1.2) and notwithstanding the contradiction highlighted above (References 16.1.1.2 & 16.1.1.4), the study area is acceptable. However, where Land potentially affected by contamination has the potential to impact on groundwater quality, the study area is likely to need to be much greater. Further engagement with the Host Authorities is required on this topic.	Noted. 250m radius for soil contamination. The water environment study area incorporates all surface and groundwater bodies that lie within the project boundary for EIA Scoping plus a 500m buffer. Engagement on waste and GI works with host authorities is ongoing.

Table 2-51: EIA Scoping comments from the LPA project group and RTS project responses to Soils and Land (Scoped in/out topics)

Page	Reference	Comment	RTS Project Response
402	16.7.3.1	It is proposed that a Hydrogeological Risk Assessment is undertaken to assess the magnitude of effects in relation to groundwater flow and pathways. It is advised that Hydrogeological Risk Assessment will also be required to assess the magnitude of effects in relation to groundwater quality.	Noted, groundwater quality aspects will be considered as part of the hydrogeological risk assessment. As stated above, between 2012 and 2015, groundwater levels and quality monitoring was undertaken approximately every two months at 24 boreholes across the project area. This included recording of field parameters, pH, conductivity, dissolved oxygen and temperature, along with various analytes. Since 2016, bi-annual monitoring has been undertaken from up to 33 boreholes across the project area. Since February 2022, level and quality monitoring has been carried out and is ongoing at 23 locations across the study area. 111 determinands are monitored quarterly and 31 determinands are monitored bi-annually. Determinands include those that have legislative requirements for monitoring and those recommended following source pathway receptor modelling. This monitoring data, alongside data collected for over 150 determinands analysed in soil, sediment and leachate as part of a recent ground investigation, will be used to inform a hydrogeological risk assessment which will be carried out according to best practice as agreed with the Host Authorities and the EA.

Page	Reference	Comment	RTS Project Response
395	16.5.1.1	The management of material, including movement of hazardous material/waste off site should be undertaken in accordance with a Materials Management Plan (MMP) and in accordance with the Deposit of Waste Code of Practice (DoWCoP).	Noted, and agreed.
403	16.7.3.4	The scoping report makes reference to chemical suitability of materials for re-use, but not geotechnical suitability. Where material is proposed for re-use – both the geotechnical and geochemical suitability must be assessed. Material for re-use must be assessed and re-used in accordance with a MMP and in accordance with the DoWCoP.	Both physical properties and chemical suitability will be assessed. The DoWCOP will be complied with where applicable.

Table 2-52: EIA Scoping comments from the LPA project group and RTS project responses to Soils and Land (Significance Criteria)

Page	Reference	Comment	RTS Project Response
399	16.7.2	Geological receptors should be included in the significance criteria	Noted, these are included.
399	16.7.2	Soils and agricultural land should be included in the significance criteria	Noted, these are included in the PEIR.
399	16.7.2.3	Any human receptors should be considered as high sensitivity.	Noted, these are included in the PEIR.
400	16.7.2.7 to 16.7.2.9	The definitions of magnitude of effects should include reference to acute and chronic risk to human health, or a definition of ‘harmful’.	Noted, included in the PEIR.
400	16.7.2.7 to 16.7.2.9	The magnitude of effects should include definitions for all identified receptors e.g. soils and agricultural land, land stability, controlled waters, geology etc and should be defined beyond reference to ‘statutory guidance’.	Noted, included in the PEIR, including loss of soils due to land take.
401	16.7.2.12 to 16.7.2.17	The definitions of significant effects should be aligned with the S-P-R risk assessment method for contaminated land and defined for each receptor identified, e.g. soils and agriculture, land stability, geology, controlled waters etc.	Noted, included in the PEIR.

2.13 Traffic and Transport

Table 2-53: EIA Scoping comments from the LPA project group and RTS project responses to Traffic and Transport (General)

Page	Reference	Comment	RTS Project Response
407-430	General	The County Highway Authority does not have any comments to make at this stage on the proposed scope of the EIA for the scheme. A Transport Assessment (TA) would be required with the DCO application.	Agreed. A Transport Assessment will be submitted.
407-430	General	The County Highway Authority has been engaged in discussions with the Applicant in respect of the TA for the RTS over a number of years, including through previous EIA Scoping and pre-application planning advice. The County Highways Authority would expect that such engagement would continue, through the Technical Working Group proposed above, as the scheme develops and progresses through the DCO process.	Agreed. Engagement with the Highway Authority will continue.

Page	Reference	Comment	RTS Project Response
410	17.2.2.8	Barge movements will need to be considered within the air quality assessment. Should there be mitigation applied, for example signage to prevent idling of vessel engines. Paragraph 17.3.2.12 mentions the potential effects on navigation associated with the bed lowering downstream of the Desborough Cut. Will this lead to increased waiting times at locks etc where boats may be idling their engines?	As stated within the paragraph the potential effects on navigation will be assessed.
412	17.2.4.1	This approach will take traffic through areas of the AQMA that are sensitive to a deterioration in air quality and increases in noise. Given the position of the scheme route in Spelthorne adjacent in places to the M3, has the option of having a project specific temporary exit into a compound directly from the M3 not been considered in order to take HGVs directly to the worksites?	A series of options is under investigation for limiting the effects of HGV movements on the local road networks, including conveyor systems under the M3 and short-haul water based transport on the Thames. The construction duration, cost and land take associated with a temporary motorway junction outweigh the benefits in this instance.
412	17.2.4.1	Potential cumulative impacts could occur with the traffic related to the operation of the recent Shepperton Studios development. Filming tends to involve HGVs for materials/supplies, welfare and to bring in sets and catering.	Noted. Shepperton Studios Development application reference 7210693 / 18/01212/OUT has been included on the long list of 'other developments' for consideration in the CEA.
418	17.5.1.1	Will there be upgrades to any of the existing infrastructure that is identified as congested and thereby contributing to poor air quality such as the Sunbury Cross M3 Junction? As the RTS could potentially attract traffic to visit the amenity areas. Traffic from West London is likely to access via the A316 and exit at that junction.	Specific mitigation measures cannot yet be determined until further assessment of the effects has taken place. We would expect the need to do some minor works at some junctions where they have existing capacity pressures on the construction routes but expect these to be within the project boundary.
420	17.6.3	Some of the proposed land uses such as water sports and cycling are likely to attract visitors, namely by car. which may car traffic to carry equipment such as canoes and family bicycles to the facilities.	Noted.
420	17.6.3	Will there be infrastructure measures such as secure cycle parking to allow visitors to lock up bicycles whilst using these facilities?	Supporting cycle facilities such as cycle parking will be provided to support proposed future uses.
420	17.6.3	The closest railways station in Spelthorne is Shepperton, there are no bathroom facilities for families to use at that station. Improving the facilities at the station and providing more public bathrooms along the scheme route would help to enable families visiting the scheme to use the public transport and active travel modes rather than drive. This would also help the Borough to facilitate more active travel for school pupils between Staines, Shepperton and Sunbury where currently there is one public toilet in Shepperton Highstreet for a walk along the river and scheme of approximately 4 to 5 miles.	We do not consider that providing additional public toilets will encourage sustainable and active travel.
421	17.7.1	These thresholds are different to those required for air quality modelling, can clarification be given as to whether a separate criteria will apply to the traffic data supplied for screening for air quality assessment purposes?	The relevant data required to undertake the air quality assessment are as detailed within Chapter 6. Air quality thresholds are discussed in section 6.4 of our PEIR with the Traffic and Transport assessment methodology discussed in Section 17.7 of our EIA Scoping Report and Section 17.4 of our PEIR.
422	17.7.1.7	Please confirm what denotes a sensitive area.	17.7.2.3 of the Scoping Report sets out receptor sensitivity.
422	17.7.1.8	The local authorities that make up the Project Group are actively encouraging public transport use and active travel. Although it is recognised the construction period is temporary this will be a prolonged period of disruption. Minimising disruption to services is necessary for the Project Group to continue to promote and encourage active travel across the County.	Noted.

Page	Reference	Comment	RTS Project Response
422	17.7.1.8	Many of the bus routes are long and are relied upon particularly by college students and school pupils and the elderly. These services are vital to keeping car trips down in the already congested morning peak.	Noted.
422	17.7.1.8	Earlier in the chapter the congestion is acknowledged, and delays are referenced which is contrary to this statement. Mitigation would be strongly encouraged from the perspective of SBC.	The need for specific mitigation measures cannot yet be determined until further assessment of the potential effects has taken place. Any effects will need to be assessed and quantified to understand if there is a material effect that needs to be mitigated.
423	17.7.1.10	Community severance regarding the RTS may not be solely the result of issues concerning the roads. The IEMA Severance Criteria presented are based on AADT screening.	Noted.
423	17.7.1.10	Is an additional broader approach needed in terms of assessing transport severance geographically given this is a channel and there will be impacts on footpaths, bridleways etc and access to local facilities by those modes also. How the scheme, where traffic flows will increase, can physically be navigated in terms of crossings will be very important in supporting active travel.	It is proposed to assess severance as part of the Traffic and Transport Chapter of the ES following the assessment methodology outlined. The TA will provide additional assessment of the effect (and benefits) of connectivity created by the scheme.
423	17.7.1.10	Many of the existing crossings in Spelthorne rely on pedestrians waiting for vehicles to stop to allow them to cross, that will become harder where traffic flows increase, and alternative crossing facilities may be required.	The extent of likely additional traffic to be generated by the scheme is yet to be determined. Once this has been developed its effect on pedestrian delay can be assessed and mitigation measures provided if required.
423	17.7.1.10	The RTS could generate pinch points where there are an increased number of cyclists and pedestrians at an entrance point encountering an increased volume of traffic for example on or crossing links on the routes to car parks, will this be assessed in terms of the physical mitigation to give adequate priority to pedestrians and cyclists safely?	The Transport Assessment will consider worksite access arrangements and safety requirements. Pedestrian and cycle safety will be paramount.
429	17.8	There seems to be an increase in weekend traffic flows compared with prior to the Covid-19 pandemic (within Spelthorne). That may be of relevance to the RTS assessments, therefore the Transport Planning team at Surrey County Council should be consulted regarding post pandemic traffic behaviour.	We will continue to engage with SCC highway team regarding the assessment of the project.

2.14 Water Environment

Table 2-54: EIA Scoping comments from the LPA project group and RTS project responses to Water Environment (Data/Survey)

Page	Reference	Comment	RTS Project Response
433	18.2.1.5	Fluvial assessment has been undertaken with a more detailed hydromorphological assessment planned to gain information on sediment transport, deposition, and erosion in the proposed RTS channel. This should include surveying the waterbodies upstream and downstream to establish any change to existing conditions since 2017 and prevent any impact from the design impacting these reaches.	Agreed. A geomorphological walkover was completed in Spring 2023 to capture this information.

Page	Reference	Comment	RTS Project Response
435	18.2.1.14	Sediment samples have occurred and been used to determine if site material can be used elsewhere. What are the proposals for re-use / Can it be utilised for the proposed works? This will need to be considered within the Material and Waste ES Chapter.	Sediment samples have been collected as part of an ongoing Ground Investigation (GI) survey. This will inform how they can be reused onsite for the proposed works. A Waste Hierarchy is proposed (Prevention; Re-use; Recycling; Recovery; disposal).
435	18.2.1.14	Can the bed substrate be site-won material?	No, it is not expected that there will be any suitable river bed materials won onsite. Screening of materials is required as it is anticipated there may be contamination and unsuitably sized (for riverbed substrate) materials excavated due to excavations within historic land fill sites. Re-using site won materials for the new river bed will be a consideration as part of the material management plan.
435	18.2.1.14	Further engagement with the Host Authorities is required on this topic.	We anticipate the Local Waste Authorities will be actively engaged as the materials management strategy develops.
435	18.2.1.17	Modelling has been undertaken / is being carried out, but neither the model or outputs have been provided at this stage.	Modelling will be available for the ES, including integrated groundwater and surface water modelling, adaptive augmented surface water flow modelling, sediment modelling, drought/low flow modelling. Findings will be included within the ES.
435	18.2.1.17	The modelling has been undertaken to establish surface water, groundwater hydrodynamic water quality and sediment transport in the proposed flood channel.	Yes, this is included in the DHI/Stantec dynamic groundwater and surface water. Findings, which will be included within the ES.
435	18.2.1.17	Was this done for flood flows and normal ‘low’ flows to establish all conditions? Has current abstraction been included?	Yes, modelling was carried out for a wet year (including a flood scenario) and a dry year. The results will be expanded on in the ES. Current abstraction has been accounted for in the modelling.
435	18.2.1.17	Further engagement with the Host Authorities is required on this topic.	Agreed, further consultation is planned.
436	18.2.1.19	Modelling of the Jubilee River, a surrogate system, has been undertaken to establish the minimum flow with no detrimental impact on water quality.	Yes and further monitoring and modelling has been carried out by UKCEH building on this study to replicate the RTS and further refine the understanding of the impacts of augmented flows on water quality within the RTS and within the River Thames.
436	18.2.1.19	Has monitoring of the Jubilee River been undertaken and can it be included to aid this design to establish what works well and what could have been done differently?	Yes, monitoring data has been included as part of the work being undertaken by UKCEH and is being used to inform the Augmented flow requirements.
436	18.2.1.19	Further engagement with the Host Authorities is required on this topic.	Agreed, further consultation is planned. A briefing presentation on work undertaken within the water topic will be presented to the LPA Project Group.
437	18.2.1.22	Sediment transport modelling has been completed for the flood channel, to establish long term balance of sediment movement which has been used to establish maintenance.	Yes. The results will be expanded on in the ES.
437	18.2.1.22	What are the main conclusions?	The main conclusions have recently been summarised in a Conceptual modelling report following a conceptual modelling workshop and will be made available. The findings will feed into the ES.
437	18.2.1.22	Does the channel become a sediment sink in non-flood conditions?	Current results of sediment modelling by Binnies predicted a 4% reduction in sediment load in the River Thames with RTS in place which would lead to relatively modest levels of deposition in the lakes or the channels. Modelling outputs will be reported in the ES and impacts on sediment processes will be assessed.

Page	Reference	Comment	RTS Project Response
N/A	General	As modelling has been carried out/is being carried but was not provided with the EIA Scoping Report, further engagement with the Host Authorities is required to determine the suitability of the data and the assessment.	Agreed, further consultation is planned.

Table 2-55: EIA Scoping comments from the LPA project group and RTS project responses to Water Environment (Scoping area / area of assessment)

Page	Reference	Comment	RTS Project Response
446	18.3.1.12	Historic modification has been assessed for the lower water bodies. Their impacts on sediment movement and surface water have been noted.	Acknowledged.
446	18.3.1.12	Has a more in depth historic modification check been done? Has this been done for all waterbodies?	The fluvial audit will include a desk study of historic mapping to assess where waterbodies have been historically artificially modified.
451	18.3.2.2	It has been noted that new River Basin Management Plan (RBMP) is due to be released.	Not available at present.
451	18.3.2.2	It should be noted, that if the new RBMP is released before the start of the construction works, the WFD assessment should be updated to match the changed objectives and condition classifications.	Yes, the WFD will be updated to reflect this, but only the objectives will change, the actual design of RTS will not be affected by this. Any changes to waterbodies will be considered.
452	18.3.2.4	Construction works may impact abstraction sites and rates through potential changes to flow and water quality.	Accepted.
452	18.3.2.4	Any potential changes to abstraction sites and rates will be required to be assessed in the EIA.	Accepted.
453	18.3.3.1	It is noted that multiple licensed abstraction points occur. The ES will need to clearly state these are a limitation as the proposed works will need to ensure flow is still available for them, but that flow may / will change if these licenses are not continued into the future, this should be assessed in the EIA.	Accepted.

Table 2-56: EIA Scoping comments from the LPA project group and RTS project responses to Water Environment (Scoped in/out topics)

Page	Reference	Comment	RTS Project Response
453	18.4.1.1	It is noted that sheet pile construction could impact groundwater, however sheet piles will also reduce the riparian cover and have a detrimental impact to habitat variation and availability, which would need to also be considered within the Biodiversity chapter of the ES.	Agreed, the water section of the PEIR cross references with the biodiversity chapter.
453	18.4.1.1	It is noted that the impact of using site won material has been highlighted. The proposed scheme passes through landfill and there is a risk this could impact the surface water and groundwater water quality and pollute the water systems.	Accepted. The impacts will be assessed within the ES.
453	18.4.1.1	Movement of hazardous material has been highlighted to have an adverse impact on the watercourses, however, it is not clear how. Further explanation is required. The assessment should consider impacts to water quality and sediment processes.	The PEIR identifies hydraulic connections with the RTS in place. Further explanation will be provided in the ES.

Page	Reference	Comment	RTS Project Response
454	18.4.1.1	River bed and bank lowering has been highlighted as having an impact. However, reducing bank levels could also impact habitats and impact the sediment processes in the watercourse. Lowering the bed will also impact flow as you are altering the gradient in a least one location. This will impact low flow conditions and sediment processes; this will need to be considered as part of the EIA.	Accepted. The impacts will be assessed within the ES.
454	18.4.2.1	Mention of adverse impacts to water quality, flow, hydromorphology and biological conditions as a result of the proposed flood channel and operation of flow control features has been highlighted.	Accepted. The impacts will be assessed within the ES.
455	18.4.2.1	Impact to sediment processes downstream is highlighted as a result of augmented flow, but flow in downstream reaches will also be impacted, therefore habitats could be impacted and should therefore be considered within the EIA.	Accepted. The impacts will be assessed within the ES.
456	18.4.2.1	Dredging will also impact the sediment processes (transport, deposition and erosion) in downstream reaches, not just water quality. This needs to be considered within the EIA.	Accepted. The impacts will be assessed within the ES.
458	18.5.2.1	Moving the weir location at Sunbury and Teddington weirs to downstream of the weir pools will mean a change in sediment processes. The upstream weir pool (existing weir pool) will be infilled by deposition caused by the weir impoundment, and the downstream section will form a new weir pool. The overall impact is minimal as the sediment processes will eventually change back to existing conditions, but this change needs to be highlighted and should therefore be in Paragraph 18.4.2 effects scoped in. Moving the structure at Molesey will also have an impact on sediment processes.	This is not the case, gates will be added but existing weirs will not be moved. The effects on sediment processes at relevant locations will be assessed within the ES.
458	18.5.2.1	Bank erosion protection built in should be green where possible, to ensure riparian cover is continuous and the channel is as ‘natural’ as possible to minimise net loss of biodiversity and encourage aquatic flora and fauna to become established on the new channel walls.	Accepted. The impacts will be assessed within the ES.
459	18.6.2.1	Installing silt traps, clearly state that this will be at the downstream of all works.	It is confirmed that they will be downstream.

Table 2-57: EIA Scoping comments from the LPA project group and RTS project responses to Water Environment (Approach)

Page	Reference	Comment	RTS Project Response
483	18.7.4.1	Examples should be given of other topics that will influence the reception and require additional assessment.	Biodiversity, flood risk and soils.

2.15 Cumulative Effect Assessment

Table 2-58: EIA Scoping comments from the LPA project group and RTS project responses to the Cumulative Effects Assessment (General)

Page	Reference	Comment	RTS Project Response
484-490	General	The Project Group has no comments to make at this stage of the process on the proposed scope of the cumulative effects assessment (CEA) as set out in Chapter 19 and Appendix L of the EIA Scoping Report. The proposed approach appears consistent with that recommended in Advice Note 17 for NSIPs. The Project Group is content that the schemes listed in Appendix L as major developments for which planning applications has been sought is accurate at this point in time. The Project Group will engage with the Applicant to ensure that the CEA captures all relevant schemes as the project progresses through the DCO process.	Noted. We have engaged with LPA Project Group to update the long-list of 'other developments' as part of the PEIR stage CEA.

3 EIA Scoping comments from Natural England and RTS project responses

Table 3-1: EIA Scoping comments from Natural England and RTS project responses

Comments	EIA Topic	RTS Project Response
Consideration for functionally linked land (FLL) impacts in relation to the lakes not designated under the South West London Waterbodies SPA & Ramsar but which are utilised by the same bird populations.	Biodiversity	The HRA will consider impacts to functionally linked land (FLL) to the South West London Waterbodies SPA & Ramsar. This is set out in the Habitat Regulations Screening Assessment to Support EIA Scoping and in the Habitat Regulations Hazards Identification and Assessment Scope provided in Appendix 7.7 of the PEIR.
Consideration being given to Biodiversity Net Gain needs to be shown within the report as this will be a key component of the work.	Biodiversity (BNG)	Noted, this will be included in the EIA.
Evidence of no potential for (or greatly reduced likelihood of) nutrients entering the designated sites or their FLL (the lakes not in the designation). This is to determine impacts on plant growth or composition in regards to food resources for the Gadwall and Shoveler.	Biodiversity	The HRA will consider the potential impacts of increased nutrients entering the South West London Waterbodies SPA & Ramsar sites and their FLL. The assessment proposed will be informed by modelling carried out for WFD assessment and evidence from comparable sites/projects. The HRA Hazards ID and Assessment Scope (Appendix 7.7 of the PEIR) identifies changes in water quality resulting in habitat change as an operational hazard that will need to be considered.
It would be useful for consideration to be given to turbidity in the lakes, their water levels and the general water quality among the other items to be assessed as part of the “Water Environment” section.	Water environment	Turbidity is being monitored along with lake levels and water quality, and will be assessed to inform baseline conditions across RTS.

4 EIA Scoping comments from Environment Agency Sustainable Places team and RTS project responses

Table 4-1: EIA Scoping comments from Environment Agency Sustainable Places team and RTS project responses

Comments	EIA Topic	RTS Project Response
For the topics within our remit, we broadly agree with the topics that have been scoped in and scoped out of the EIA and wish to make the following comments.	Overarching	Noted.
We note that the flood risk section does not include reference to the construction phase impacts, this should be scoped in. Of specific concern is the storage of materials during the construction phase. If material is located within the Floodplain, this could lead to an increase in flood risk elsewhere which is not compliant with the NPPF. Suitable mitigation should be proposed to address any potential increase in flood risk to third party land at any stage of the scheme.	Flood risk	For clarity, this is already included in the scope for comprehensive construction stage assessment, particularly for the stockpiles and processing areas associated with the storage of materials, etc. See Section: 10.7.3.2 of the Scoping Report: “A quantitative assessment will be completed of the potential effect of temporary increased flood risk to properties, infrastructure and existing operations (e.g. businesses) in the study area as a result of the project during construction. This will be done by reviewing hydraulic modelling of predicted flood risk for different construction scenarios (for example partially built channels, phasing of the project in terms of land raising), and what effects there will be on flood risk to receptors within the study area.”
The Scoping Report indicates that the principle for the scheme in its more general form was established through the Lower Thames Flood Risk Management Strategy (LTFRMS) which was finalised after consultation with other public bodies, businesses and residents in 2009. However, the LTFRMS does not appear to be included in the appendices of the Scoping Report, this should be included. In addition, the policies and principles of flood risk management have changed significantly over the past 13 years, the Scoping Report should justify why the LTFRMS is still an up to date and appropriate assessment of alternative flood risk management strategies. It should be sufficiently evidenced within the Report whether this is still the best option.	Flood risk	The work done as part of the Strategic Outline Case (approved in 2017) and the Outline Business Case (approved in 2020) demonstrate that, “the LTFRMS is still an up to date and appropriate assessment of alternative flood risk management strategies' and this will be discussed further in the DCO application.” We have not appended the LTFRMS to the PEIR as it is significant in size, however, the PEIR makes clear/direct reference to it.
We recommend that the scheme employ an adaptive approach regarding climate change, such as changing the design if it appears that the climate is changing in a different way or at a different rate to that originally anticipated. We would encourage ongoing evaluation of the climate change scenarios being used to inform the project as new information becomes available. We would also like to see assessments of the risks that would arise following failure of all or parts of the scheme. This appears to have been discussed for other factors but not for flood risk.	Flood risk	Hydraulic modelling will use the most up to date climate scenarios. The scheme has been designed to address the fact that the channels, for example, will be used more in the future as a result of climate change.
We are pleased to see that there is a discussion of fluvial and tidal interactions, and that modelling will look at effects downstream of Teddington Lock. The applicant should consider whether plans on other parts of the Thames could impact on the RTS. For example, changes implemented as	Flood risk	We are considering other relevant plans and operations in the FRA and Thames Estuary 2100 will be considered in the assessment of cumulative effects.

Comments	EIA Topic	RTS Project Response
part of the Thames Estuary 2100 Plan are likely to impact the RTS, including alterations to the flood defences and Thames Barrier operations and location.		
We are pleased to see that due to the risk to water quality, assessments regarding the impact of bringing previously offline lakes online will be included. It should be noted that localised impacts are often scoped out of WFD assessments due to impacting less than 1% of the waterbody length. For best practice, the WFD Assessment should include cumulative impacts on receptors for all waterbodies.	Water environment	Noted. The WFD assessment will include cumulative impacts on receptors for all WFD waterbodies.
Appendix K has not mentioned the potential requirement for new structures on the Upper Thames waterbody, at the input and outlet locations for the Spelthorne Channel. This should be scoped in as it will directly impact riverbank, and riverbed (and associated habitats) with the potential need for further physical modification. In addition, there should be an assessment of the derogated reach as this stretch of waterbody contains 0.4 kilometres where the Spelthorne Channel offtakes before the Runnymede Channel returns, which would leave it without the flows of both channels.	Water environment	Noted. The WFD assessment will include consideration and assessment of effects to the derogated reach. Assessment of the intake and outflow structures to the waterbodies will also be included within the WFD report. This design detail is currently unavailable, although it is noted that where these structures are small, they may be considered as low risk activities. Further assessment and engagement with the Environment Agency will be sought where details such as this are clarified.
We understand from the report that modelling is ongoing, however; there should be an assessment for the augmentation flow change after the completion of the WFD assessment or evidence as to why this isn't required. As part of the groundwater modelling process, modelling potential climate change impacts and extreme flood and drought scenarios will be required to support the feasibility of the augmented flow aims. For example, how will groundwater flows be modified in the project area and how will augmented flow balances be delivered under prolonged dry weather and drought scenarios? Are the augmented flow volumes sustainable, and are they potentially at the cost of baseflow that is needed elsewhere?	Water environment	We have completed integrated groundwater and surface water modelling that has considered groundwater flow paths (this will be reported on in the ES). The effects of the augmented flow on the water environment of lakes and watercourses on the flood channel alignment and on the Thames itself is being modelled and assessed further under a range of scenarios to understand its sustainability. An operating procedure will be developed for the augmented flow, to balance demands.
An assessment of the augmentation arrangement for the Spelthorne channel is required. This should include: mechanism of augmentation, protocol for augmentation during prolonged dry weather and drought, and/or periods where the groundwater levels and levels in the Thames are low and an assessment of potential environmental impacts and required mitigation during low flows (for example, depleted dissolved oxygen levels, algal blooms, fish kills). Without these assessments, how the scheme will function during different flow scenarios is unknown. The proposed flow regime will have a significant role in informing the channel design, and therefore determines what habitats the scheme hopes to create.	Water environment	The effects of the Augmented flow on the water environment of lakes and watercourses on the flood channel alignment and on the River Thames itself is being modelled and assessed further under a range of scenarios to understand its sustainability. An operating procedure will be developed for the augmented flow, to balance demands.
Section 18.4.1.1: Project Activities and Associated Likely Effects does not include capacity works on weirs. This should be included as any changes in the structures during construction (for example, the use of coffer dams) has	Water environment	Construction of capacity improvements at the River Thames weirs has now been scoped in. Construction will follow coffer dam guidance and be built in line with the CEMP. This will include embedded mitigation to reduce impacts to flows and hydromorphology.

Comments	EIA Topic	RTS Project Response
the potential to impact on flows and hydromorphology. Therefore, an assessment should be carried out into potential impacts and mitigations.		
The groundwater in the project area is vulnerable because it is in the immediate vicinity of several major potable groundwater abstractions, source protection zones and it's located upon aquifers which are sensitive receptors. Many are Principal aquifers which provide water for local abstractions which support water supplies at a strategic scale, including the baseflow of the River Thames. Contaminative land uses, including several historic landfills, will be excavated during the formation of the RTS channel. Land contamination is discussed in both Chapter 16 (Soils and Land) and Chapter 18 (Water Environment), the following refers to information in both chapters. Given the hydrogeological situation beneath the scheme whereby the main source of contamination, deposited waste materials in historical and licensed landfills, is present in both the unsaturated and saturated zones and located very close to or in immediate contact to aquifer material, it may be beneficial to have issues associated with contamination in a single chapter. We welcome that further assessment of contamination associated with the landfills has been scoped in for further assessment.	Water environment	Noted with thanks.
Section 4.2.3.2 identifies that 'Groundwater in the landfill areas could potentially be contaminated and require treatment before being discharged into public sewers, river or removed via tanker from site'. In terms of water resources, the groundwater flows in the (shallow) groundwater units are likely to be the most disturbed by the project construction works at a range of flow scales. We welcome that site-specific ground investigations and modelling have been discussed and further assessments will be carried out to improve the geo-environmental understanding of the conditions in the vicinity of the RTS channel and the landfills. During any construction works that disturb, or have the potential to disturb landfills/contaminated land, carefully designed monitoring will be essential to detect any impacts to receptors, in real-time, especially to vulnerable and sensitive controlled waters which border the site works.	Water environment	Noted with thanks. Ground Investigations are ongoing; A land contamination conceptual site model (CSM) and risk assessments will be developed for the project using the above information to identify any sources of contamination, ground gas, pathways, and receptors present within the study area. The risk assessment will determine the likelihood of existing contamination being encountered during the construction process, such that it could cause significant environmental harm or adverse health effects if not addressed adequately at the construction and/or operational stages. Measures, including the scope of required monitoring, would be identified within the CSM assessment, and secured within the DCO process. Any works within or affecting landfills or involving waste will be subject to the requirement for an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016. As part of the permitting process, we will be required to undertake a range of risk assessments, which will be subject to scrutiny by the Environment Agency's National Permitting Service to ensure that they are robust. We will also have to propose and put in place suitable measures to mitigate effects on the environment to an acceptable level, which the Environment Agency will review and scrutinise in terms of their adequacy and appropriateness for mitigating the risks and impacts identified.
We note several references to the assessment of measured concentrations of contaminants in soil and waste samples relative to generic land contamination assessment criteria (Land Quality Management (LQM) Chartered Institute of Environmental Health (CIEH), Suitable for Use Levels (S4ULs) etc) only. We strongly recommend that the RTS employs the services of a specialist geo-environmental consultant familiar with the assessment of land contamination	Materials and waste	Noted. RTS has employed the services of a specialist geo-environmental consultant familiar with the assessment of land contamination risks.

Comments	EIA Topic	RTS Project Response
risks for both human health and environmental receptors to complete the contamination assessments that have been scoped in for further assessment.		
We are pleased that section 18.6.3.2 outlines that detailed site-scale work and data assessment is essential to deliver the project and to avoid, reduce and mitigate risks to groundwater from contaminated land. Please be aware, the hydrogeological risk assessment will need to have sufficient baseline monitoring data to understand the status and hydrogeology of each of the sites, and to provide evidence for the opportunities for betterment where possible. The risk assessment needs to give particular focus to the hydraulic connections between geological units, river beds and landfill sites. Remediation treatment and waste disposal options will need to be appraised from sustainability perspectives in addition to general suitability and efficacy. Groundwater dewatering for construction excavations will need detailed hydrogeological risk assessments, and water quality data that will inform the need for treatment.	Materials and waste	Groundwater quality and flow aspects will be considered as part of the hydrogeological risk assessment. Between 2012 and 2015, groundwater levels and quality monitoring was undertaken approximately every two months at 24 boreholes across the project area. This included recording of field parameters, pH, conductivity, dissolved oxygen and temperature, along with various analytes. Since 2016, bi-annual monitoring has been undertaken from up to 33 boreholes across the project area. Since February 2022, level and quality monitoring has been carried out and is ongoing at 23 locations across the study area. 111 determinands are monitored quarterly and 31 determinands are monitored bi-annually. Determinands include those that have legislative requirements for monitoring and those recommended following source pathway receptor modelling. This monitoring data, alongside data collected for over 150 determinands analysed in soil, sediment and leachate as part of a recent ground investigation, will be used to inform a hydrogeological risk assessment which will be carried out according to best practice as agreed with the Host Authorities and the EA.
The categorisation of excavated materials, and subsequent placement or disposal is a critical consideration for this project. Suitability criteria for the placement of material inside the site area for landscaping will need specialist consultation for the Materials Management Plan and throughout the project to avert any significant effects outlined above. This will be subject to an appropriate regulatory pathway for achieving “non-waste” status for excavated materials and the various sources of excavated material being suitable for reuse at the proposed deposition locations. With respect to material suitability; material must be suitable from both geotechnical and geochemical perspectives. Geochemical reuse criteria will need to be developed considering all potential source-pathway-receptor "contaminant linkages" that may exist for deposition locations. Please note, existing Waste Acceptance Criteria (WAC) and commercially available generic land assessment screening criteria (LQM/CIEH, S4ULs etc) for soils must not be used for the assessment of the suitability of material reuse as they do not consider environmental receptors.	Materials and waste	Noted, however the risk assessment for human health for the placement of soils will be screened against public open space, park, residential (with consumption of homegrown produce) land uses. Controlled waters will be screened against the Water Framework Directive and EQS. Any works within or affecting landfills or involving waste will be subject to the requirement for an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016. As part of the permitting process, we will be required to undertake a range of risk assessments, which will be subject to scrutiny by the Environment Agency’s National Permitting Service to ensure that they are robust. We will also have to propose and put in place suitable measures to mitigate effects on the environment to an acceptable level, which the Environment Agency will review and scrutinise in terms of their adequacy and appropriateness for mitigating the risks and impacts identified.
The environmental impact of the long-term maintenance regime for this scheme needs to be scoped in. Section 7.4.2.1 recognises that dredging or other possible management activities to reinstate the design profile of the flood channel have the potential for adverse effects on water quality due to the mobilisation of sediment and pollutants. However, it is unclear what mitigation has been factored in for this.	Biodiversity	Maintenance of the channel to restore the design profile was originally scoped into the Biodiversity and Water Environment topics, and has now also been scoped into the flood risk, health, landscape and visual, and materials and waste topics as per the PINS scoping response. Mitigation associated with this activity will be identified in relevant topic chapters.
There needs to be further assessment and detail regarding the options for the design of the new channel. This should include: cross sections with indicative	Biodiversity	Design of in-channel and riparian habitat is ongoing and details will be provided alongside the ES.

Comments	EIA Topic	RTS Project Response
flow levels (low, normal, and high flow, plus climate change), an assessment of channel design (geometry and planform) with regard to the proposed flow regime (an assessment of how the channel will be resilient to flow extremes) and further detail is needed to show how the channel can provide benefits for biodiversity and geomorphology.		
The loss of habitat that heavy and light maintenance causes must be scoped in. There needs to be assurance that the increased roughness and increased vegetation volumes, formed as the channel matures over time, has been built into the design of the flood relief channel dimensions, allowing ecological functionality. The channel should be designed to hold more mature river vegetation and only require minimal maintenance options for the large part. Plans should be designed to show the channel size and dimensions in relation to flood flows, plus the vegetation growth or geomorphological features which will accrete to visualise this scenario.	Biodiversity	Noted. See the above two responses.
Whilst we understand that the Spelthorne channel is proposed to flow through a significant length of historic landfill, there needs to be justification for the hard engineering as proposed, detailing why other options were ruled out. For example, puddle clay lining instead, setting back the sheet piling, lowering the concrete bed to enable a natural channel shape and substrate to be achieved. Any sheet piling that is in the vicinity of the river will need to consider the construction impacts of piling on fish spawning and migration, although we welcome the use of non-percussive methods wherever practical. Timing constraints (both for coarse and salmonid species depending on the location) may be required. There is a risk that the current channel designs (both the proposed ‘natural’ channel, and sheet piled sections) will provide unfavourable habitat owing to its trapezoidal, uniform shape. This may create a legacy of slow flowing, aggrading channels, with limited opportunities for healthy habitats to develop over time.	Biodiversity	Design of in-channel and riparian habitat is ongoing and details (including alternatives considered) will be provided in the ES. Construction effects on fish have been scoped into the EIA and mitigation (including seasonality of work) is being investigated.
Previous consultation has advised that: ‘In order to protect the Thames and associated wetland features, a 10 metre minimum ecological buffer must be required to be retained or restored between the top of the riverbank and any development of open green spaces, including lighting and storage of materials’. However, within this report, it is unclear how this has been addressed. At present, the channel design appears to be focused on flood flow capacity with limited regard to biodiversity and geomorphology and will not provide a functioning habitat for wildlife. Without justification it is difficult to understand why this option has been chosen. We strongly advise that this design is reconsidered.	Biodiversity	Design of in-channel and riparian habitat is ongoing and details will be provided alongside the ES.

Comments	EIA Topic	RTS Project Response
We welcome that BNG will be achieved through biodiversity improvements. However, a percentage goal should be scoped in, ideally 20%. The Phase 1 and UK Habitat surveys should be included, stating the metric calculations and the outputs. The report implies that it is not yet known which parcels of land are available for Habitat Creation Areas (HCAs). The report states: 'a series of potential HCAs are being considered'. There is a risk that the Scheme will miss out on multiple benefit opportunities and that habitat improvements will be secondary.	Biodiversity (BNG)	The design of habitat improvements is ongoing including that within the priority areas for habitat creation, mitigation or enhancement. The project aims to achieve biodiversity net gain alongside high quality habitats that improve ecological connections and nature recovery and balancing this with other project goals such as carbon sequestration .
The Scope should reference Defra's Pollinator Strategy and how the Scheme will contribute. Preference for an appropriate flower-rich seed mix should be adapted where possible. Short flowering species can be selected in regularly mown areas. Wildlife friendly mixes should be chosen over perennial rye grass heavy, amenity mixes where practicable. Mixes should be chosen with soil types in mind. Surrey Wildlife Trust has previously given good advice, that the habitat creation proposals take account of the 'historic land management practices encountered in the Thames floodplain and seek to create wet/seasonally flooded grasslands in low lying areas, and lowland dry acid grasslands in more elevated locations. It is unknown if these recommendations have been taken on board	Biodiversity (BNG)	Noted, this will be considered in the design.
It should be noted that the gravels being referenced in 4.1.2.9 ('the majority of channel in these areas will be excavated through topsoil and sub-soil into the underlying (Shepperton) gravels') would also lend themselves to acid grassland creation as well as the flood channel bed-creation mentioned in the report. This should be considered within the Scope.	Biodiversity (BNG)	The project will consider opportunities for habitat creation/enhancement within the local context. There is no acid grassland currently identified within the baseline from UKHab surveys however botanical advice will be sought to inform the ongoing L&GI designs if this is considered desirable. Provisional findings suggest that the delivery of acid grassland would result in a lower BNG score than other grassland types (e.g. 'other neutral grassland').
It appears that lots of data has been collected for the Scheme, however, there are currently no appendices showing habitat and species data. It would be useful to make this information more accessible (with a map or table) to aid in interpreting environmental impacts to particular habitats and species.	Biodiversity (BNG)	The PEIR/ ES will set out the baseline habitats and species through the use of appendices and maps. The EIA will also be digitised which will improve the accessibility of the data used in the assessment, the impacts identified and the mitigation proposed to reduce the resultant effects.
Section 7.3.1.9 states that 'All of the water bodies are likely to support a diversity of aquatic life including fish populations of varying sizes and assemblages (further detail is provided below)'. In the appendix, it lists the fish surveys that have been carried out, and so this section within the Scoping Report should be more definitive, using the available data.	Biodiversity	The ES will include a more definite list of fish species based on the data to date. A suite of fish surveys is proposed in 2023 which will allow an update to the baseline for the ES.
There is no information for managing INNS within the Scoping Report. It is of paramount importance that INNS are not spread further during construction or operation, and that adequate management, and mitigation is detailed. Ongoing monitoring of water quality and INNS needs to be carried out at all locations impacted by the scheme (during construction, and operation) before further decisions are made. This is to ensure there is enough data to inform	Biodiversity (INNS)	Assessment of INNS spread is included in the EIA. Surveys are ongoing and an INNS management plan will be developed in liaison with authorities.

Comments	EIA Topic	RTS Project Response
both the baseline, and environmental impacts arising from the Scheme. The significance of the impacts on water quality and INNS is unclear until this information is provided, and the impacts are assessed in detail.		
Section 7.3.1.5 of the Scoping Report explains a number of old quarries have been used for landfill or have been restored to a series of interconnected lakes. This existing interconnection needs to be shown so that we can understand the scale of increase of connectivity that may facilitate more movement of INNS from waterbody to waterbody, INNS resulting in adverse effects on designated and non-designated terrestrial and aquatic habitats and protected and notable species.	Biodiversity (INNS)	The existing and future hydraulic connections between waterbodies as a result of the RTS will be mapped in the PEIR and ES.
In the long term, it is likely that the increased pathways will introduce certain INNS to where they were not present before, even with mitigation. The specific topics that need further investigation for the next stage are: the significance of the spread on those habitats and any compensation, perhaps by aiding habitat management for affected species. These changes are likely to only be picked up by longer term monitoring. We therefore strongly advise a 5 to 10 year monitoring plan to be factored into the project. There needs to be full transparency about whether increased spread of INNS is expected, with future requirements and justification fully set out within the EIA.	Biodiversity (INNS)	Assessment of INNS spread is included in the EIA. Surveys are ongoing and an INNS management plan will be developed in liaison with authorities; this may include proposals for longer term monitoring of INNS.
There is no mention of expected fish movements within the new flood channels, and lakes. Please note that at Chertsey weir, the geomorphology of the weir pool (which includes a shoal) is very valuable and sensitive. There is no indication that there are plans to alter this, but this will need to be protected. If there is a possibility that the weir pool at Chertsey could be impacted by this scheme, this will need to be scoped into the EIA. This scheme could impact on fish migration as fish may swim up the flood relief channel rather than up the Thames, especially if the flood relief channels have a sweetening flow	Biodiversity (Fish Passage)	Effects on weir pools in depleted reach of the River Thames have been scoped into the EIA already, and this weir pool (and those on other bypassed weirs) included in scheme footprint to enable habitat mitigation if needed.
The EIA should include an assessment of implications for movement of fish, through connection via the new flood channel. Specifically, what level of connectivity will the lakes have during different flow scenarios? Which of the lakes are fished by angling clubs? Have they been consulted? Do the lakes have a need to restrict the movement of their fish stocks, or will they benefit from the potential influx of fish via the Thames? In addition, details of fish habitat and fish passage in different flows should be assessed.	Biodiversity (Fish Passage)	The effects on movement of mobile species such as fish are included in the scope of the EIA and will include consideration of the questions asked within this comment. No change to scoping. Fish data DBA being produced and fish surveys are ongoing.
For the proposed weirs on the new flood channels, it is unknown if these weirs will be passable to fish, or if that is the desire. It's also not clear from the Scoping Report where flood flows will sit within the channel, and therefore interpretation of the Scheme for fish habitat is difficult to visualise. An	Biodiversity (Fish Passage)	All weirs on the flood channel will incorporate multi-species fish passes. Design of in-channel and riparian habitat is ongoing and details will be provided alongside the ES; this includes consideration of habitat for fish species.

Comments	EIA Topic	RTS Project Response
assessment of the suitability of the channel as fish habitat should be completed, answering questions such as: where are the opportunities for fish refuge? Are we relying on fish using lakes as refuge to escape being washed out? Would they be able to traverse the weirs in these conditions? This is not factored into the channel design and there is no mention of backwaters or similar. These can provide ideal habitat opportunities and we strongly recommend this is considered in the design of the scheme.		
Previous consultation has advised that: 'Online lakes, in particular the gravel pits will change from being oligotrophic (low nutrient) to eutrophic (high nutrient) ecosystems. There could be an impact on the carp fisheries through nutrient enrichment and escapement of fish, plus a possible increase in algae, a decrease in zooplankton and an increase in silver fish'. The impact on fish populations should be assessed and mitigated for. Please be aware, eel herpies virus is present in Ellis and Sheepwalk Lakes	Biodiversity (Fish Passage)	Effects on habitats and species (including fish) from changes in nutrient levels as the augmented and operational flow in both the flood channel and intersected waterbodies will be assessed in the EIA. No change to scoping.
The report advises that the flood channel intersects the course of several rivers, including the Abbey River. The Abbey River will be allowed to flow into, across and then out of the flood channel in order to maintain the local regime in the Abbey River as close as possible to existing conditions. There are possible hydro-morphological impacts to the Abbey River as a result of this. We are pleased to see this has been scoped into the EIA. The possible impacts on connectivity should be scoped in, this will need to be assessed to ensure the retention of fish passage. Whilst the flood channel is being dug in this location, flow will need to be maintained in the Abbey River or there will be significant adverse impacts from this too.	Biodiversity (Fish Passage)	Effects on the Abbey River will be assessed in the EIA including impacts on connectivity, changes in flow and the retention of fish passage. No change to scoping.
We note that in section 7.4.1.1, the possible impacts of de-watering, including the entrainment of fish in pumps, has been highlighted. Whilst we are pleased to see this has been mentioned, we would expect screening to be used to prevent this. We would also expect to see mitigation measures in place to prevent any impact to fish spawning and eel migration	Biodiversity (Fish Passage)	Construction methods to protect fish will be included in the mitigation set out in the EIA. No change to scoping.
There needs to be further assessment of the potential mobilisation of sediments caused by the Scheme, both during construction and as part of the long-term management for the Scheme.	Water environment	A fluvial audit has been undertaken.
With regards to Section 4.1.2.14: Channel Through Existing Lakes, there needs to be an assessment of the quantities of silt in the lakes currently, and the potential for all other sediment inputs. The report does identify potential for increased sediment load from urban development (and construction), agricultural runoff, channel modification and boat wash however, it does not identify burrowing activities of non-native crayfish or mitten crabs as a potential fine sediment input. This should inform both a construction silt	Water environment	Silt mitigation is included within the project (channel maintenance to restore the design profile is primary mitigation and siltation management during construction is tertiary mitigation). In addition, modelling is being undertaken to understand sediment processes and impacts to the lakes from augmentation and flood flows. Results will refine any necessary silt mitigation at operational stage. Findings and assessment of the sources, pathways and sinks will be available within the ES.

Comments	EIA Topic	RTS Project Response
mitigation plan and an operational silt mitigation plan. As the augmentation mechanism is not clear within the report, it is also unknown if there will be an additional source of sediment entering the system. The report states: 'Introducing an augmented flow and operational flow into the flood channel and intersected waterbodies has the potential for adverse effects on the chemical water quality of WFD and non-WFD lakes from the introduction of river water to previously unconnected lakes containing nutrient rich water and potentially contaminated sediments from sources including increased scour within the existing and new channels'. However, there is currently no suggestion of mitigation.		
With regards to fish ecology and fisheries, the Marine Management Organisation noted: 'Potential impact of works on fish spawning areas due to silt smothering/sediment disturbance. Advised to contact the Centre for Environment, Fisheries and Aquaculture Science or Environment Agency (in their capacity as a statutory consultee) to identify appropriate information relating to these receptors to ensure that assessment is appropriate'. There is currently no evidence within the Scoping Report to suggest that this work has been completed.	Biodiversity	The effects on fish are included in the scope of the EIA. A fish data DBA is being produced and fish surveys are ongoing. MMO consulted CEFAS technical advisors in providing their scoping response.
We understand that the new channel will be non-navigable. However, how the new channel interacts with the existing Thames main channel in terms of navigation should be considered. Primarily, ensuring that the locations where the RTS channels interact with the Thames are designed to minimise disruption to navigation. Firstly, design considerations ensuring new channels are well signed, buoyed or otherwise adequately marked or screened to prevent craft accessing. Secondly, consideration should be given to the effect of river flow leaving the main river, or returning to the main channel and how that may affect navigation. Although in higher flows situations we advise via the use of yellow or red boards whether the river is navigable, design should attempt to minimise risks of craft being drawn into structure or the top of each channel, or prevent as far as possible dangerous flows re-entering the main river at the bottom of the RTS channels. For example, by avoiding as much as possible a perpendicular return flow to the channel.	Traffic and transport	Effects on navigation of the flood channels and the effect of increased boat traffic using the River Thames was scoped out of the assessment and this has been accepted by the PINS Scoping Opinion. Effects on navigation of the River Thames caused by potential changes in water levels as a result of the augmented flow have been scoped into the assessment. There will be no direct navigation between the River Thames and the flood channels. Each channel will have a gated flow control structure at the inlet and these along with channel outlets will be designed with the health and safety of users of the River Thames in mind.

5 EIA Scoping comments from National Highways and RTS project responses

Table 5-1: EIA Scoping comments from National Highways and RTS project responses

Comments	EIA Topic	RTS Project Response
It should be noted that it will be important to assess the SRN junctions as well as routes to reach the SRN, particularly the M3 and M25.	Traffic and transport	The extent of the junction assessment will be determined by the 5% exceedance threshold (which will also provide the extent of impact in absolute numbers). This will consider all junctions, including those on the SRN. M25 J13 and J14 were also the subject of the additional traffic surveys undertaken in May and June 2022 and will therefore be considered for assessment subject to the results of the trip generation and distribution exercise.
However, the context of the development in a congested, urban, Greater London location should be factored when determining an appropriate threshold for significance. National Highways require a robust assessment of additional trip generation and mitigation of impacts for SRN junctions and this will be reviewed in light of the trip generation through SRN junctions in terms of absolute numbers, rather than as a percentage change on existing flows.	Traffic and transport	The trip generation and distribution will inform whether change in flows exceed the 10% threshold. This percentage change will also be provided in absolute numbers to inform whether junction testing at SRN junctions is required.

6 EIA Scoping comments from the Marine Management Organisation (MMO) and RTS project responses

Table 6-1: EIA Scoping comments from the MMO and RTS project responses

Comments	EIA Topic	RTS Project Response
Paragraph 3.5.4 references that the South Inshore and Offshore Marine Plan Areas will be taken into consideration while preparing the EIA and ES. The MMO considers that for the final ES a table should be produced to highlight all policies within these plans and whether these have been screened in or out, including justification. The MMO welcomes any further discussions with RTS in relation to this.	Water environment	Acknowledged with thanks.
Consideration is required on all areas of conservation of habitats and species, and appropriate assessments must carried out where required. These areas include but not limited to: Special Protection Area (SPA) UK9012171 - South West London Waterbodies Special Area of Conservation (SAC) UK0030246 - Richmond Park RAMSAR UK11065 - South West London Waterbodies	Biodiversity	The sites listed were all considered in the Habitat Regulations Screening Assessment to Support EIA Scoping. The HRA Screening will be reported in the ES as well as the HRA. The ES will also include any wider assessment of effects.
The MMO defers to Natural England as the Statutory Nature Conservation Body (SNCB) on the suitability of the scope of the assessment with regards to Marine Protected Areas (MPA).	Biodiversity	No response required.
Consideration is required on the impacts to Special Site of Scientific Interest (SSSI). These areas include but not limited to: SSSI • 1477753 - Bushy Park and Home Park SSS • 1000342 - Richmond Park SSSI • 1007240 - Knight & Bessborough Reservoirs SSSI • 1007242 - Kempton Park Reservoirs SSSI • 1000115 - Dumsey Meadow SSSI • 1007243 - Thorpe Park No. 1 Gravel Pit SSSI • 1000366 - Thorpe Hay Meadow SSSI	Biodiversity	Consideration of these sites is included in the PEIR and will be reported in the ES as appropriate.
There is potential for introduction of invasive non-native species (INNS), it is appropriate as such that an assessment of INNS has been proposed. This INNS must detail mitigation measures for each site, including consideration of equipment and materials entering site.	Biodiversity (INNS)	Noted, mitigation measures will be set out in the Environmental Statement.
There is the potential for sediment disturbance to result in smothering of benthic fauna and mobilisation of contaminants.	Biodiversity	Noted. This effect is scoped in.

Comments	EIA Topic	RTS Project Response
It is stated that aquatic invertebrates (including nationally rare species) will be scoped in as receptors and that macrophytes and phytobenthos will be considered as ecosystem indicators under the assessment of Habitats of Principal Importance (HPIs) (as per sections 7.4.3.2-7.4.3.3 of the Scoping Report). While this is appropriate, it is unclear what exactly will be included under “aquatic invertebrates”. The MMO would expect any benthic invertebrate assemblages below the Mean High Water Springs (MHWS) (i.e., at or downstream of Teddington Weir) that would be impacted by the proposed works to be included as receptors. This should be clear within the Environmental Statement.	Biodiversity	Aquatic (and terrestrial) invertebrates are included as receptors in the PEIR. These will be assessed in further detail in the ES. Benthic invertebrate assemblages below the Mean High Water Springs (MHWS) will be assessed in the ES as appropriate as part of this assessment.
The MMO agrees with the construction and operation activities and associated likely significant effects that have been scoped into the impact assessment (see sections 7.4.1 and 7.4.2 of the Scoping Report). The MMO notes that the suspension of sediments and release of any associated contaminants will be assessed in relation to the presence and management (e.g., dredging) of a new flood channel during the operation phase (see section 7.4.2.1 of the Scoping Report). However, we would also expect the same pressures to be assessed in relation to the riverbed lowering activities during the construction phase; however, this doesn’t appear to be explicitly scoped in (see section 7.4.1.1 of the Scoping Report). The Applicant should confirm whether they intend to include this in their impact assessment for benthic ecology receptors.	Water environment	Response to water element: Noted. This effect is scoped in in the Water Chapter: "River bed and bank lowering has the potential for adverse effects by releasing or disturbing sediment causing an increase in turbidity" Response to benthic ecology receptors: Effects from the flood channel during operation and the bed lowering at Desborough Cut on benthic ecology receptors will be assessed in the EcIA.
Activities/pressures are scoped in or out of the impact assessment in a broad sense rather than for each receptor group, which leaves it unclear whether each scoped-in activity will be assessed for benthic ecology receptors specifically. It should be indicated within the ES if it is intended to exclude benthic ecology receptors from the assessments of any activities that affect aquatic habitats below the MHWS. If so, then justification for not including benthic ecology receptors in these assessments must be provided.	Biodiversity	Effects on benthic ecology receptors have been scoped into the EcIA. These are reported in the PEIR and will be assessed in more detail for the ES for each relevant activity.
The MMO has determined that there was minimal impact on coastal processes from works. Please ensure that the environmental statement provides appropriate justification for scoping out of this impact.	Water environment	Acknowledged with thanks.
The MMO would expect further detailed information on the proposed construction works to be included in the Preliminary Environmental Impact Report (PEIR)/ES, including any in-river piling works and other noise-generating activities. The effects of underwater noise and vibration on sensitive marine receptors (including migratory fish species) should be appropriately considered	Biodiversity	When detailed information on construction is available this will be provided in the ES. It is considered likely that in most cases airborne noise will have a greater impact on human receptors than waterborne noise so will be the focus of the noise and vibration assessment. An assessment of waterborne noise or vibration on aquatic receptors will be carried out within the biodiversity topic.

Comments	EIA Topic	RTS Project Response
There is potential impact of works on fish spawning areas and fish stock from these proposed works.	Biodiversity	Effects on fish spawning / stock have been scoped into the EcIA. Fish are receptors in the PEIR and will be assessed in more detail for the ES for each relevant activity.
In preparing the ES, you should identify and assess the potential impacts to fish receptors arising from habitats loss, underwater noise, vibration, increased suspended sediment concentrations, and potential reduction in water quality. The MMO would expect you to consider whether the proposed in-river construction works are likely to overlap with the sensitive periods of spawning or migration for fish receptors.	Biodiversity	Effects on fish have been scoped into the EcIA. Fish are receptors in the PEIR and will be assessed in more detail for the ES for each activity.
The MMO would expect the method(s) of piling proposed for use (for example percussive or vibropiling) to be specified and a more comprehensive assessment of potential impacts of underwater noise in relation to fish receptors.	Noise and vibration	This impact is within the scoping report and will be assessed in the EcIA.
The MMO has also noted that the transboundary effects screening exercise has been undertaken. No transboundary impacts relating to fish or fish ecology have been identified and has screened out the transboundary effects. Given the project area's lack of proximity to any international boundaries or territorial waters, the MMO agrees that transboundary impacts can be scoped out of further assessment.	Water environment	Acknowledged with thanks.
The MMO recommends that the ES chapters such as "biodiversity" are separated into subchapters relating to specific receptor groups, for example a section relating specifically to aquatic fauna.	Biodiversity	The PEIR identifies individual receptors and reports as appropriate. The structure of the ES is to be confirmed.
The document (section 7.2.1.5) refers to biodiversity surveys will be undertaken of aquatic Invertebrates (including Invasive Non Native Species (INNS)) to inform the baseline. As part of the aquatic invertebrate survey the MMO would want to see invasive shellfish species such as Chinese mitten crab (*Eriocheir sinensis*) considered.	Biodiversity	Chinese mitten crab were subject of previous INNS surveys - none found. No further surveys proposed.
The MMO acknowledges the planned biodiversity survey for white clawed crayfish (*Austropotamobius pallipes*) which are native and protected, and is in agreement with this approach.	Biodiversity	No response required.
Several models have or are being undertaken for the ES. The MMO considers that the data generated may allow unbiased statistical assessment although the methods are yet to be fully described. The MMO expects these to be fully described in the EIA report.	EIA Methodology and Scope of assessment	Methods for the EIA are presented within the PEIR and will be reported in more detail for ES if required.
The heritage environment has been appropriately scoped into further assessment in relation to the importance of the local area to the heritage environment. Further information however is required to determine potential	Cultural heritage	The local heritage environment is reported within the 'Cultural Heritage' chapter of the PEIR.

Comments	EIA Topic	RTS Project Response
impacts of the development in relation to heritage assets and the further assessments are clearly outlined within the scoping report.		
The statements should include consideration of buried assets, i.e. undiscovered assets and both designated and undesignated heritage assets in relation to potential impact from disturbance during construction works.	Cultural heritage	The PEIR includes consideration of buried heritage assets within the cultural heritage chapter.
The MMO defers to Historic England on the suitability of the scope of the assessment with regards to archaeology and cultural heritage impacts.	Cultural heritage	Historic England have been consulted on the scope of the EIA.
The MMO recommends early engagement with the Port of London Authority (PLA) to ensure that any mitigation measures regarding impacts on shipping and navigation are adopted appropriately. They are also best placed to determine if a risk assessment regarding river navigation is required.	Traffic and transport	The PLA was last contacted in November 2022. It responded as follows: “Details of the scheme have been passed on to our Planning team but as it appears to be upstream of Teddington, the scheme would fall outside of the PLA’s jurisdiction.”
The Environmental Statement needs to consider impacts during and after construction works and cumulative effects in relation to river traffic. This should be informed by engagement with local users and marine services.	Traffic and transport	The feasibility of using water borne transport during construction is ongoing. Engagement with local users and marine services will take place if it is determined that water borne transport is a viable option. This will also be addressed with the Transport Assessment.
The MMO defers to the PLA, the Maritime and Coastguard Agency (MCA) and Trinity House on the suitability of the scope of the assessment with regards to navigational vessels and safety.	Traffic and transport	Noted.
The ES must demonstrate that no deterioration in water quality will result during and after the construction works.	Water environment	Any deterioration in water quality as part of the construction works will be assessed as part of the ES.
The MMO defers to The Environment Agency on the suitability of the scope of the assessment with regards to water quality.	Water environment	No response required.
A Water Framework Directive (WFD) assessment may be required and detailed methodology provided for each stage of the construction works at Teddington.	Water environment	Acknowledged with thanks.
Any mitigation proposed to prevent/reduce any reduction in water quality must be detailed, demonstrating how they will avoid deterioration in waterbody status and damage to protected features. Any monitoring proposed must also be detailed. This must include any mitigation proposed to reduce/avoid reduction in quality of shellfish waters experienced from increased boat traffic. Details of dredging methodologies and volumes of silt expected to also be provided.	Water environment	Noted, further information on mitigation and bed lowering methodologies will be provided at the appropriate time in the DCO process.
If any bespoke sediment sampling is required/undertaken for sediment quality, these should adhere to the MMO guidelines, especially with regard to the selection of a validated laboratory.	Water environment	We have used accredited laboratories.

Comments	EIA Topic	RTS Project Response
A flood risk assessment including modelling is required to demonstrate that the works will not result in any increased flood risk downstream. This must include an assessment of any potential impact on tidal flood defences. The assessment must adhere to the EA's latest flood risk climate change guidance.	Flood risk	Agreed and covered.
A flood risk permit may be required from the EA. Please contact - Thames@environment-agency.gov.uk.	Flood risk	Agreed and covered.
The MMO defers to the Local Authority and Public Health England on the suitability of the scope of the assessment with regards to population and human health impacts.	Health	Noted.

7 EIA Scoping comments from Historic England and RTS project responses

Table 7-1: EIA Scoping comments from Historic England and RTS project responses (General)

Comments	EIA Topic	RTS Project Response
It is noted that a study area was agreed between Historic England and the applicants for the Setting Study produced in 2018 - which was to be greater than 500m established for the two DBA's. As such the eventual Environmental Statement should encompass all areas to which the presence of the 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. It is important that the assessment is designed to ensure that all impacts are fully understood. Techniques such as photomontages and computer-generated views analysis imagery are a useful part of this. This would be particularly important as there needs to be an understanding of the impact on the setting of the Scheduled Monuments and listed buildings affected, as well as the character and appearance of Conservation Areas, and Parks and Gardens of Special Historic Interest. It will be important that the setting of heritage assets is fully understood and also the contribution the setting makes to the significance of the assets. In this respect an analysis of the views from within, out of, and across the areas affected will be vital. With regard to designated heritage assets there needs to be an understanding of what makes these assets 'special'. Significance can be harmed or lost through alteration or destruction of the heritage asset or through development within its setting, so it needs to be demonstrated how this proposal would impact on character and significance. An integrated approach to assessment will be required for this project that demonstrates an understanding of how all the individual elements of the historic environment come to together to form a 'special place', and which fully analyses how the development proposals may impact upon the specialness of the areas affected, and the assets within them.	Cultural heritage	This is being addressed as part of the setting study which wasn't available at the time of the scoping report.
We note in particular the high probability for the discovery of non-designated archaeological remains within the development areas that cross previously undeveloped land. If any such remains were discovered that directly related to designated heritage assets, they may be deemed to be of equal significance to those protected by national designation. We note in particular the high potential for the discovery of prehistoric archaeological remains on the gravel terraces of this area. It will be for the conservation officers and archaeological advisors based at or working for the relevant Borough Councils and Surrey County Council to provide further advice and commentary in relation to this. The two exceptions would be the Greater London Archaeological Advisory Service (GLAAS) and the Regional Archaeological Science Officer (in relation to geoarchaeological matters),	Cultural heritage	Stage 1, 1a and 2 evaluation works are continuing at sites identified as being of high archaeological potential. Discussions to inform design and mitigation are ongoing, and would include the discovery of remains related to designated assets. This would mainly apply to the Chertsey Abbey SM and the enclosure on Laleham Golf Course SM.

Comments	EIA Topic	RTS Project Response
both based at Historic England. Their specific comments are included below. It is noted that a great deal of exemplary work has been undertaken on this scheme in order to assess and evaluate the potential and significance of this stretch of the Thames floodplain. The DBA and cultural heritage chapter are generally comprehensive. The work has been geoarchaeologically-led, which has been required given the floodplain location and potential for relatively deeply buried archaeology and palaeoenvironmental remains within natural alluvial / fluvial sediments. It has shown that, outside of former aggregates extraction sites, the buried deposits are likely to be rich in palaeoenvironmental and potentially also archaeological remains.		

Table 7-2: EIA Scoping comments from Historic England and RTS project responses (Site specific comments)

Comments	EIA Topic	RTS Project Response
This specific part of Chertsey has great historical importance as it would have formed part of the wider Chertsey Abbey estate. The scheduling boundary of the Abbey reflects the core of the monastic site; however, the estate extended well beyond this (arbitrary) boundary, incorporating much of the surrounding landscape to provide support for the Abbey in terms of farming, industry, and trade. This is demonstrated for example, by the medieval ridge and furrow to the north of the core Abbey site which provides evidence of cultivation, and the presence of Abbey Mills which is separate from the main Abbey site. Water management is a particular feature of the Abbey site; the scheduled area contains important archaeological remains of fish ponds, moats, and other water management features, and the Abbey's location and connection with the River is therefore particularly significant. It will be important therefore, for the EIA chapter to sufficiently characterise the archaeological resource in this area, and adequately reflect the historic connection of this area of land with the Abbey site.	Cultural heritage	Evaluation works have taken place at Abbey Meads to allow such a characterisation and are also planned at Laleham Golf Course (which is assumed to have once been part of the Abbey lands). Discussions are also taking place between YA and the project team to determine the precise nature of works along the Abbey River so a suitable scheme of evaluation and mitigation can be designed.
The area defined as Laleham Burway includes a scheduled earthwork enclosure in the northern part of the site. The earthwork is the possible site of a temporary Roman marching camp, which is evident from the uniform nature of the enclosure and the rounded corners. The location next to the River Thames may have been of strategic importance. It has also been suggested that it may have been a medieval stock enclosure given the proximity to Chertsey Abbey and the Abbey Meads. As this area has been identified as a likely candidate for habitat creation, it will be important to adequately characterise the archaeological and heritage resource. An important part of this characterisation will be to understand more about the function and date of	Cultural heritage	Stage 2 trial trench evaluation is planned and SMC obtained which will assist with characterisation, date and function. Its setting is a modern (now-disused) golf course which contributes very little to its significance. This has been covered by the setting study.

Comments	EIA Topic	RTS Project Response
the scheduled monument, in order to fully understand what the impact of the proposals might be on the site - in particular, through development within its setting.		
We would reiterate the comments of the Planning Inspectorate that there needs to be further clarity on the differences of approach in the assessment of cultural heritage and the LVIA. The Environment Statement will need to clearly set out its method for assessing the impacts to historic landscape character and highlight where the more significant impacts would occur.	Cultural heritage	Discussions will take place with the LVIA team and effect on historic landscape is covered by the setting assessment.
We concur with the comments of the Planning Inspectorate that there is a lack of clarity on construction traffic routing (related to transportation of non-hazardous materials) and as such it is not possible to ascertain the effect this may have on the setting of heritage assets. We agree that the Environmental Statement should provide clear detail on the routes for construction traffic and address any potential impact (or not) on designated heritage assets. We also agree that the Environmental Statement should assess whether the demolition of buildings or structures as part of the scheme would result in any harm to heritage assets or their setting. The effects of any new lighting provided as part of the scheme (or associated works), on heritage assets, will also need to be considered within the Environmental Statement	Cultural heritage	Transport and lighting will be considered when effect on setting is assessed. The demolition of buildings and structures will also be included.
The Cultural Heritage section of the Scoping Report contains a ‘significance criteria’ and considers various magnitudes of change that could have a high through to negligible level of impact. We are unclear as to the difference between the term “very minor”, used in the “low” category and “slightly” used in the “very low” category. We do not feel the distinction between the “low” and “very low” categories is meaningful and would request the removal of “very low” category.	Cultural heritage	The methodology set out in the DMRB has been used as a guide for the assessment methodology. Table 3.4N (LA104 Revision 1) has five levels for magnitude of impact; major, moderate, minor, negligible and no change. This makes a distinction between minor and very minor (negligible). The current terminology will be used in the ES
We are pleased to see a thorough approach has been taken with regard to the updated Desk Based Assessment. However, the potential impacts from the works concerning the weir upgrades and fish passes are not clear. This will need to be addressed in the Environmental Statement. The Archaeological Priority Area (APA) descriptions for a number of London boroughs have been updated in recent years and this should be referenced. Specifically, LB Richmond now deploys the tiered system for its APA’s and this will need to be considered and incorporated into the assessments for the Environmental Statement. We would like to see the Teddington and Moseley sites scoped in going forward. We do not agree that the potential for Palaeolithic archaeology is low, as the scoping report suggests. We would also request that more information is provided about the impacts on industrial archaeology, such as the weirs and the sites of the hulks on the eyots.	Cultural heritage	These issues can be addressed within the ES.

Comments	EIA Topic	RTS Project Response
We concur with the Planning Inspectorate's request that the Environmental Statement and any mitigation strategy should be clear in its approach to the discovery of archaeological remains that could be deemed of national importance. This should include a strategy for dealing with archaeology that should be preserved in situ.	Cultural heritage	Consultation with relevant stakeholders will take place regarding mitigation strategies and all WSIs are approved by Archaeological Advisors. Such a scenario will be addressed through that process. LPA feedback indicates that they are satisfied with the approach to archaeology.
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. Previous evaluation work for the scheme is included with other past work in the 'events' sections (DBA, Section 5). This is reasonable but it would be helpful to see where we can be confident and where the baseline evidence remains uncertain. We are also not shown (on a figure) where the evaluation work to date has been done. This links with the mapping of potential (DBA Figs 48 & 49 and section 11.5.3). We have concerns with the 'moderate potential/risk' category. We also note it is discussed in 11.5.3 in terms of risk, not potential. However, the mapping shows potential. We do not feel that areas of unknown potential should be lumped together with areas surrounding those of high potential, as well as areas of high palaeoenvironmental potential and all classed together as of moderate risk / potential. We can see that they could all present a moderate level of risk, but the figures are mapping potential, not risk. By lumping different things together, makes it difficult to disentangle the different components of this category and in particular the areas of unknown potential. This is important, as there should be an intention to target for evaluation any areas where the potential is unknown. We would like to see a figure where areas that have not been covered in the deposit modelling to date or by any form of fieldwork are identified and mapped as of unknown potential.	Cultural heritage	Figures showing where assessments have taken place were included in the scoping report. This has not been updated for our PIER as further evaluations were not complete at the time of writing. The ES can include these further evaluations and Figures can also be produced to map the "unknown" areas.
No information is provided on how deep the evaluation trenching done to date has gone and/or whether trenching or test pits have adequately evaluated the potential for waterlogged archaeology in areas of high palaeoenvironmental potential. If evaluation of these deeper wet areas has been focused on boreholes and perhaps test pits, can we be confident that waterlogged archaeology does not survive? Neither the DBA or cultural heritage chapter say much or make much provision for waterlogged archaeological remains. Waterlogged artefacts and structures of all periods are likely to be rare and important (even potentially nationally important). Therefore: a) areas with waterlogged palaeoenvironmental preservation might be better mapped separately and the potential for rare but important archaeology to also exist in these areas flagged-up; b) an approach to mitigation of areas where the potential for deeply buried waterlogged remains has been identified should be outlined in the Scoping document, cultural heritage chapter. This is likely to require a different approach to the 'archaeological monitoring of construction	Cultural heritage	The fieldwork reports will be included as Technical Appendices to the ES which will provide information on depth. All fieldwork reports are approved by stakeholders and areas of potential for waterlogged archaeology are known. Areas have been identified (e.g. Thorpe Hay Meadow and Shepperton) where stage 2 trenching could not take place due to waterlogging. These have been flagged up and the project team is aware that works will need to take place during construction. Areas can be mapped separately.

Comments	EIA Topic	RTS Project Response
excavations', or the 'programme of geoarchaeological investigation and palaeoenvironmental sampling', if this is reliant on boreholes (9.6.2.2). It might also need to be done in a controlled archaeological manner at the same time as construction work (to ensure access to deep deposits). Therefore, time should be allowed for this in the construction programme.		
The DBA identifies the potential for a network of palaeochannels to preserve archaeological and palaeoenvironmental information (7.3.1 - 7.3.4; 7.45). It needs to be emphasised here and in the Potential section (11.3.2), as well as in 10.1.1 and 10.2.1 (and elsewhere), that these will not all be features with surface expression. As well as the palaeochannels mapped through lidar interpretation, palaeochannels could also be buried at depth and no longer be visible at the ground surface. Therefore in 7.4.6 (Implications of the Geoarchaeological Record for the Study Area) it should be made clear that any impacts into floodplain deposits, not just into palaeochannels identified through lidar, need prior geoarchaeological assessment to ascertain depth and character of buried deposits and the potential for palaeochannels buried at depth. This point also links to the need for deposit modelling to be threaded through the archaeological mitigation (Scoping document, cultural heritage chapter, 9.6.2.2, see below).	Cultural heritage	The stage 1a and 2 evaluations have confirmed the presence of palaeochannels. Where borehole survey has been conducted, a deposit model has been produced. These are included in the fieldwork reports.
DBA paragraph 7.4.7 discusses the skull assemblages from the Thames and its tributary channels. Firstly, because the current channel probably did not exist in the Bronze Age and Medieval periods, it should be noted that such skulls might also be associated with the palaeochannels. However, secondly, it is surely likely that the Thames skulls may have been eroded and redeposited like those in the Walbrook. A geoarchaeological assessment taking account of landscape and taphonomic processes would be appropriate should such skulls be recovered as part of archaeological work.	Cultural heritage	This can be taken into account should any such remains be encountered.
It is not clear from the DBA where there is deposit modelling at sufficient resolution to provide confidence in our understanding of deposit character, sequence, distribution, potential and significance of the buried deposits. Likewise, we are not told where we do not yet have good data coverage. (See point above about mapping unknowns). DBA paragraph 7.4.9 notes the potential for islands of higher ground to exist within the floodplain and their significance for past human activity. This emphasises that detailed deposit models, building on those already constructed for the scheme need to be constructed for any areas of impact, to inform any further evaluation and mitigation. The deposit models should be updated following fieldwork and be used to inform post excavation and to feed into publication and wider sharing of the project findings. This need for deposit modelling to be threaded through	Cultural heritage	The DBA summarises previous work and the deposit models are available where borehole survey has been conducted and included with fieldwork reports. The evaluation works are ongoing. All fieldwork reports will be included as Technical Appendices to the ES.

Comments	EIA Topic	RTS Project Response
the approaches to mitigation should be included in the Scoping document Cultural Heritage chapter, 9.6.2.2.		
For both the Spelthorne and Runnymede channels Table 21 (Potential, significance and impact on heritage assets) identifies potential for palaeoenvironmental and archaeological remains associated with “Any intervention in to the Shepperton Gravels, Langley Silt and identified palaeochannels”. Although we agree with regard to Palaeochannels, we question this in relation to Shepperton Gravels and Langley Silts. These are both Pleistocene deposits and have (some, limited) potential for Palaeolithic remains. Linked to 10.2.4 and 10.1.2, we would question what is meant by “a moderate level of potential for the discovery of artefacts within the Thames gravels from the Palaeolithic period onwards”? The Thames gravels were deposited in the Pleistocene so might contain Palaeolithic remains (only; and these are likely to be few and far between). However, the surface of the gravels - at the interface with the overlying alluvium could have potential for Late Upper Palaeolithic, Mesolithic and later prehistoric remains… is this what the text is implying? It needs to be explained more clearly.	Cultural heritage	The potential will be explained more clearly in the ES.

8 EIA Scoping comments from Kent County Council and RTS project responses

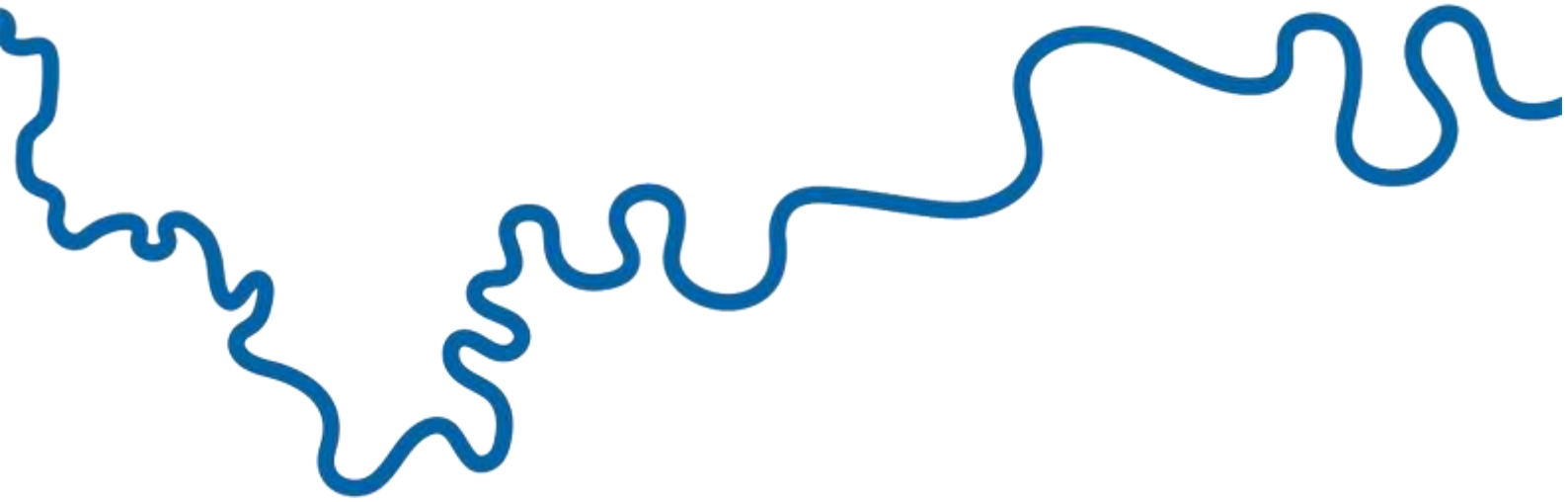
Table 8-1: EIA Scoping comments from Kent County Council and RTS project responses

Comments	EIA Topic	RTS Project Response
Only comments regard indirect impacts to the county and will welcome continued engagement.	Overarching	Noted.
The River Thames stops being tidal at Teddington and therefore much of the proposed works are along the river heads, upstream away from Kent. It is therefore the County Council's view that the impacts, including those to habitats and species within Kent are likely to be minimal. It is expected that the applicant will implement measures to avoid impacts including to habitats and species adjacent to the works area and subsequently any impacts to features in Kent would be further reduced.	Cumulative effects	Noted. We will implement measures to avoid impacts including to habitats and species adjacent to the works area and subsequently ensure any impacts to features in Kent would be further reduced.

9 EIA Scoping comments from London Borough of Kingston Upon Thames and RTS project responses

Table 9-1: EIA Scoping comments from London Borough of Kingston Upon Thames and RTS project responses

Comments	EIA Topic	RTS Project Response
It is considered that the Council have no objection to the proposals, although would like the following comment to be taken into account:	Overarching	Noted.
The main potential impact to the Royal Borough of Kingston would appear to be the speed of the water in the River Thames as it passes between the upstream and downstream weirs generally or at times of increased rainfall. The Environmental Statement should consider the impact of this in relation to nature conservation, biodiversity, safety for those in or adjacent to the river and use of the river for leisure.	Water environment	Impacts of flow both in flood and drought will be assessed within the ES.



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