The Planning Inspectorate
Yr Arolygiaeth Gynllunio

SCOPING OPINION:

Proposed River Thames Scheme

Case Reference: WA020001

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

15 November 2022

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1. INTRODUCTION

1.0.1 On 05 October 2022, the Planning Inspectorate (the Inspectorate) received an application for a Scoping Opinion from the Environment Agency and Surrey County Council (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed River Thames Scheme (the Proposed Development). The Applicant notified the Secretary of State (SoS) under Regulation 8(1)(b) of those regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development and by virtue of Regulation 6(2)(a), the Proposed Development is 'EIA development'.

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

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000013

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000014

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000016

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000015

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000017

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000018

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000019

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000020

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000021

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000022

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000023

http://infrastructure.planninginspectorate.gov.uk/document/WA020001-000024

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

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

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

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

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

https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

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

2. OVERARCHING COMMENTS

2.1 Description of the Proposed Development

(Scoping Report Section 4

ID	Ref	Description	Inspectorate's comments
2.1.1	4.3.2.5 to 4.3.2.6, 6.5.2.1	Long – term maintenance	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.
2.1.2	n/a	Channel design and functionality – technical advice from the Environment Agency	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.

2.2 EIA Methodology and Scope of Assessment

(Scoping Report Section x)

ID	Ref	Description	Inspectorate's comments
2.2.1	Section 4.4	Decommissioning	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.
2.2.2	Section 5.4.6 and Appendix D	Major accidents and disasters	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).
2.2.3	10.5.1.1, 11.5.1.1, 12.5.1.1, 14.5.1.1, 15.5.1.1, 16.5.1.1 and 17.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site in relation to the following Chapters: flood risk, health, landscape and visual impacts assessment (LVIA), noise and vibration, socio-economics, soils and land and water environment	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.
2.2.4	Section 19.5	Transboundary	The Inspectorate on behalf of the SoS has considered the Proposed Development and concludes that the Proposed Development is unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State. In reaching this

ID	Ref	Description	Inspectorate's comments
			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/

3. ENVIRONMENTAL ASPECT COMMENTS

3.1 Air Quality

(Scoping Report Section 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.1.1	6.5.1.1	Construction – emissions from use of non-road mobile machinery (NRMM)	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.
3.1.2	6.5.1.1	Construction – air quality changes from movement of hazardous materials and waste on the major road network and placement at licensed sites	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.
3.1.3	6.4.2.1	Operation – air quality effects from operation of recreation areas	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.

ID	Ref	Description	Inspectorate's comments
3.1.4	6.2.3.19	Ecological receptors	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 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.
3.1.5	6.7.1.32 and Table 6-1	Ammonia deposition	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.
3.1.6	6.4.1.1	Construction dust assessment	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.
3.1.7	6.6.2.5	Electric or low-emission fleet vehicles	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

ID	Ref	Description	Inspectorate's comments
			made in the assessment about use of such vehicles for the purposes of establishing residual effects.
3.1.8	6.7.1.21 and 6.7.2.2	Assessment methodology	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.
3.1.9	n/a	River movements	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.

3.2 Biodiversity

(Scoping Report Section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.2.1	7.5.1.1	Construction - transportation of hazardous material and Invasive Non-Native Species (INNS)	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.
3.2.2	7.5.1.1	Construction - accidental spills on protected and notable habitats and species	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.
3.2.3	7.5.2.1	Operation – changes to hydromorphological conditions at weirs on protected and notable habitats and species	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.
3.2.4	7.5.2.1	Operation – soil erosion and water quality effects from failure of flow control structures	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.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.2.5	7.5.2.1	Operation – damage to habitats and disturbance to designated sites and protected and notable species from general maintenance activities	Please see box 2.1.1 of this Scoping Opinion
3.2.6	7.5.2.2	Construction and operation – effects on designated sites over 2km from the project boundary	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.
3.2.7	n/a	Construction – fish spawning	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.
3.2.8	n/a	Operation – movement of fish	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.

ID	Ref	Description	Inspectorate's comments
3.2.9	Figure 7-1	Windsor Great Park Special Area of Conservation (SAC) and Windsor Forest and Great Park SSSI	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

ID	Ref	Description	Inspectorate's comments
			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.
3.2.10	7.3.2.6, 7.4.3.2 and Figures 7-1 and 7-2	Veteran trees and ancient woodland	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.
3.2.11	7.4.3.2	Receptors - fish	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.
3.2.12	n/a	Operation – mitigation and biodiversity net gain	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.
3.2.13	n/a	Operation – nutrient conditions	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.

ID	Ref	Description	Inspectorate's comments
3.2.14	n/a	Receptors – benthic invertebrates	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.

3.3 Climatic Factors

(Scoping Report Section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.3.1	Section 8.5.1 and paragraph 8.7.1.4	Construction – sources of emissions not expected to result in material contribution to overall contribution	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.
3.3.2	8.7.2.1	Impacts during construction	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.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			The ES should set out the necessary mitigation required to address a significant flooding event during construction where significant effects are likely.

ID	Ref	Description	Inspectorate's comments
3.3.3	n/a	n/a	n/a

3.4 Cultural Heritage, Archaeology and Built Heritage

(Scoping Report Section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.4.1	9.5.1.1	Construction - transportation of non-hazardous material to existing licensed sites during construction	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.

ID	Ref	Description	Inspectorate's comments
3.4.2	9.1.1.2 and 9.3.10.1	Historic landscape character	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 impacts to historic landscape character and assess impacts to where significant effects are likely to occur.
3.4.3	4.2.3.1	Demolition of buildings	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

ID	Ref	Description	Inspectorate's comments
			receptors and if so, the ES should assess significant effects where they are likely to occur.
3.4.4	4.1.5.6	Operation - lighting	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.
3.4.5	9.3.1.1	Construction - mitigation and preservation in-situ	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.
3.4.6	Appendix G – paragraph 7.4.8	'Blank' areas	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.

3.5 Flood Risk

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.5.1	10.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion
3.5.2	10.5.1.1	Construction – Dewatering effects on surface water and sewer flood risk	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.
3.5.3	10.5.1.1	Construction – increased flood risk from works e.g. cofferdams in and around waterbodies	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 impacts from the proposed mitigation should be assessed where significant effects are likely to occur.
3.5.4	10.5.1.1	Construction and operation – flood risk effects to and from reservoirs	The project is not anticipated to cause physical damage to reservoirs or alter the flood risk to and from reservoirs (Scoping Report

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			paragraph 10.3.2.8). On this basis, the Inspectorate is content to scope this matter out.
3.5.5	10.5.1.1	Construction and operation – flood risk effects to and from canals	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.
3.5.6	10.4.1.1	Construction – storage of materials on site and flood risk to third party land	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.
3.5.7	10.5.2.1	Operation – adverse flood risk downstream during times of flood	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.
3.5.8	10.5.2.1	Operation – sediment accumulation in new flood channels affecting conveyance	The Scoping Report states that sediment modelling will be used to inform the design of the channels and where appropriate mitigation will be employed.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			The ES should present the results of sediment modelling and where mitigation is required, this should be described and secured through the DCO.
3.5.9	10.5.2.1	Operation – existence of hardstanding and altered topography leading to changes in drainage patterns	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.
3.5.10	10.5.2.1	Operation – general maintenance	Please see box 2.1.1 of this Scoping Opinion

ID	Ref	Description	Inspectorate's comments
3.5.11	n/a	n/a	n/a

3.6 Health

(Scoping Report Section 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.6.1	11.5.2.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion
3.6.2	11.5.2.1	Operation - existence of hardstanding and altered topography leading to changes in drainage patterns and increasing stress	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.
3.6.3	11.5.2.1	Operation – provision of new green space and landscape works affecting security of private land and existence of the Proposed Development and risk to public health and safety	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.
3.6.4	11.5.2.1	Operation – light pollution disturbance on local communities	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.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			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.
3.6.5	11.5.2.1	Operation – loss of access to existing public open spaces	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.
3.6.6	11.5.2.1	Operation – general maintenance activities	Please see box 2.1.1 of this Scoping Opinion

ID	Ref	Description	Inspectorate's comments
3.6.7	n/a	Baseline data 2021	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.

3.7 Landscape and Visual Amenity

(Scoping Report Section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.7.1	12.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion
3.7.2	12.5.2.1	Operation – general maintenance activities	Please see box 2.1.1 of this Scoping Opinion

ID	Ref	Description	Inspectorate's comments
3.7.3	n/a	Baseline – Tree Preservation Orders (TPOs)	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 secured through the DCO. Effort should be made to agree the approach with the relevant Local Authority.

3.8 Materials and Waste

(Scoping Report Section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.8.1	13.5.1.1	Construction – waste arising from demolition of buildings at the northern end of Runnymede Channel	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.
3.8.2	13.5.1.1	Construction – waste management at established third party waste management facilities	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).
3.8.3	13.5.2.1	Operation – general maintenance activities	Please see box 2.1.1 of this Scoping Opinion
3.8.4	13.8.1.3	Construction – waste arisings associated with construction components and products	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.

ID	Ref	Description	Inspectorate's comments
3.8.5	13.2.2.3 and 13.4.2.1	Materials management	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
3.8.6	13.7.2.2	Receptors	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.

3.9 Noise and Vibration

(Scoping Report Section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.9.1	14.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion
3.9.2	14.5.2.1	Operation – use of the proposed open spaces and recreational facilities	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.
3.9.3	14.7.3.16	Construction – vibration from offsite construction traffic	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

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			whether this is likely. The Inspectorate considers that this approach is acceptable; the outcome of the review should be reported in the ES.

ID	Ref	Description	Inspectorate's comments
3.9.4	14.3.1.1	Ecological receptors	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.
3.9.5	14.4.2	Operational noise effects	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.

3.10 Socio-Economics

(Scoping Report Section 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.10.1	15.5.1.1 and section 4.2	Construction – influx of site personnel disrupting community cohesion	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.
3.10.2	15.5.1.1	Construction – effects to Common Land	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.
3.10.3	15.5.2.1	Operation – flood risk to Common Land	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.
3.10.4	15.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.10.5	15.5.2.1	Operation – disturbance of local businesses from provision of new green open spaces impacting transport e.g. changes in traffic due to new walking/cycling routes	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.
3.10.6	15.5.2.1	Operation – loss and demolition of existing residential dwellings	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.
3.10.7	15.5.2.1	Operation – provision of road bridges altering access to communities and businesses	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.

ID	Ref	Description	Inspectorate's comments
3.10.8	15.2.1.3	Locations of non-motorised user (NMU) counts	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.

3.11 Soils and Land

(Scoping Report Section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.11.1	16.3.1.30	Construction and operation – impacts from Radon gas	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.
3.11.2	16.5.1.1	Construction – general activities causing damage, compaction, erosion or instability of soils	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.
3.11.3	16.5.1.1	Construction – impacts from accidental spillages of liquids and chemicals stored on site	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.
3.11.4	16.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion
3.11.5	16.5.2.1	Operation – operational failures causing bank instability and/or	Mitigation such as bank protection works and profiling of channels to safe measurements and support from sheet piling is proposed to

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		erosion of soils at intakes and outfalls	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.
3.11.6	16.5.2.1	Operation – existence of flood channels effects on soil structure/quality through changes to groundwater levels	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.
3.11.7	16.5.2.1	Operation – impacts from existence of weirs altering sediment and flow regimes	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.

ID	Ref	Description	Inspectorate's comments
3.11.8	16.4.1.1 and section 16.7.1	Methodology	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 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.
3.11.9	16.7.2	Agricultural land as a receptor	Section 16.7.2 of the Scoping Report does not include agricultural land as a receptor (including best and most versatile) although the

ID	Ref	Description	Inspectorate's comments
			grading is reported in paragraph 16.3.1.22. The ES should assess the potential for significant effects due to agricultural land take.
3.11.10	n/a	Land instability	Considering the reprofiling of land has potential to cause land instability, the ES should assess significant effects where they are likely to occur.

3.12 Traffic and Transport

(Scoping Report Section 17)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.1	17.5.1.1	Construction – movement of hazardous waste/ materials on the strategic road network	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.
3.12.2	17.5.1.1	Construction – obstruction to River Thames boat traffic	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.
3.12.3	17.5.2.1 and 4.2.6	Operation – provision of new road bridges	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.
3.12.4	17.5.2.1	Operation – modal shift in travel from provision of new walking and cycling infrastructure	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.
3.12.5	17.5.2.1	Operation – changes in recreational use of the River Thames following provision of new navigable flood channels	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.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.12.6	17.5.2.1	Operation – bird strike risk to aeroplanes using Heathrow Airport	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 through the DCO, the Inspectorate agrees to scope this matter out; evidence of agreement with Heathrow should be provided in the ES.

ID	Ref	Description	Inspectorate's comments
3.12.7	17.6.2.2	Use of river and rail routes for construction movements	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.
3.12.8	N/A	Abnormal indivisible loads	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.

3.13 Water Environment

(Scoping Report Section 18)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.13.1	18.5.1.1	Construction – transportation and handling of hazardous material / waste from the major road network and placement off-site	Please see box 2.2.3 in this Scoping Opinion
3.13.2	18.5.1.1	Construction – impacts from sheet piling on groundwater quality	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.
3.13.3	18.5.1.1	Construction – surface water runoff from site compounds, processing and material storage	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.
3.13.4	18.5.1.1 and 18.6.2.1	Construction – sediment disturbance and spill impacts to lake and rivers from weir improvement works	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.
3.13.5	18.5.1.1	Construction – sediment disturbance and spills affecting waterbodies intersected by the flood channel	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

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			employed to reduce/avoid effects. These measures should be secured through the DCO.
3.13.6	18.5.1.1	Construction – chemical and liquid spill impacts on groundwater	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.
3.13.7	18.4.1.1	Construction – capacity works on weirs	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.
3.13.8	18.5.2.1	Operation – capacity improvement impacts resulting in downstream hydromorphological changes	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.
3.13.9	18.5.2.1	Operation – flow control, weir and fish pass operation failure effects on erosion and water quality/quantity	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.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
3.13.10	18.5.2.1	Operation – Effects of maintenance activities on bank instability and erosion of soils	Please see box 2.1.1 of this Scoping Opinion
3.13.11	18.5.2.1	Operation – flood channel operation in previous landfill sites and impacts from contaminants	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.
3.13.12	n/a	Construction and operation – changes in water quality due to bringing lakes 'online' into new river channels	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.

ID	Ref	Description	Inspectorate's comments
3.13.13	4.1.2.2	Augmented flow	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.

ID	Ref	Description	Inspectorate's comments
3.13.14	4.1.2.14 and section 18.2.1	Sediment	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.

3.14 Cumulative Effects

(Scoping Report Section 18)

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

ID	Ref	Description	Inspectorate's comments
3.14.2	n/a	n/a	n/a

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES[1]

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Integrated Care Board	NHS South West London Integrated Care Board
	NHS Frimley Integrated Care Board
	NHS Surrey Heartlands Integrated Care Board
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	Royal Berkshire Fire and Rescue Service
	Surrey Fire and Rescue Service
	London Fire Brigade
The relevant police and crime commissioner	Surrey police and crime commissioner
	Metropolitan police and crime commissioner
	Thames Valley police and crime commissioner
The relevant parish council(s) or, where the application relates to land [in] Wales or Scotland, the relevant community council	Wraysbury Parish Council
The Environment Agency	The Environment Agency

[1] Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Marine Management Organisation	Marine Management Organisation
The Civil Aviation Authority	Civil Aviation Authority
The Relevant Highways Authority	Surrey County Council
	London Borough of Richmond upon Thames
	Royal Borough of Windsor and Maidenhead
The relevant strategic highways company	National Highways
Transport for London	Transport for London
The Canal and River Trust	The Canal and River Trust
The Forestry Commission	The Forestry Comission - South East and London
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS[2]

STATUTORY UNDERTAKER	ORGANISATION
The relevant Integrated Care Board	NHS Surrey Heartlands Integrated Care Board
	NHS South West London Integrated Care Board
	NHS Frimley Integrated Care Board
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	London Ambulance Service NHS Trust
The relevant NHS Foundation Trust	South East Coast Ambulance Service NHS Foundation Trust

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

STATUTORY UNDERTAKER	ORGANISATION
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
Road Transport	Transport for London
Canal Or Inland Navigation Authorities	The Canal and River Trust
Canal Or Inland Navigation Authorities	River Thames - Environment Agency
Civil Aviation Authority	Civil Aviation Authority
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertaker	Affinity Water
	Thames Water
	Thames Water Commercial Services
The relevant public gas transporter	Cadent Gas Limited
	Northern Gas Networks Limited
	Scotland Gas Networks Plc
	Southern Gas Networks Plc
	Wales and West Utilities Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited

STATUTORY UNDERTAKER	ORGANISATION
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Leep Gas Networks Limited
	Last Mile Gas Ltd
	Mua Gas Limited
	Quadrant Pipelines Limited
	Squire Energy Limited
	National Grid Gas Plc
The relevant electricity distributor with CPO Powers	Eclipse Power Network Limited
	Energy Assets Networks Limited
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Indigo Power Limited
	Last Mile Electricity Ltd
	Leep Electricity Networks Limited
	Mua Electricity Limited
	Optimal Power Networks Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	Eastern Power Networks Plc
	London Power Networks Plc

STATUTORY UNDERTAKER	ORGANISATION
	South Eastern Power Networks Plc
	Southern Electric Power Distribution Plc
	UK Power Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc
	National Grid Electricity System Operator Limited

TABLE A3: SECTION 43 LOCAL AUTHORITIES (FOR THE PURPOSES OF SECTION 42(1)(B))[3]

LOCAL AUTHORITY[4]
Runnymede Borough Council
Elmbridge Borough Council
Spelthorne Borough Council
Royal Borough of Windsor and Maidenhead
London Borough of Richmond upon Thames
Woking Borough Council
Surrey Heath Borough Council
Guildford Borough Council
Mole Valley District Council
Buckinghamshire Council
Wandsworth London Borough Council
Wokingham Borough Council
Hammersmith and Fulham London Borough Council
Slough Borough Council

[3] Sections 43 and 42(B) of the PA2008

[4] As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY[4]
Royal Borough of Kingston upon Thames
Hounslow London Borough Council
Hillingdon London Borough Council
Bracknell Forest Council
Surrey County Council
South Downs District Council
Croydon London Borough Council
Bromley Council
Sutton Council
West Sussex County Council
East Sussex County Council
Hampshire County Council
Kent County Council

THE GREATER LONDON AUTHORITY

ORGANISATION
The Greater London Authority

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Bracknell Forest Council
East Sussex County Council
Elmbridge Borough Council
Environment Agency
Health and Safety Executive
Kent County Council
London Borough of Hounslow
London Borough of Kingston
Marine Management Organisation
National Grid
Natural England
Northern Gas Networks
Runnymede Borough Council
Spelthorne Borough Council
Surrey County Council
Transport for London

Bracknell Forest Council

Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol,
BS1 6PN

2nd November 2022
Our Ref: ACKAPP

Dear Sir/Madam

Town and Country Planning Act 1990 (as amended)

REFERENCE:	22/00017/SCO **(Please quote this reference on all correspondence)**
DESCRIPTION:	Consultation from Planning Inspectorate re: Scoping Opinion as to Environmental Statement required in connection with application by the Environment Agency and Surrey County Council for an Order granting Development Consent for the River Thames Scheme (the Proposed Development).
LOCATION:	River Thames

I can confirm that Bracknell Forest Council do not have any comments in relation to the information that should be provided within the Environmental Statement relating to the proposed development.

Yours faithfully

Becky Souter

Principal Planning Officer (Major Sites)
Planning Transport and Countryside
EMail: [redacted]
Direct Line: [redacted]

PLACE, PLANNING AND REGENERATION

Bracknell Forest Council, Time Square, Market Street, Bracknell, Berkshire RG12 1JD
T: 01344 352000 Minicom: 01344 352045 [redacted]

Deery, Claire

From: Edward Sheath [redacted]
Sent: 06 October 2022 08:19
To: River Thames Scheme
Subject: WA020001 - River Thames Scheme - EIA Scoping Notification and Consultation

Dear Sir or Madam,

Thank you for consulting East Sussex County Council on the above matter. I can confirm that the County Council has no comments to make.

Kind Regards,

Edward Sheath
Head of Planning and Environment
Communities, Economy and Transport

01273 481632 | [redacted]
eastsussex.gov.uk

creating a better place

Environment Agency

Planning Inspectorate
National Infrastructure Planning
Temple Quay House (2 The Square)
Temple Quay
Bristol
Avon
BS1 6PN

Our ref: WA/2022/130070/01-L01
Your ref: WA020001-000005

Date: 02 November 2022

Dear Sir/Madam

Planning Act 2008 (As Amended) And The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (The EIA Regulations) – Regulations 10 And 11

Application By The Environment Agency And Surrey County Council (The Applicant) For An Order Granting Development Consent For The River Thames Scheme (The Proposed Development)

Scoping Consultation And Notification Of The Applicant's Contact Details And Duty To Make Available Information To The Applicant If Requested

The Flood Channels Are Proposed Between Egham Hythe And Chertsey And Between Laleham And Weybridge.

Thank you for consulting the Environment Agency on the EIA Scoping Opinion for the proposed development. We have reviewed the River Thames Scheme (RTS) Environmental Impact Assessment Scoping Report dated October 2022, prepared by the Environment Agency and Surrey County Council working in partnership.

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.

Flood Risk

We are pleased that Flood Risk has been scoped into the report. We are pleased that the report defines the Functional Floodplain as the 3.3% Annual Exceedance Probability (AEP) in accordance with the 2022 update to the Planning Practice Guidance (PPG). We are also pleased to see that Flood Zones will inform landscape design work to ensure that the required elements are located in appropriate Flood Zones for their Flood Risk Vulnerability Classification in accordance with the National Planning Policy

Framework (NPPF). We are also pleased that there is a commitment that the project will be safe for its lifetime, without increasing flood risk elsewhere. However, 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.

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.

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.

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 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.

Water Environment

Water Framework Directive (WFD)

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.

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.

It is noted that in non-flood conditions, the flood channel will contain groundwater due to the presence of water level control structures. An augmented flow has been proposed and we welcome that assessments are being carried out. The report explains that the WFD assessment will be undertaken before augmentation flows have been confirmed.

Cont/d..

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?

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.

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 the potential to impact on flows and hydromorphology. Therefore, an assessment should be carried out into potential impacts and mitigations.

<u>Groundwater and Contaminated Land</u>
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.

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.

Cont/d..

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 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.

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.

Permits

We welcome that the waste hierarchy has been followed and the waste going to landfill will be limited. For awareness, Addlestone, Alton Road and Runfold South sites are regulated. There are four landfill sites with permits that require sites to self-monitor to track and prevent gas and groundwater pollution that may be affected by the channel. These are: Norlands Lane, Coldharbour, Wraysford and Kingsmead.

Biodiversity

We are pleased to see that it has been explained why the dredging of the Desborough Cut is the best option, and that the ecological impacts of this have been scoped in. However, 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.

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 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.

In addition, 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.

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.

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.

<u>Biodiversity Net Gain (BNG)</u>
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.

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.

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.

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.

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.

Invasive Non-Native Species (INNS)

We are pleased to see that a management plan will be included within an Ecological Impact Assessment. However, 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 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.

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.

Fish Passage

We are very pleased to see that fish passes have been included in the scheme at Chertsey, Sunbury, Molesey and Teddington weirs. However, 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.

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.

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 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 (please see the attachment for more details).

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.

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.

<u>Sediment Transfer and Silt Management</u>
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.

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 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.

Navigation

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.

<u>Advice to applicant – Harbour Masters Notice</u>

We understand that there will be certain construction and dredging activities that are likely to pose a hazard to, or affect, navigation on the river during the construction phase of the project. We would request that these activities are highlighted to the Environment Agency in good time so that our Waterways team can assess the requirement for a river closure or river restriction and what conditions we may need to apply. A closure or restriction is implemented and advertised via the use of a Harbour Masters Notice, and we would usually prefer a minimum of 12 weeks notice to assess and approve these.

Advice to applicant - Charged for planning advice

Should you wish us to review any technical documents or want further advice to address the environmental issues raised, we may do this as part of our charged for planning advice service.

Further engagement will provide you with the opportunity to discuss and gain our views and advice on potential options. It should also result in a better quality and more environmentally sensitive development.

As part of our charged for service we will provide a dedicated project manager to act as a single point of contact to help resolve any problems. We will provide you with an estimated cost for any further discussions or review of documents. The standard terms of our charged for service are available[redacted].

If you would like more information on our planning advice service, including a cost estimate, please contact us at planning_THM@environment-agency.gov.uk

Final comments
Thank you for contacting us. Our comments are based on our available records and the information as submitted to us. Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me.

Yours faithfully

Miss Chloe Alma-Daykin
Planning Advisor

Direct dial [redacted]
E-mail Planning_THM@environment-agency.gov.uk

Disease Diagnostics Report

National Fisheries Laboratory

Sample submission			
This report is an Environment Agency document giving an assessment of the disease status of fish submitted in support of a mortality investigation. These findings are based solely on the sample submitted and unless stated otherwise, will be deemed to be representative of the mortality as a whole. All examinations were conducted under laboratory conditions following established diagnostic protocols. This report is NOT a health certificate and is only intended as a fisheries management advisory tool.			
To	Martin Van Heerden	**From**	John Price
Date reported	27/09/22	**Lab ref**	22/077
Origin of sample	Ellis and Sheepwalk Lakes Littleton Lane Shepperton TW17 ONF		
	NGR	TQ0616467469	
	Registration ref	EW057-W-690	
Agency Area	Herts and North London		
Capture method	NA - Collected dead		
Date sample submitted	01/09/22	**Sample submitted by**	Martin Van Heerden

Fish submitted		
Species	**Number**	**Length (mm)**
Eel (DOA - submitted frozen)	1	490

Summary of findings

Given the advanced state of decomposition and the extent of post mortem change, only very limited examinations could be completed on the eel submitted from Ellis and Sheepwalk Lakes. However, the virology testing returned a positive result for Anguillid Herpesvirus (AngHV-1), and the characteristics of this mortality event do indicate a likely role for the virus, including the timing, the eel-specific nature of the losses and behavioural observations on site.

AngHV-1 is a warm water virus that can affect all freshwater life stages of eel, with outbreaks most commonly occurring in summer/early autumn. It causes a range of behavioural changes including erratic swimming (as seen on site), and symptoms such as gill and skin necrosis and haemorrhage. Like other herpesviruses, it can form dormant infections in healthy eels, with outbreaks of the disease generally being triggered by stressors that can reduce a fish's immunity to such viral pathogens (please see our Ang-HV1 factsheet for further information).

It has been suggested that larger eels undergoing 'silvering' (the physiological/morphological changes required prior to migration), and that are unable to migrate due to being landlocked, may be particularly susceptible to outbreaks of this virus. In this case it is thought that predominantly larger eel were affected, and whilst the fishery complex is described as being online, current environmental conditions (very low flows, lack of rain) are such that escapement may not have been possible. As such, the situation on site at the time of the losses could be ideally fitting of an Ang-HV1 outbreak. It is difficult however to draw strong conclusions from an investigation based on one individual, and in this case it was not possible to assess the role of other pathogens in the mortalities on site.

Site restrictions
The detection of the Category 2 Pathogen Anguillid herpesvirus (AngHV-1) will have implications for the movement of fish from this site under the Keeping and Introduction of Fish Regulations.

Site details, incident history and water quality
Ellis and Sheepwalk Lakes is a members only mixed species specimen fishery with low stock density and light angling pressure. Eel specific mortalities were first noticed on 15/08/22 and across all lakes on site; although the majority have been found on Ellis Water. All sizes of eel are affected, although it is predominantly larger specimens (> 5 lb) that are dying. It is estimated that ~12 eel have died, however this number may not be accurate given the size of the waters. Affected individuals have been observed swimming at the water surface and moribund in the margins. On 01/09/22 (11:39 am), the following water quality parameters were recorded: Dissolved oxygen 92%/8.33 mg/L, temperature 20.2 °C, pH 8.14 and ammonia (NH3) 0.02 mg/L. An algal sample collected at the same time showed nothing of concern in relation to fish health.

Diagnostic information and results	
Due to the nature of the sample, only virology screening could be completed. No observations could be made due to the eels' advanced state of decomposition.	
Test	**Result**
Virology	**Positive for *Anguillid herpesvirus* (AngHV-1)**. Negative for Eel Virus European X (EVEX) and Eel Virus European (EVE)

For further information please contact	John Price [redacted]) or Charlotte Eade ([redacted])

Health and Safety Executive

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

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

Email: RiverThamesScheme@PlanningInspectorate.gov.uk

Dear Ms Emily Park

Date: 27 October 2022

PROPOSED RIVER THAMES SCHEME (the project)
PROPOSAL BY THE ENVIRONMENT AGENCY AND SURREY COUNTY COUNCIL (the applicant)
INFRASTRUCTURE PLANNING (ENVIROMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as amended) REGULATIONS 10 and 11

Thank you for your letter of 5 October 2022 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

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

According to HSE's records the proposed DCO application boundary corridor for this Nationally Significant Infrastructure Project just falls into the inner middle and outer zones of a Major Accident Hazard Site (MAHS) in the vicinity of the Sunbury Locks. This is based on the Site Location map Figure 0-1 - Overview of the RTS (Environment Agency, 2022), contained in the River Thames Scheme Environmental Impact Assessment Scoping Report, October 2022.

The major accident hazard site is:

- HSE reference 0892- Exolum Pipeline Systems Ltd

The Applicant should make contact with the above operator, to inform an assessment of whether or not the proposed development is vulnerable to a possible major accident.

HSE's Land Use Planning advice is dependent on the location of areas where people may be present. Based on the information in the River Thames Scheme Environmental Impact Assessment Scoping Report, October 2022, it is unlikely that HSE would advise against the development. Please note that the advice is based on HSE's existing policy for providing land-use planning advice and the information which has been provided. HSE's advice in response to a subsequent planning application may differ should HSE's policy or the scope of the development change by the time the Development Consent Order application is submitted.

Hazardous Substance Consent

Given the details of the scheme provided in the River Thames Scheme Environmental Impact Assessment Scoping Report, October 2022, it is unlikely that hazardous substance consent will be required.

Further information on HSC should be sought from the relevant Hazardous Substances Authority, if required or if changes to the scheme are made.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 Annex on the Planning Inspectorate's website - Annex G – The Health and Safety Executive . This document includes consideration of risk assessments on page 3.

Explosives sites

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

Electrical Safety

No comment from a planning perspective.

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

Yours sincerely

[redacted]

Allan Benson
CEMHD4 NSIP Consultation Team

Emily Park
Senior EIA Advisor
on behalf of the Secretary of State
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol, BS1 6PN

BY EMAIL ONLY

Growth and Communities

Invicta House
County Hall
Maidstone
Kent
ME14 1XX

Phone: 03000 423203
Ask for: Alessandra Sartori
Email: [redacted]

2 November 2022

Dear Emily,

Re: River Thames Scheme - EIA Scoping

Thank you for consulting Kent County Council (KCC) on the Environmental Impact Assessment (EIA) and Scoping Report for the proposed River Thames Scheme, including new flood control measures, green spaces and sustainable travel routes.

The County Council has reviewed the EIA and Scoping Report. As the County Council understands, the proposed works are not located within or directly adjacent to Kent. However, KCC appreciates being consulted on this matter to consider any indirect impact to the County.

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.

KCC would welcome continued engagement as this proposal progresses. If you require any further information or clarification on any matters raised above, please do not hesitate to contact me.

Yours sincerely,

Stephanie Holt-Castle
Director for Growth and Communities

Deery, Claire

From: Sophie Middleton <[redacted]
Sent: 20 October 2022 16:28
To: River Thames Scheme
Cc: Deery, Claire; Park, Emily; Eamon Cassidy
Subject: RE: WA020001 - River Thames Scheme - EIA Scoping Notification and Consultation - CORRECTION

Good afternoon,

Thank you for consultation on the above application. The council does not wish to comment on this application at this moment in time.

Best regards,

Sophie Middleton | Planning Officer
Development Management | Central Area Team
Housing, Planning and Economic Regeneration

London Borough of Hounslow
2nd Floor, Hounslow House
7 Bath Road, Hounslow,
TW3 3EB

Office: 02085833119
Email: [redacted]
Web: [redacted]

From: River Thames Scheme <RiverThamesScheme@planninginspectorate.gov.uk>
Sent: 05 October 2022 16:29
Cc: Deery, Claire <[redacted]; [redacted]
Subject: WA020001 - River Thames Scheme - EIA Scoping Notification and Consultation - CORRECTION

FAO Head of Planning

Dear Sir/Madam,

Please see attached amended correspondence on the proposed River Thames Scheme.

Please note the correct deadline for consultation responses is 02 November 2022 and is a statutory deadline that cannot be extended.

Kind regards,

The Planning Inspectorate

Emily Park | Senior EIA Advisor
The Planning Inspectorate
T 0303 444 5657

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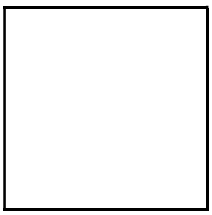

THE ROYAL BOROUGH OF
KINGSTON
UPON THAMES

Royal Borough of Kingston upon Thames
Development Management

Case Ref: **22/03213/AAC**

Date: 28th October 2022

The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol
BS1 6PN

Dear Planning Inspectorate

ADJOINING BOROUGH CONSULTATION

Site Address: River Thames Scheme

Proposal:

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

Application by The Environment Agency and Surrey County Council (the Applicant) for an Order granting Development Consent for the River Thames Scheme (the Proposed Development)

Scoping consultation

Thank you for your consultation dated 5th October 2022.

After careful consideration, it is considered that the Council have no objection to the proposals, although would like the following comment to be taken into account:

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.

Yours sincerely

Barry John Lomax

Head of Development Management
On behalf of Kingston Council

Marine Management Organisation

Marine Licensing
Lancaster House
Hampshire Court
Newcastle Upon
Tyne
NE4 7YH

T +44 (0)300 123 1032
F +44 (0)191 376 2681
[redacted]

Project Team
Planning Inspectorate
RiverThamesScheme@Planninginspectorate.gov.uk

MMO reference: DCO/2022/00009
Your reference WA020001-000005

By email only

04 November 2022

Dear Sir/Madam

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

Regulations 10 and 11 Application by The Environment Agency and Surrey County Council (the Applicant) for an Order granting Development Consent for the River Thames Scheme (the Proposed Development)

Thank you for your scoping opinion request of 07 October 2022 and for providing the Marine Management Organisation (MMO) with the opportunity to comment on the River Thames Scheme Environmental Statement scoping request.

The MMO's role in Nationally Significant Infrastructure Projects

The MMO was established by the Marine and Coastal Access Act 2009 (the "2009 Act") to contribute to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas. The responsibilities of the MMO include the licensing of construction works, deposits and removals in English inshore and offshore waters and for Welsh and Northern Ireland offshore waters by way of a marine licence[1]. Inshore waters include any area which is submerged at mean high water spring ("MHWS") tide. They also include the waters of every estuary, river or channel where the tide flows at MHWS tide. Waters in areas which are closed permanently or intermittently by a lock or other artificial means against the regular action of the tide are included, where seawater flows into or out from the area. In the case of Nationally Significant Infrastructure Projects ("NSIPs"), the 2008 Act enables Development Consent Order's ("DCO") for projects which affect the marine environment to include provisions which deem marine licences[2].

[1] Under Part 4 of the 2009 Act
[2] Section 149A of the 2008 Act

As a prescribed consultee under the 2008 Act, the MMO advises developers during preapplication on those aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction, deposit or removal within the marine area, this also includes assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works. Where a marine licence is deemed within a DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence ("DML") enable the MMO to fulfil these obligations. Further information on licensable activities can be found on the MMO's website[3]. Further information on the interaction between the Planning Inspectorate and the MMO can be found in our joint advice note[4].

Please find attached the scoping opinion of the MMO. In providing these comments, the MMO has sought the views of our technical advisors at the Centre for Environment, Fisheries and Aquaculture Science (Cefas).

The MMO reserves the right to make further comments on the project throughout the preapplication process and may modify its present advice or opinion in view of any additional information that may come to our attention. This representation is also submitted without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

If you require any further information, please do not hesitate to contact me using the details provided below.

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

Yours sincerely,

[redacted]

Luke Harto
Marine Licensing Case Officer
D (+44) [redacted]
E [redacted]

[3] [redacted]

Scoping Opinion

Marine Works (Environmental Impact Assessment) Regulations 2007 ("the Regulations")

Title: River Thames Scheme (RTS)

Applicant: Mr Richard Woodward, Environment Agency

MMO Reference: DCO/2022/000009

Contents

1. Proposal

River Thames Scheme (RTS)

1.1. Project Background

The River Thames between Egham and Teddington is highly populated but currently has no flood defences in place, putting homes and businesses at risk. This scheme will be a major new piece of green and blue infrastructure which integrates a new flood channel with new sapces open to the public, associated recreational infrastructure and environmental enhancements

The RTS design comprises the following elements, which will be undertaken within the project boundary:

- A new flood channel in two sections, through the boroughs of Runnymede and Spelthorne in Surrey. Permanent features associated with the flood channel include flow and water level control structures, flood embankments, erosion prevention, bridges and permanent site compounds for maintenance; the channel will include planting for wildlife and places for recreational access;
- Capacity improvements to the River Thames through lowering the bed of the River Thames downstream of Desborough Cut, upgrades to Sunbury, Molesey and Teddington Weirs;
- New green open spaces adjacent to the channel and accessible to local communities;
- Habitat creation areas which link with existing and new blue and green wildlife corridors and build upon the network of existing wildlife sites;
- New or improved active travel provision along and across the flood channel corridor and new open spaces with connections to the existing network;
- Permanent compounds for maintenance; and
- Temporary construction features such as site compounds and materials reprocessing sites.

2. Location

The River Thames Scheme is located in Surrey between Egham and Teddington Weir, which is displayed in Figure 1 below.

Figure 1: Overview of the RTS (Environment Agency, 2022)

Due to the location and tindal extent of the Thames up to Teddington, any licensable activities within the marine area as defined in section 42 of the Marine and Coastal Access Act (MCAA) 2009, will require consent via the deemed marine licence (DML).

3. Scoping Opinion

Pursuant of regulations 10 and 11 of the Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations), the The Environment Agency and Surrey County Council (the Applicant) have requested a Scoping Opinion from the MMO. In so doing a Scoping Report entitled "River Thames Scheme – Environmental Impact Assessment Scoping Report" has been submitted to the MMO for review.

The MMO agrees with the topics outlined in the Scoping Report and in addition, we outline that the following aspects be considered further during the Environmental Impact Assessment and must be included in any resulting Environmental Statement (ES).

3.1. Marine Planning

3.1.1. 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.

3.2. Conservation of Habitats and Species Regulations 2017

3.2.1. 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

3.2.2. 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).

3.3. Other Nature Conservation

3.3.1. 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

3.3.2. 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.

3.3.3. The MMO defers to Natural England as the SNCB on the suitability of the scope of the assessment with regards to MPAs.

3.4. Benthic Ecology

3.4.1. There is the potential for sediment disturbance to result in smothering of benthic fauna and mobilisation of contaminants.

3.4.2. 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.

3.4.3. 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.

3.4.4. 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.

3.5. Coastal Processes

3.5.1. 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.

3.6. Underwater Noise

3.6.1. 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.

3.7. Fish Ecology and Fisheries

3.7.1. There is potential impact of works on fish spawning areas and fish stock from these proposed works.

3.7.2. 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.

3.7.3. 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.

3.7.4. The MMO has also noted that the transboundary effects screen 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.

3.7.5. 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.

3.8. Shellfish

3.8.1. The document (section7.2.1.5) 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.

3.8.2. 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.

3.8.3. 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.

3.9. Archaeology / Cultural Heritage

3.9.1. 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 impacts of the development in relation to heritage assets and the further assessments are clearly outlined within the scoping report.

3.9.2. The statements should includeconsideration of buried assets, i.e. undiscovered assets and both designated and undesignated heritage assets in relation to potential impact from disturbance during construction works.

3.9.3. The MMO defers to Historic England on the suitability of the scope of the assessment with regards to archaeology and cultural heritage impacts.

3.10. Navigation / Other Users of the Sea

3.10.1. 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.

3.10.2. 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.

3.10.3. The MMO defers to the PLA, the Maaritime and Coastguard Agency (MCA) and Trinity House on the suitability of the scope of the assessment with regards to navigational vessels and safety.

3.11. Water Quality

3.11.1. The ES must demonstrate that no deterioration in water quality will result during and after the construction works.

3.11.2. The MMO defers to The Environment Agency on the suitability of the scope of the assessment with regards to water quality.

3.11.3. A Water Framework Directive (WFD) assessment may be required and detailed methodology provided for each stage of the construction works at Teddington.

3.11.4. 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.

3.12. Seabed / Land / Soil Quality

3.12.1. 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.

3.13. Seascape / Landscape

3.13.1. The MMO defers to Historic England, Natural England (as the SNCB) and relevant local planning authorities on the suitability of the scope of the assessment with regards to Seascape and Landscape.

3.14. Risk of Major Accidents and Disasters Relevant to the Project (including those caused by Climate Change)

3.14.1. 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.

3.14.2. A flood risk permit may be required from the EA. Please contact - Thames@environment-agency.gov.uk.

3.15. Population and Human Health

3.15.1. 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.

3.16. Cumulative Impacts & In-Combination Impacts

3.16.1. The MMO is content with the proposal for cumulative impacts and in-combination impacts.

4. Conclusion

The topics highlighted in this scoping opinion should be assessed during the EIA process and the outcome of these assessments should be documented in the EIA report in support of the deemed marine licence application and the planning application. This statement, however, should not necessarily be seen as a definitive list of all EIA (and HRA) requirements. Given the scale and program of these planned works, other work may prove necessary.

Yours faithfully

[redacted]

Luke Harto
Marine Licensing Case Officer
D (+44)[redacted]
E [redacted]

CC'd:
[redacted]Marine Licensing Case Manager)
[redacted] (Marine Licensing Senior Case Manager)
[redacted] (Applicant)

Deery, Claire

From: Before You Dig [redacted]
Sent: 10 October 2022 09:26
To: River Thames Scheme
Subject: RE: EXT:WA020001 - River Thames Scheme - EIA Scoping Notification and Consultation - CORRECTION

Good Morning,

NGN has a number of gas assets in the vicinity of some of the identified "site development" locations. It is a possibility that some of these sites could be recorded as Major Accident Hazard Pipelines(MAHP), whilst other sites could contain High Pressure gas and as such there are Industry recognised restrictions associated to these installations which would effectively preclude close and certain types of development. The regulations now include "Population Density Restrictions" or limits within certain distances of some of our "HP" assets.

The gas assets mentioned above form part of the Northern Gas Networks "bulk supply" High Pressure Gas Transmission" system and are registered with the HSE as Major Accident Hazard Pipelines.
Any damage or disruption to these assets is likely to give rise to grave safety, environmental and security of supply issues.

NGN would expect you or anyone involved with the site (or any future developer) to take these restrictions into account and apply them as necessary in consultation with ourselves. We would be happy to discuss specific sites further or provide more details at your locations as necessary.

If you give specific site locations, we would be happy to provide gas maps of the area which include the locations of our assets.
(In terms of High Pressure gas pipelines, the routes of our MAHP's have already been lodged with members of the local Council's Planning Department)

Kind regards,

Lucy McMahon

Administration Assistant
Before You Dig
Northern Gas Networks
1st Floor, 1 Emperor Way
Doxford Park
Sunderland
SR3 3XR

Before You Dig: 0800 040 7766 (option 5)
[redacted]
Alternative contact:
beforeyoudig@northerngas.co.uk

Deery, Claire

From: Behnke, Piotr [redacted]
Sent: 01 November 2022 21:36
To: River Thames Scheme
Subject: Natural England Response - 408688 - Planning Inspectorate - WA020001 - EIA Scoping Notification and Consultation - River Thames Scheme

FAO: Emily Park

Dear Emily,

Many thanks for sending through the below EIA scoping consultation regarding the River Thames Scheme.

Natural England has been involved in pre submission work with the Environment Agency regarding the scheme over the years and as such we consider that there are only a few points we'd wish to reiterate to ensure they are fully considered within the scope of the EIA.

The points would be as follows:

- 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.
- Consideration being given to Biodiversity Net Gain needs to be shown within the report as this will be a key component of the work.
- 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.
- 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.

Otherwise the scoping report covers a very wide range of topics which will give a wide ranging and detailed assessment of the potential impacts of the scheme. We of course will input at later stages of the process and look forward to this further consultation.

I trust that this response is useful.

Regards,

Piotr Behnke
Lead Adviser
Planning and UAS
Thames Solent Team
0208 026 3893

Deery, Claire

From: Before You Dig <BeforeYouDig@northerngas.co.uk>
Sent: 10 October 2022 09:26
To: River Thames Scheme
Subject: RE: EXT:WA020001 - River Thames Scheme - EIA Scoping Notification and Consultation - CORRECTION

Good Morning,

NGN has a number of gas assets in the vicinity of some of the identified "site development" locations. It is a possibility that some of these sites could be recorded as Major Accident Hazard Pipelines(MAHP), whilst other sites could contain High Pressure gas and as such there are Industry recognised restrictions associated to these installations which would effectively preclude close and certain types of development. The regulations now include "Population Density Restrictions" or limits within certain distances of some of our "HP" assets.

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If you give specific site locations, we would be happy to provide gas maps of the area which include the locations of our assets.
(In terms of High Pressure gas pipelines, the routes of our MAHP's have already been lodged with members of the local Council's Planning Department)

Kind regards,

Lucy McMahon

Administration Assistant
Before You Dig
Northern Gas Networks
1st Floor, 1 Emperor Way
Doxford Park
Sunderland
SR3 3XR

Before You Dig: 0800 040 7766 (option 5)
[redacted]
Alternative contact:
beforeyoudig@northerngas.co.uk

November 2, 2022

Dear Emily Park (Planning Inspectorate)

Reference: River Thames Scheme

PINS REF NO: WA020001 (River Thames Scheme)

DESCRIPTION: Planning Act 2008 (as amended) and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 - Scoping Opinion Consultation

PROPOSAL: Application by Surrey County Council and Environment Agency for an Order granting Development Consent for the River Thames Scheme

I write in response to the statutory consultation received by Surrey County Council, Elmbridge District Council, Runnymede District Council and Spelthorne District Council (hereafter referred to as the Project Group) on 5th October 2022 in relation to the Environmental Impact Assessment (EIA) Scoping Report concerning the above development proposal.

The development is classed as a Project of National Significance, a Section 35 Direction was given by the Secretary of State (SoS) on 24 December 2020 and confirms that the project is nationally significant, and it should be treated as development for which development consent is required.

This letter (and Annex A) therefore constitutes the Project Groups' response to the River Thames Scheme EIA Scoping Report (2022) (hereafter referred to as the EIA Scoping Report) consultation issued by the Planning Inspectorate.

It should be noted that there is a clear separation of responsibilities and an information barrier in place between the officers performing a regulatory function within Surrey County Council and those advising and promoting the River Thames Scheme on behalf of the Applicant. Stantec will be supporting officers of The Project Group in performing Host Authority duties, as part of the Planning Act 2008 under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

If you have any queries, please do not hesitate to contact us. For any new consultations, or to provide further information on this consultation please send your correspondence to claire.sorrin@stantec.com

Kind Regards,

Caroline Smith (Surrey County Council - Planning Group Manager)
[redacted]

Victoria Gibson (Runnymede Borough Council - Development Manager Runnymede Borough Council)
[redacted]

Kim Tagliarini (Elmbridge Borough Council - Head of Planning and Environmental Health)
[redacted]

Esmé Spinks (Spelthorne Borough Council - Planning Development Manager
[redacted]

1 Annex A - Scoping Opinion Response

1.1 Legislation

1.1.1 The project will be subject to an Environmental Impact Assessment (EIA), and the environmental effects reported within an Environmental Statement (ES). The proposed project meets the criteria of Schedule 2 paragraph 10 (h) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations), being an "inland-waterway construction not included in Schedule 1 of these Regulations, canalisation and flood-relief works".

1.1.2 The Project Group agree with the Applicant (Surrey County Council and the Environment Agency) that in relation to Schedule 3 of the EIA Regulations there is the potential for significant environmental effects based on the characteristics of the development, the location of the development and the type and characteristics of potential impact and an ES should be produced and submitted with a Development Consent Order (DCO) application,

1.1.3 Under Section 5(1) of the Planning Act 2008 (PA08), National Policy Statements (NPS) are designated by the Secretary of State (SoS) which set out national policy in relation to one or more specified descriptions of development (Section 5(1)) and the application would be decided under Section 104. However, there is no applicable NPS for the River Thames Scheme, therefore the application will be decided under Section 105 of the PA08. Despite this, parts of the draft NPS (dNPS) for Water Resources Infrastructure published in November 2018 and updated in August 2019 may be important and relevant to the SoS's consideration of the project for the purposes of Section 105(2)(c) as it is considered that water resources projects are the closest projects in form to the RTS that are covered by a NPS. Notably elements of Section 3 on 'Assessment Principles' and Section 4 on 'Generic Impacts' are particularly relevant to the River Thames Scheme (RTS).

1.1.4 The Project Group agree with the policies relevant for the dNPS set out in Appendix M of the EIA Scoping Report.

1.1.5 Other matters that the SoS will consider include relevant national and local planning policy. The National Planning Policy Framework (NPPF) (MHCLG, 2021a) is relevant national policy. The NPPF sets out the UK government's planning policies for England and how these ought to be applied. The NPPF must be considered in the preparation of local and neighbourhood plans and is a material consideration in granting development consent. At the heart of the NPPF is a presumption in favour of sustainable development. The framework sets out guidance under thirteen subheadings that contribute to delivering sustainable development, as follows:

- Delivering a sufficient supply of homes;
- Building a strong, competitive economy;
- Ensuring the vitality of town centres;
- Promoting healthy and safe communities;

- Promoting sustainable transport;
- Supporting high quality communications;
- Making effective use of land;
- Achieving well-designed places;
- Protecting Green Belt land;
- Meeting the challenge of climate change, flooding and coastal change;
- Conserving and enhancing the natural environment;
- Conserving and enhancing the historic environment; and
- Facilitating the sustainable use of minerals

1.1.6 The Project Group agree with the extensive list of policies relevant to the RTS set out in Appendix M of the EIA Scoping Report.

1.2 Structure of ES

1.2.1 The Project Group broadly agrees with the structure of the ES. However, at Paragraph 22.3.1.4 of the EIA Scoping Report, an indicative outline structure of the technical topic chapters is provided. The structure of the technical chapters should be revised. To understand the summary and the likely impact of a receptor, mitigation should be considered prior (embedded mitigation) and after the 'Assessment of Effects', which will determine the Residual Impact, which should also be included in the structure of the technical chapters. As cumulative effects should be included within the structure of each technical topic. Suggested format below:

- Introduction;
- Legislation and Policy;
- Consultation and Engagement;
- Assessment Methodology;
- Existing and Future Baseline;
- Key Environmental Considerations and Opportunities;

- Assessment of Effects;
- Cumulative and in combination effects
- Mitigation and Management
- Residual impacts
- Summary of Significance

1.3 Non-technical summary

Page	Reference	Comment
General		
Scoping Non-Technical Summary	iii 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.
	v Existing Environmental Conditions	Shepperton is missing from the settlements list. 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. 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.

1.4 Project Description and Alternative Options Considered

Page	Reference	Comment
General		
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.
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.
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.
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).
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?
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?
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.
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. 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. 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?
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. 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. motorway. 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.
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. 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. 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.

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 & 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. 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?
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? The Project Group's Environmental Health Team's should be consulted on the PSRA.
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?

1.5 Approach to EIA

Page	Reference	Comment
General		
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.
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))
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)
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.
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)
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.
	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."

1.6 Air Quality

Page	Reference	Comment
General		
	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).
Data/survey		
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).
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.
Scoping area / area of assessment		
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.
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.
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.
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 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).
Approach to Mitigation		
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.
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.
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. Suitable wheel wash facilities should also be specified to reduce trackout of dust onto the highway.
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.
Assessment Methodology		
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.
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.
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.
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. 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.
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.

101	6.7.1.25	The latest version of the Defra emission factor toolkit at the time of the assessment should be used. Traffic congestion should be taken into account in the dispersion modelling, particularly a reduction of speeds on the approach to junctions.
101	6.7.1.26	Heathrow Airport meteorological data is considered to be suitable for use in the assessment.
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.
102	6.7.1.31	The EIA Scoping Report indicates that the $PM_{2.5}$ limit value of 20 µg/m^3 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 $PM_{2.5}$ concentrations of less than 10 µg/m^3 across their administrative areas by 2030, an annual mean of 10 µg/m^3 should be used when assessing impacts on $PM_{2.5}$ concentrations at human receptor locations.
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.

1.7 Biodiversity

Page	Reference	Comment
General		
		As mentionedd 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.
Data/survey		
112	7.3.1.34	The ES should clearly state where species are listed Species of Principal Importance in England.
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.
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.
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
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.

125	7.3.2	The Future Baseline used to inform the ES should take into account changes brought about through climate change.
Scoping area / area of assessment		
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.
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 needs to include baseline monitoring and modelling of noise and vibration levels in locations where sensitive receptors, such as SPA birds, are found.
128 129	7.4.1 7.4.2	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.
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.
128 129	7.4.1 7.4.2	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.
Scoped in/out topics		
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.
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.
133	7.4.3.4	It is agreed that none of the biodiversity features should be scoped out from the EIA.
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.
134	7.5.2.1 (3rd bullet)	Where mitigation measures are required to avoid/minimize operational effects to designated sites, to a level where they would be not significant, this should be fully assessed and captured within the ES.
Mitigation		
135	7.6	Mitigation measures should follow the overarching principles of the Mitigation Hierarchy
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.

135	7.6	Mitigation required to avoid significant effects to European sites or qualify species, should be informed by the requirements of the Habitats Regulation Assessment (HRS).
135	7.6	Timing restrictions for works in proximity to watercourses should be discussed and agreed with the EA.
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.
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 protect species license applications and agree these with Natural England.
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.
135 138	7.6.2.1 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 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.
Assessment Methodology		
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))
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.
138	7.7	The ES should include details of all relevant planning policy against which the application will be assessed.

1.8 Climatic Factors

Page	Reference	Comment
Data Sources		
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.
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.
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.
Baseline		
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.
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.
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.
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.
Effects scoped in / out		
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
Mitigation		

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.
Methodology		
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.
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.
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.
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.
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.
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.

1.9 Cultural Heritage, Archaeology and Built Heritage

Page	Reference	Comment
General		
166-206	General - Cultural	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

	Heritage Overview	EIA Scoping Report about the 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. 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.
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. 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. 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. 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.
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. 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. 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.

1.10 Flood Risk

Page	Reference	Comment
General		
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.
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
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)?
212	10.2.2.13	Level for level floodplain compensation should be provided for any loss of floodplain storage capacity.
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.
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?
		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?
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).
Data/survey		
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
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.

Scoping area / area of assessment		
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
Baseline		
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.

1.11 Health

Page	Reference	Comment
General		
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.
Data/survey		
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 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.
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
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.
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.
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.
Scoping area / area of assessment		
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.
Scoped in/out topics		
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.
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.
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.

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?
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.
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.
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.
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.
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.

1.12 Landscape and Visual Amenity

Page	Reference	Comment
General		
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. 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. 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. 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.
	General	Engagement between the Applicant and Project Group required on the potential impact of the route on tree preservation orders (TPO's), particularly around Ferris Meadows (Spelthorne).

1.13 Materials and Waste

Page	Reference	Comment
General		

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. 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).
Policy Framework		
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.
Stakeholder Engagement		
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.
Study Area		
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.
Permitted Landfill Site in Surrey		
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.
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.
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)?
Key Environmental Considerations and Opportunities		
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.
Construction Effects		
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.
Operational Effects		
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 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.
Effects not requiring Assessment		
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
Approach to Mitigation		
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.
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?
Significance Criteria		
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.
Assessment of Effects		
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.
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.
329	13.8.1.9	Where will the scope of the waste classification testing be secured? Will testing include geochemical testing to determine whether materials are suitable for the land end use where they will be re-used?
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.
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.

1.14 Noise and Vibration

Page	Reference	Comment
Data/survey		
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.
Scoping area / area of assessment		
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 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.
Scoped in/out topics		
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.
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.
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.
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.
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.

356	14.7.3.1	Noise impact arising from potential noise and vibration works at night should be assessed within the ES.
356	14.7.3.4	The duration of exposure, required to consider effects to be significant, is not provided. The assessment of significant effects should be outlined within the PEIR and 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.
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.
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.
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 impact of vibration and underwater noise on the impact on aquatic wildlife should be assessed within the ES.
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;* 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.
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.
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.

1.15 Socio-economic

Page	Reference	Comment
General		
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.
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.
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.
Data/survey		
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.
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.
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.
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).

	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.
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.
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.
	15.3	The baseline should report on the number of homes in the Study Area (and each of the respective local authority boroughs).
Scoped in/out topics		
		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 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.
		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.
		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.

1.16 Soils and Land

Page	Reference	Comment
General		
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.
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.
405	16.8.1.4	The stakeholders should be defined and include the LA's and the EA where controlled waters are concerned
	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).
	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.
Data/survey		
381 & 382	16.2.1.2 & 16.2.1.4	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 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.
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)). 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 the EIA. This process must be undertaken in accordance with that set out in Land Contamination Risk Management (LCRM), published by the Environment Agency. 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. Landfill information has been provided for licensed activity and we advise that details regarding unlicensed activities should also be provided. 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).

		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). The reports produced at the various stages of risk assessment must be appended to the ES. 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, 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.
Scoping area / area of assessment		
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.
Scoped in/out topics		
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.

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).
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.
Significance Criteria		
399	16.7.2	Geological receptors should be included in the significance criteria
399	16.7.2	Soils and agricultural land should be included in the significance criteria
399	16.7.2.3	Any human receptors should be considered as high sensitivity.
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'. 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'.
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

1.17 Traffic and Transport

Page	Reference	Comment
General		
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. 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.

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?
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? 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.
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.
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. Will there be infrastructure measures such as secure cycle parking to allow visitors to lock up bicycles whilst using these facilities? 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.
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?
422	17.7.1.7	Please confirm what denotes a sensitive area.
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. 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. 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.
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. 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. 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 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?
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.

1.18 Water Environment

Page	Reference	Comment
Data/survey		
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.
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. Can the bed substrate be site-won material? Further engagement with the Host Authorities is required on this topic.
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. The modelling has been undertaken to establish surface water, groundwater hydrodynamic water quality and sediment transport in the proposed flood channel. Was this done for flood flows and normal 'low' flows to establish all conditions? Has current abstraction been included? Further engagement with the Host Authorities is required on this topic.
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. 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? Further engagement with the Host Authorities is required on this topic.
437	182.1.22	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. What are the main conclusions? Does the channel become a sediment sink in non-flood conditions?
	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.
Scoping area / area of assessment		

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. Has a more in depth historic modification check been done? Has this been done for all waterbodies?
451	18.3.2.2	It has been noted that new River Basin Management Plan (RBMP) is due to be released. 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.
452	18.3.2.4	Construction works may impact abstraction sites and rates through potential changes to flow and water quality. Any potential changes to abstraction sites and rates will be required to be assessed in the EIA.
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.
Scoped in/out topics		
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
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.
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.
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.
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.
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.
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.
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.
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
459	18.6.2.1	Installing silt traps, clearly state that this will be at the downstream of all works.
Approach		
483	18.7.4.1	Examples should be given of other topics that will influence the reception and require additional assessment.

1.19 Cumulative Effects Assessment

Page	Reference	Comment
General		
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.

Deery, Claire

From: Carr Richard [redacted]
Sent: 10 October 2022 09:59
To: River Thames Scheme
Cc: Daniel Bicknell; Simpson Lucy; Hoad Sarah; Calver Danny (ST); Carr Richard
Subject: FW: WA020001 - River Thames Scheme - EIA Scoping Notification and Consultation
Attachments: WA020001 - Statutory Consultation Letter (1).pdf

Thank you for consulting Transport for London (TfL) on the draft EIA scoping report for the above project. As the strategic transport authority for London, TfL manages the Transport for London Road Network (TLRN) including the A3, A312 within London which may be used as strategic access routes for HGVs travelling to the sites in Richmond and Kingston. TfL has an interest in the protection of rail infrastructure in particular those routes used by London Underground services including the Elizabeth line. As noted in the scoping report TfL also manages a number of bus services in the study areas.

TfL will therefore be interested in measures designed to minimise impacts on rail infrastructure, the highway network and transport operations and to mitigate any negative impacts, both during construction and in operation. In particular, London Underground Infrastructure Protection would want to see further details of areas that may be affected by flooding during construction works in order to update contingency plans. An evaluation of the long term capacity improvements would enable flood risk assessments for the London Underground network to be updated.

Documents submitted for consideration by TfL should take account of the London Plan, Mayor's Transport Strategy, available travel data and TfL guidance documents including advice on Transport Assessments, Travel Plans and Construction Logistics that are published on the TfL website.

We look forward to engaging with the applicants as they develop the full EIA and supporting documents

Best wishes
Richard Carr