



ENVIRONMENTAL STATEMENT: 6.3 APPENDIX 4-2: SCOPING OPINION RESPONSE

Cory Decarbonisation Project

PINS Reference: EN010128

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Revision A



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1. APPENDIX 4-2: SCOPING OPINION RESPONSES

1.1.1. The EIA Scoping Opinion¹ was received from the Planning Inspectorate on behalf of the Secretary of State on 26th May 2023. The responses to the comments made by the Planning Inspectorate and statutory consultees regarding chapters Chapter 1: Introduction (Volume 1) – Chapter 21: Cumulative Effects (Volume1) and how these comments have been or will be addressed by the Applicant, are set out in Table 1 – Table 18 below.



Table 1: Scoping Opinion Response - Introductory Chapters (Introduction, Site and Proposed Scheme Description, Consideration of Alternatives, and EIA Methodology)

Section ID	Scoping Opinion Comments	Response
Planning Ins	spectorate	
2.1.1	"The Scoping Report presents a relatively high level description of the Proposed Development (noting that a zoning plan will be developed at a later stage), which has limited the Inspectorate's ability to provide detailed comments on the project description at this time. The locations of principal development components within the application site are not yet confirmed and that their anticipated heights have not been provided, except for an indicative maximum (worst-case scenario) height of 90m AOD for the absorber column stack. At the point of application, the description of the physical characteristics of the Proposed Development should be sufficiently developed to include further details regarding the design, size and locations of the different elements of the Proposed Development. This should include the footprint and heights of both temporary and permanent structures and land-use requirements for all phases and elements of the Proposed Development. This should be supported (as necessary) by figures, cross sections and drawings which should be clearly and appropriately referenced. The Applicant should make effort to fix the siting of each component and reduce uncertainty where feasible; where this	The Works Plans (Document Reference 2.3) show the zones that comprise the Site, indicating the approximate locations of principal components of the Proposed Scheme, which are also described in Chapter 1: Introduction (Volume 1) and explained further in Chapter 2: Site and Proposed Scheme Description (Volume 1) of this ES. Further, maximum parameters for the Proposed Scheme are described in Chapter 2: Site and Proposed Scheme Description (Volume 1) which are secured through the DCO. Together, and alongside the Design Principles and Design Code (Document Reference 5.7) and the various mitigation documents secured by the Environmental Statement (ES), form the basis of assessment for the Environmental Statement (ES). This ES assesses the worst case scenario and adopts a parameter based approach, which is explained further within Chapter 4: EIA Methodology (Volume 1).



Section ID	Scoping Opinion Comments	Response
	is not possible, the Applicant should provide justification and ensure that the ES assesses a worst-case scenario adopting a parameters based approach."	
2.1.2	2.1.2 "The Scoping Report refers to the development of destination geological storage locations offshore and the transportation of LCO ₂ and low carbon hydrogen, which do not form part of the Proposed Development which is subject to a proposed application for Development Consent under the Planning Act	As described in Chapter 1: Introduction (Volume 1) , the Hydrogen Project is no longer included in the scope of the Proposed Scheme. The transportation of LCO ₂ and geological storage destinations are discussed within Chapter 2: Site and
	The ES should clearly describe the relationship between the Proposed Development and connected projects. This should include the extent to which the Proposed Development is dependent on their delivery and the development timelines and anticipated consenting routes of the other projects, with an explanation of how these will be coordinated. The Scoping Report states that the "downstream" effects of the transporting the LCO ₂ (via the River Thames) and hydrogen (via pipeline connection, hydrogen tube trailers or hydrogen tankers (ships) may be assessed as part of the ES for the Proposed Development, "where appropriate". The ES should explain the likely methods proposed to	 Proposed Scheme Description (Volume 1). Chapter 21: Cumulative Effects (Volume 1) reports the assessment of the likely significant cumulative of other relevant projects together with the Proposed Scheme. However, both the transportation and storage of the LCO₂ falls out of the scope of the Proposed Scheme and consequently the chapters of this ES, with the following exceptions: Chapter 5: Air Quality (Volume 1), which considers marine vessel emissions of NO₂, PM₁₀ and PM_{2.5}; Chapter 8: Marine Biodiversity (Volume 1), which assesses the potential impacts of vessel strikes on marine mammals;
	transport LCO ₂ and hydrogen from the site and should demonstrate that the methods considered are deliverable. Accordingly, the assessment should address the potential for any of these methods to result in a likely significant effect.	Chapter 13: Greenhouse Gases (Volume 1) which assesses the potential impacts of the transportation of



Section ID	Scoping Opinion Comments	Response
	The Inspectorate advises that the ES sets out clearly and in detail, how the assessment addresses impacts resulting from consequential development and activity where significant effects are likely to result (e.g shipping of LCO2 and transport of hydrogen). The ES should clearly explain and justify the boundaries and limitations of the assessment and, noting uncertainty may persist, any reasonable assumptions that have been applied (e.g. number and routing of vessel movements etc). The assessment should address the worst case (which may differ for different aspects), and if the nature and likely impacts of transport methods are very different, then the Applicant should consider the need to assess each option individually."	 LCO₂ for the geological storage destination and explains the basis on which this is undertaken; Chapter 19: Marine Navigation (Volume 1), which considers impacts of collision, contact, grounding and breakout associated with the LCO₂ vessels; and Chapter 20: Major Accidents and Disasters (Volume 1), which assesses the risk of transport accidents in the River Thames. Further detail is provided within the respective technical chapters.
2.1.3	"The ES should confirm the maximum number and the maximum (and where relevant, minimum) height and diameter of the proposed stack/s. Should flexibility be required, any limits of deviation should be taken into account in relevant ES assessments, particularly with regards to air quality modelling and the Townscape and Visual Impact Assessment. The ES should identify and assess the worst case scenario for the stacks for relevant aspect chapters (noting that this may differ between aspects)."	Chapter 2: Site and Proposed Scheme Description (Volume 1) details the parameters of the proposed stacks. These parameters are considered the worst case scenario and have been assessed as appropriate in the technical chapters.
2.1.4	"The Scoping Report identifies available options for the principal components of the Proposed Development. The options include a number of potential sources for the water	As described in Chapter 1: Introduction (Volume 1) , the Hydrogen Project and the battery energy storage system are no longer included in the scope of the Proposed Scheme.



Section ID	Scoping Opinion Comments	Response
	supply for the Electrolysis Plant and different approaches relevant to the export of hydrogen offsite, including whether a pipeline would be brought forward by a distribution network	The delivery of construction materials and the backup power supply is described in Chapter 2: Site and Proposed Scheme Description (Volume 1) .
	operator. There is also uncertainty regarding whether construction materials would be delivered via road/ water, the number of buildings required to house electrolyser arrays and associated plant, and the backup power supplies for the CCS Project and Hydrogen Project (described as "for example a battery energy storage system and/or emergency standby generators").	The options identified for the potential sources of water supply for the Proposed Scheme are described in Chapter 3: Consideration of Alternatives (Volume 1) . The chosen options for the source of water supply to the Proposed Scheme are described in Chapter 2: Site and Proposed Scheme Description (Volume 1) and assessed within the relevant chapters.
	The Inspectorate notes that early determination of options and engagement with relevant consultation bodies will support a more robust assessment of likely significant effects and provide certainty to those likely to be affected. Where it is determined that options cannot be excluded and flexibility	Engagement has and will continue to be undertaken with consultation bodies, where relevant, as described in Chapter 4: EIA Methodology (Volume 1) and the other topic chapters where relevant.
	needs to be retained, this should be fully justified. Where options are retained, the assessment should address the	Any consultation undertaken to date and specific mitigation measures are described in the technical chapters.
	worst case (which may differ for different aspects), and where the nature and likely impacts of options are very different, then the Applicant should consider the need to assess each option individually, specifying mitigation where required."	This ES assesses the worst case scenario and adopts a parameter based approach, which is explained further within Chapter 4: EIA Methodology (Volume 1).



Section ID	Scoping Opinion Comments	Response
2.1.5	"If the Proposed Development includes works that may affect the existing drainage regime including ditches these should assessed in the ES. In particular the assessment should focus on upgrades to or construction of crossing points, including any crossings required temporarily for construction."	The Proposed Scheme will require a new drainage system within the Site. A description of the likely drainage system is provided within Chapter 2: Site and Proposed Scheme Description (Volume 1) and assessed within the relevant chapters.
		The Outline Drainage Strategy (Document Reference 7.2) contains relevant information on the existing drainage regime and the new drainage regime designed as part of the Proposed Scheme, including any proposed works to ditches.
		Further detail about the baseline (existing) drainage regime is provided within Chapter 2: Site and Proposed Scheme Description (Volume 1) and Chapter 11: Water Environment and Flood Risk (Volume 1). An assessment of the potential impacts of the Proposed Scheme on the existing drainage regime is provided within Chapter 7: Terrestrial Biodiversity (Volume 1) (as habitats and through their supporting value to water voles) and Chapter 11: Water Environment and Flood Risk (Volume 1).
2.1.6	"Paragraph 2.1.17 states that "A portion of the Crossness LNR is proposed to be included in the Site Boundary" and paragraph 6.6.2 states that "The Proposed Scheme will likely result in the loss of part of Crossness LNR". The ES should quantify the amount of land within the Crossness LNR which is located within the application site and describe in detail the works which would take place within the LNR.	The amount of land of the Crossness LNR within the Site is described and quantified in Chapter 7: Terrestrial Biodiversity (Volume 1). The works likely to take place within the Crossness LNR are described in Chapter 2: Site and Proposed Scheme Description (Volume 1), the Outline LaBARDS (Document Reference 7.9) and also



Section ID	Scoping Opinion Comments	Response
	The scoping consultation response from Thames Water (Appendix 2 of this Opinion) states that Crossness LNR was	described within Chapter 7: Terrestrial Biodiversity (Volume 1).
	required to be provided and maintained for at least 99 years by a section 106 legal agreement associated with a previous planning permission. Where there is potential for the Proposed Development to impact on the Crossness LNR, the ES should include an assessment of relevant effects,	The Works Plans (Document reference 2.3) shows the Mitigation and Enhancement Area, which is described in Chapter 2: Site and Proposed Scheme Description (Volume 1).
	including any effects on the ability to deliver outcomes required through the mitigation provided under the previous scheme."	A summary of the historical commitments made by Thames Water in relation to the Crossness LNR are provided in Chapter 2: Site and Proposed Scheme Description (Volume 1). Chapter 7: Terrestrial Biodiversity (Volume 1) assesses the potential ecological effects of the Proposed Scheme on the Crossness LNR and considers the ability of the Proposed Scheme to continue to deliver outcomes required under the previous permission. The Draft DCO (Document Reference 3.1) submitted as part of the application deals with the impacts of crossover with the Section 106 agreement and previous planning permissions.
2.1.7	"The description in the ES of the nature and quantity of materials and natural resources to be used during the operational phase (and where relevant, stored on site) should include the solvent for chemical absorption in the Carbon Capture Plant and the water supply for the Electrolysis Plant. The volume of amine-loaded waste to be produced by the	A description of the nature and quantity of the chemicals in relation to the Carbon Capture Facility (including aminebased solvents), during operation, is provided in Chapter 16: Materials and Waste (Volume 1) and the proposed scope and methodology for this assessment is provided in Chapter 16: Materials and Waste (Volume 1).
	Solvent Regeneration System, stored on site and transported off site for incineration should also be estimated.	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the chemicals used in the Carbon



Section ID	Scoping Opinion Comments	Response
	The description of the land use requirements of the operational phase should include the locations of storage areas (including for materials, liquids, water and wastes) within the application site."	Capture Facility and sets out that small volumes of amine-loaded sludge will be produced as a by-product of the carbon capture process. This will be temporarily stored onsite prior to being transported offsite to an appropriate waste treatment facility as hazardous waste, further details are provided in Chapter 18: Landside Transport (Volume 1) . The volume of amine wastewater effluent will also be comparatively small; therefore, the waste will be disposed of by specialised appointed Contractor(s), taking the waste offsite for disposal via road tanker. An estimate of the volume of amine-loaded waste produced during operation of the Proposed Scheme, where information is available is provided in Chapter 16: Materials and Waste (Volume1) and the proposed scope and methodology for this assessment is provided in Chapter 16: Materials and Waste (Volume 1).
		The description of the land use requirements of the operation phase are described in Chapter 2: Site and Proposed Scheme Description (Volume 1) . The final, permanent, LCO ₂ storage locations do not form part of the Proposed Scheme.
2.1.8	"The Scoping Report presents little information in relation to proposed works in the marine environment. The ES should describe in detail all proposed works in the marine environment. The ES should identify areas that would be dredged during construction and operation and the likely quantities of material that would be dredged, along with the	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the proposed works in the marine environment, including dredging requirements and the proposed dredging regime, during the construction and operation phases.



Section ID	Scoping Opinion Comments	Response
	methods and frequencies of these activities and likely location for any disposal. Any likely significant effects should be assessed in the relevant ES aspect chapters."	Likely significant effects on the marine environment as a result of the Proposed Scheme are discussed in Chapter 8: Marine Biodiversity (Volume 1), Chapter 9: Historic Environment (Volume 2), Chapter 11: Water Environment and Flood Risk (Volume 1) and Chapter 19: Marine Navigation (Volume 1).
2.1.9	"The ES should describe the technical capacity of the backup power supplies for the CCS Project and Hydrogen Project (described in the Scoping Report as "for example a battery energy storage system and/or emergency standby generators")."	As described in Chapter 1: Introduction (Volume 1) , the battery energy storage system is no longer included as part of the Proposed Scheme.
		Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the main components of the backup power supply for the Proposed Scheme; which will be diesel generators.
2.1.10	"The ES should detail the number of full and part time jobs anticipated to be generated by all phases of the Proposed Development.	Chapter 2: Site and Proposed Scheme Description (Volume 1) details the estimated peak workforce. Further information is provided in Chapter 15: Socio-economics
	It should be explained how the construction workforce would vary depending on whether the CCS Project is constructed in either a single phase or two phases."	(Volume 1). Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the construction sequence and indicative construction programme. Each technical chapter of this ES has assessed the worst case preliminary construction programme.



Section ID	Scoping Opinion Comments	Response
2.1.11	"The ES should confirm the locations and sizes of the construction compound(s) and where possible, show detailed layouts. Any mitigation measures proposed to avoid or minimise impacts relating to the use of compounds should be described in the ES."	Temporary Construction Compounds are described in Chapter 1: Introduction (Volume 1) and explained further in Chapter 2: Site and Proposed Scheme Description (Volume 1), the locations of the Temporary Construction Compounds are shown on the Works Plans (Document Reference 2.3).
		Mitigation measures relating to the Temporary Construction Compounds are included within the relevant technical chapters and the Outline CoCP (Document Reference 7.4).
2.1.12	"The Scoping Report notes that some 24-hour working is likely to be required. The locations and types of such activities should be identified and any likely significant effects from these works assessed within the ES."	As described in Chapter 2: Site and Proposed Scheme Description (Volume 1), during construction, standard working hours for the landside activities are Monday to Friday 07:00 to 19:00. On Saturdays, standard working hours are 07:00 to 13:00, with no working on Sundays or Bank Holidays. These restrictions do not apply to construction works where these (a) are carried out within existing buildings or buildings constructed as part of Proposed Scheme; (b) are carried out with the prior approval of the relevant planning authority; or (c) are associated with an emergency.
		A precedent has been set for these construction hours, replicate those used for the construction of Riverside 2.
		Marine construction activities are expected to be 24 hours and 7 days a week.



Section ID	Scoping Opinion Comments	Response
		Once construction of the Proposed Scheme is complete it will operate concurrently with Riverside 1 and Riverside 2, which are designed, and consented, for continuous operation. Therefore, other than for periods of maintenance and unplanned shutdowns, the Carbon Capture Facility will operate continuously.
2.1.13	"The ES should detail the number of anticipated vehicle and vessel movements during all phases of the Proposed Development, including those required for dredging and disposal, and explain the assumptions upon which these have been established. In relation to vessels, the ES should provide details of berthing and navigational arrangements, direction and distances of travel, and a recommended speed limit for vessels including how this would be enforced. The ES should also consider, within relevant sections, the requirement for contingency plans during construction and operation in the event that river navigation is not possible, for example extreme meteorological events or jetty outage."	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the construction and operation vehicle and vessel movements and management for the Proposed Scheme. Vehicle movements are considered in Chapter 18: Landside Transport (Volume 1) and Appendix 18-1: Transport Assessment (Volume 3). Vessel movements are considered in Chapter 19: Marine Navigation (Volume 1) where additional management procedures including the enforcement of a minimum passing distance from marine works (50m) and a maximum speed reduction (less than 6kts) is set out. Contingency plans during construction and operation, in the event that river navigation is not possible are described Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3).



Section ID	Scoping Opinion Comments	Response
2.1.14	"The ES should provide a full description of the nature and scope of operation and maintenance activities, including types of activity and frequency. This should include consideration of potential overlapping of activities with those required for the continuing operation of Riverside 1 and future operation of Riverside 2."	A description of the nature and scope of operation and maintenance activities of the Proposed Scheme is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1).
2.1.15	"The assessment in the ES should take into account the locations of existing infrastructure and identify any interactions between it and the Proposed Development. Any impacts to existing infrastructure which are likely to result in significant effects should be assessed. In particular, the Applicant's attention is drawn to the scoping consultation responses from Thames Water, the Environment Agency, National Grid Electricity Transmission Plc and Northern Gas (see Appendix 2 of this Opinion), which highlight flood defences and electricity transmission, gas and water infrastructure that could be affected by the Proposed Development."	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the existing utilities infrastructure within the Site and how these have been considered in the design of the Proposed Scheme.
		Chapter 11: Water Environment and Flood Risk (Volume 1) assesses potential significant effects on the existing flood defences and Chapter 20: Major Accidents and Disasters (Volume 1) considers potential risks to the existing electricity transmission, gas and water infrastructure. Sensitive receptors considered by Chapter 17: Ground Conditions and Soils (Volume 1) includes below ground services and building structures.
2.1.16	"The scoping consultation response from Thames Water (Appendix 2 of this Opinion) indicates that if the water supply is to be via mains water connection, works to existing water infrastructure may be required. The ES should take into account impacts resulting from any works required to utilities infrastructure to serve the Proposed Development."	As described in Chapter 2: Site and Proposed Scheme Description (Volume 1) the water supply will likely use a combination of potable water from Thames Water (Water Supply Zone: 0105), and recycled effluent from the Carbon Capture Facility. Provision of potable water will require a new potable water connection and will be required from a Thames Water main. This connection will likely be located within the



Section ID	Scoping Opinion Comments	Response
		southern area of Norman Road within the Site Boundary and as such connecting pipework will need to be installed within Norman Road.
		Additional utilities connections will be required for wastewater discharge, the insulated heat pipework associated with the Heat Recovery and Transfer System as well as other electrical or telecommunications connections.
		The above utilities connections collectively form part of the Proposed Scheme and as such have been assessed within this ES.
2.1.17	"The ES should describe the proposed site entrance/s and the routes to be used for all vehicular and vessel access during construction and operation of the Proposed Development and this information should be clearly presented on supporting plans within the ES. The ES should describe and assess the potential impacts (both positive and negative) associated with any	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the proposed access routes and access points during the construction and operation phases and these are also shown on the Access and Rights of Way Plans (Document Reference 2.4). The current access road (Norman Road) will be used during the construction and operation phases.
	improvements/ changes to the access routes which are either required to facilitate construction/ operation of the Proposed Development or are required for restoration purposes on completion of the works.	Chapter 18: Landside Transport (Volume 1) includes an assessment of effects upon access routes. It is assumed that vehicles, including HGV, would access the Site via the A282/M25, A206, A2016 and Norman Road.
	The ES should explain how the proposed access route(s) relate to sensitive receptors."	



Section ID	Scoping Opinion Comments	Response
2.1.18	"Chapter 19 of the Scoping Report states that as much of the application site is brownfield land which has already been developed, the discovery of previously unidentified UXO is unlikely. No reference is made to the likely risk of encountering UXO in the marine area of the application site.	A high-level assessment of the potential impacts associated with the risk of encountering UXO in both the marine and terrestrial area of the Site is provided in Chapter 17: Ground Conditions and Soils (Volume 1) .
	In view of the location, nature and characteristics of the Proposed Development, the Inspectorate advises that the ES should include a high-level assessment of impacts from UXO in relevant aspect chapters based on a likely worst case scenario. Any assumptions used in the definition of the worst case scenario should be explained in the ES."	
2.1.19	"The ES should describe the location and methods applied for piling activities (including any piling in the marine area) and explain any assumptions made in this regard. Any likely significant effects should be assessed and any proposed mitigation measures described."	Indicative locations for piling, and the proposed piling methods, are described in Chapter 2: Site and Proposed Scheme Description (Volume 1) .
2.1.20	"The Proposed Development may involve the demolition of a single industrial facility (Munster Joinery Warehouse) which is located within the application site. The ES should provide a description of any demolition works required and assessment of any resulting likely significant effects."	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the likely demolition works required for the Proposed Scheme and these works have been considered in the relevant technical chapters.



Section ID	Scoping Opinion Comments	Response
2.2.1	"Paragraph 3.8.2 of the Scoping Report states that there are no plans to decommission and remove the Proposed Development and were it to be removed, it would be likely to require a similar degree of plant, equipment and disturbance to that predicted during construction. At the end of the anticipated 25 year operational lifespan, a decision would be taken as to whether to extend the operational life of the Proposed Development. The Inspectorate does not consider that sufficient information has been provided regarding the location and nature of the works in order to scope out impacts from decommissioning. The ES should provide aproportionate description of the activities and works which are likely to be required to decommission the Proposed Development or extend its operational life, and the anticipated duration. Where significant effects are likely to occur as a result of works to decommission the Proposed Development or extend its operational life, these should be described and assessed in the ES."	As set out in Chapter 2: Site and Proposed Scheme Description (Volume 1) and Chapter 4: EIA Methodology (Volume 1), any decommissioning would be likely to be completed in less time than the construction phase and would be likely to require a similar degree of plant, equipment and disturbance to that predicted during construction and so this ES has not assessed this phase separately, rather, it has assumed that such phase would have similar or less effects than the construction phase. In order to demonstrate this Chapter 2: Site and Proposed Scheme Description (Volume1), by technical topic, demonstrates that there are unlikely to be any materially new or materially different significant effects during decommissioning than those identified during construction. A Demolition Environmental Management Plan will be prepared in advance of decommissioning commencing.
2.2.2	"The ES should assess impacts from any thermally elevated discharges into the River Thames which are likely to result in significant effects on ecological receptors."	Water discharge from the Proposed Scheme is described in Chapter 2: Site and Proposed Scheme Description (Volume 1) – there is no intention to discharge into the River Thames.



Section ID	Scoping Opinion Comments	Response
2.2.3	"Having regard to the nature and characteristics of the Proposed Development, the Inspectorate is content that any impacts from radiation are not likely to result in significant effects. This matter can be scoped out of the ES."	No response required.
2.2.4	"Paragraph 3.10.1 of the Scoping Report proposes to scope out lighting, however other sections of the Scoping Report (e.g. Chapter 6: Terrestrial Biodiversity) identify impacts from lighting as scoped into the assessment, meaning the proposed approach is unclear. The Inspectorate is therefore not in a position to agree that this matter can be scoped out. The ES should assess impacts from lighting which are likely to result in significant effects."	Chapter 2: Site and Proposed Scheme Description (Volume 1), the Outline Lighting Strategy (Document Reference 7.3) and the Outline CoCP (Document Reference 7.4) describe lighting for the Proposed Scheme. The assessment of the potential effects from lighting emissions of the Proposed Scheme is provided in Chapter 7: Terrestrial Biodiversity (Volume 1), Chapter 8: Marine Biodiversity (Volume 1) and Chapter 10: Townscape and Visual (Volume 1).
2.2.5	"The ES should describe any limitations to the baseline data collection for the Proposed Development resulting from Riverside 2 currently being under construction on the application site (e.g. possible restrictions on land access), and explain how any such limitations have been addressed. Paragraph 3.4.8 of the Scoping Report states that where it is not possible to access third party private land, data will be collected from publicly accessible land only. The ES should be based on sufficient baseline data to support a robust assessment of likely significant effects, as required by the EIA Regulations 2017. The Applicant should make effort to agree	The chapters in this ES detail the limitations and assumptions of each topic, including any associated with Riverside 2 being under construction. Chapter 4: EIA Methodology (Volume 1) explains how Riverside 2 has been factored into the baseline and future baseline scenarios. Riverside 2 is due to be operational by 2026. This ES is based on sufficient baseline data to support a robust assessment of likely significant effects. Engagement has, and will continue to be, undertaken with consultation bodies where relevant, as described in Chapter 4: EIA Methodology (Volume 1). Any consultation



Section ID	Scoping Opinion Comments	Response
	the sufficiency of surveys required to inform the assessment with relevant consultation bodies."	undertaken, including that relating to surveys, is described in each technical chapter where relevant.
2.2.6	"The Scoping Report refers to use of information gathered and presented within the Ess for previous projects (primarily Riverside 2).	The baseline data used is described in each topic chapter. Where data has been utilised, or is proposed to be used, from previous schemes, such as Riverside 1 and Riverside 2,
	The ES should utilise available datasets (for example, air quality monitoring data for Riverside 1) and identify where this is required be supplemented by new surveys to ensure that the assessment is based upon up-to date information and is representative of the baseline at the time of production. Data collected in relation to other projects and used within the ES for this Proposed Development should be clearly referenced and the ES should include an explanation of why that data is considered applicable and to remain representative of the current and future baseline."	clear justification for the appropriateness of this has been provided.
2.2.7	"The Inspectorate notes the ES would be based on an assumption that Riverside 2 is completed and operational by 2026. Construction of the Proposed Development is scheduled to start in Q1 2026.	Riverside 2 is on programme and is planned to be operational by 2026. Construction of the Proposed Scheme remains scheduled to commence in 2026 but post Riverside 2 opening.
	If there is any change to this position and there is potential for overlapping construction of the two projects, the ES should describe and assess a worst case."	



Section ID	Scoping Opinion Comments	Response
2.2.8	"The description of reasonable alternatives in the ES should include any alternatives to the use of land within Crossness LNR and the main reasons for selecting that option, including a comparison of the environmental effects."	Chapter 3: Consideration of Alternatives (Volume 1) describes the reasons for selecting the location of the Proposed Scheme and the alternative sites considered for both the Carbon Capture Facility and Proposed Jetty. Further detail is provided in the Terrestrial Site Alternatives Report (Document Reference 7.5) and Jetty Site Alternatives Report (Document Reference 7.6) and the Design Approach Document (Document Reference 5.6) for Carbon Capture Facility layout.
2.2.9	"The Scoping Report (paragraph 10.6.2 and Table 19-4) confirms that an Emergency Preparedness and Response Plan will be developed. A draft/ outline version of this plan should be provided with the ES and the ES should confirm how adherence with the plan would be secured through the dDCO or other legal mechanism. If impacts from measures in this plan (for example backup generators in the event of a loss of electrical power) are likely to result in significant effects, these should be assessed in relevant ES chapters."	The Outline EPRP (Document Reference 7.11) outlines the contingency plans in the event that an emergency event occurs onsite. The full Emergency Preparedness and Response Plan will be prepared prior to the commencement of construction in substantial accordance with the Outline EPRP (Document Reference 7.11), which is secured through a requirement in the Draft DCO (Document Reference 3.1).
		Contingency plans during construction and operation, in the event that river navigation is not possible are described Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3).
		The scope of the contingency plans within the Outline EPRP (Document Reference 7.11) and Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3) are based upon the description of the Proposed Scheme



Section ID	Scoping Opinion Comments	Response
		presented within Chapter 2: Site and Proposed Scheme Description (Volume 1) and the findings of the technical assessments presented within Chapter 5: Air Quality (Volume 1) to Chapter 21: Cumulative Effects (Volume 1).
2.2.10	"The Inspectorate on behalf of the SoS has considered the Proposed Development and concludes that the Proposed Development is unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State. In reaching this conclusion the Inspectorate has identified and considered the Proposed Development's likely impacts including consideration of potential pathways and the extent, magnitude, probability, duration, frequency and reversibility of the impacts.	There are no material changes to the description of the Proposed Scheme, therefore the preparation of a further detailed transboundary screening is not required.
	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 Proposed Development subject to this transboundary screening is the Cory Decarbonisation Project (to be located within the site boundary shown on Figure 1-1 of the Scoping Report), which is subject to a proposed application for Development Consent under the Planning Act	



Section ID	Scoping Opinion Comments	Response
	2008. Disposal of CO2 offshore does not form part of the Proposed Development and development of offshore elements of the project, including off-site geological storage locations for the captured CO2, is subject to separate consenting requirements.	
	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/	
2.2.11	"The Scoping Report refers to the draft NPS' published in 2021. The ES should make reference to the most recently available version of the draft NPS, currently from March 2023, or the adopted NPS if published by the time of authoring of the ES."	This ES makes reference to the latest versions of the NPS designated by the Secretary of State of DESNZ in January 2024 ² .
Environmen	t Agency	
2.2.41	"During summer droughts when dissolved oxygen levels in the estuary can be depressed (especially when storm sewers vent raw sewage (something which should reduce, but not end completely, following the operation of the Thames Tideway Tunnel) an alternative and possibly beneficial option	Chapter 2: Site and Proposed Scheme Description (Volume 1) provides a description of the types of wastewater and how wastewater will be generated and treated as part of the Proposed Scheme. It is not practicable to vent the oxygen



Section ID	Scoping Opinion Comments	Response
	may be to vent the oxygen via a diffuser into the tideway water, to elevate dissolved oxygen levels."	via a diffuser into the Thames Tideway Tunnel which is located approximately 5km northwest of the Site Boundary.
		Appropriate mitigation is described in the technical chapters.
		Extreme temperatures events and droughts are assessed in Chapter 12: Climate Resilience (Volume 1).
2.2.56	"New jetty requires marine licences and accompanying WFD assessments. EA are consultee to all marine licences (both PLA and MMO licenses required MMO may be the main consultee under DCO but PLA licence required also). Marine team would expect to be included in WFD marine water quality compliance consultations. As piling and associated activities WILL disturb sediments, and sediments in this part of the river WILL contain EQSD chemicals AND CEFAS- list chemicals (at concentrations ABOVE action level 1), this activit will not "scope out" and will require the further "impact assessment" stage. Dredging will certainly require WFD impact assessment stage. We note the project has "scoped in" water quality, within the WFD scoping exercise carried out in Appendix A, and we agree with this interpretation of the guidance."	A WFD impact assessment for the Proposed Scheme holistically (including the Carbon Capture Facility, Proposed Jetty Temporary Construction Compounds, Mitigation and Enhancement Area, and Utilities Connections and Site Access Works) is presented in Appendix 11-1: Water Framework Directive Assessment (Volume 3). The Environment Agency, the Marine Management Organisation and the Port of London Authority have been consulted on the Proposed Scheme, and this will continue. Further detail about the consultation undertaken for the Proposed Scheme is provided in Table 11-2 of Chapter 11: Water Environment and Flood Risk and also within the Consultation Report (Document Reference 5.1).
		Chapter 2: Site and Proposed Scheme Description (Volume 1) provides an overview of the construction activities, including piling and dredging that will be required for the construction phase of the Proposed Scheme.
		Piling and dredging associated with the Proposed Scheme is assessed in the relevant technical chapters. The dredged



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		arisings will be managed in accordance with relevant legislation and will be disposed of offsite (via vessel to a suitably licenced facility) as it is unlikely that the dredged arising will be suitable for reuse on the Proposed Scheme. The removal of the dredged arisings will be undertaken by an appropriately licenced waste carrier.
2.2.57	"Need for dredging noted. WFD "impact assessment stage" will be required, and we look forward to seeing it once the chemical analysis of dredge samples has been undertaken."	A WFD impact assessment for the Proposed Scheme holistically (including the Carbon Capture Facility, Proposed Jetty Temporary Construction Compounds, Mitigation and Enhancement Area, and Utilities Connections and Site Access Works) is presented in Appendix 11-1: Water Framework Directive Assessment (Volume 3).
2.2.58	"Noted a waste-water treatment plant is required. This may suggest a wastewater discharge is intended, either directly or indirectly, to the Thames Middle waterbody, and this is a matter for the EA permitting function. WFD compliance needs not be taken into account within any permit issued."	Chapter 2: Site and Proposed Scheme Description (Volume 1) provides a description of the types of wastewater likely to be generated and how it would be treated as part of the Proposed Scheme. Appropriate mitigation is described in the topic chapters.
		A WFD impact assessment for the Proposed Scheme is presented in Appendix 11-1: Water Framework Directive Assessment (Volume 3). The WFD impact assessment considers the Thames Middle Water Body. Further information on this waterbody is presented in Chapter 8: Marine Biodiversity (Volume 1) and Chapter 11: Water Environment and Flood Risk (Volume 1). There is no intention to discharge into the River Thames.



Section ID	Scoping Opinion Comments	Response
2.3.8	"The Construction Practice (OCoCP) will be important in the context of mitigation for WFD potential impacts during construction. Drainage of the site may have implications for the Thames."	As detailed in Chapter 2: Site and Proposed Scheme Description (Volume 1) the Proposed Scheme will require a new drainage system within the Site, further information is included within the Outline Drainage Strategy (Document Reference 7.2).
		The new drainage system is considered in Appendix 11-1: Water Framework Directive Assessment (Volume 3) and Chapter 11: Water Environment and Flood Risk (Volume 1).
		Construction impacts to drainage are managed through measures in the Outline CoCP (Document Reference 7.4) .
3.10.1	"We question whether this statement is accurate in respect of heat. Can the applicant confirm that there will be no thermally elevated discharges into the Thames Middle waterbody as a result of this project. If not, then they need to be scoped in, and considered in any permitting of discharges."	As detailed in Chapter 3: Consideration of Alternatives (Volume 1) wastewater discharge to the River Thames has been ruled out as a viable option. Chapter 2: Site and Proposed Scheme Description (Volume 1) provides a description of the types of wastewater likely to be generated and how they would be treated as part of the Proposed Scheme. There is no intention to discharge into the River Thames
		Impacts to the Thames Middle Transitional Water Body are considered in Appendix 11-1: Water Framework Directive Assessment (Volume 3) and Chapter 11: Water Environment and Flood Risk (Volume 1).



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3.12.6	"For the WFD water quality element we agree with the WFD scoping carried out so far, in that water quality has been correctly scoped in for further detailed WFD "impact assessment" stages. These will follow when supporting information has been gathered, and we will comment upon the final WFD impact assessment for the various activities which ordinarily require marine licenses, though this will be via the DCO process."	No response required.
London Bor	ough of Bexley	
Policy Update	"Land Use designations shown on figures within the Scoping Opinion and Policies should be updated to reflect the adoption of the Bexley Local Plan (2023). On 26 April 2023, the London Borough of Bexley formally adopted the Bexley Local Plan. The Local Plan, together with the Mayor's London Plan (2021), now comprise the statutory Development Plan for the borough and will be used by officers for the determination of planning applications. A new Policies Map illustrates geographically the application of the policies in the Local Plan. The Local Plan and Policies Map replace in full the Bexley Core Strategy 2012, the remaining extant policies of the Bexley Unitary Development Plan 2004, and the Unitary Development Plan Proposals Map 2004. The Bexley Local Plan, along with the Local Plan Policies Map are available to view and download from the Council website at https://www.bexley.gov.uk/services/planning-and-building-	The Bexley Local Plan ³ , adopted on 26 April 2023, is considered, where relevant, within Chapter 5: Air Quality (Volume 1) to Chapter 21: Cumulative Effects (Volume 1).



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	control/planning-policyand-guidance. A number of relevant Local Plan policies are missing from the policy, sections of each chapter in the scoping report."	
Mayor's Offi	ce for Policing and Crime	
N/A	"The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA."	The policy, legislation, and guidance relevant to each technical assessment is detailed within Chapter 5: Air Quality (Volume 1) to Chapter 21: Cumulative Effects (Volume 1).
Port of Lond	Ion Authority	
Site Location	"Note that the redline boundary for the proposed development is very broad at this stage, extending across the River Thames to the borough boundary line between the London Boroughs of Bexley and Barking & Dagenham. It will need to be made clear as the scheme develops the extent of the actual works affecting the Thames and how far into the Thames the proposed jetty and berthing pocket will encroach in order to amend the red line boundary as appropriate."	The Proposed Jetty and other maritime works including proposed dredging is predominantly located within the River Thames as shown on the Works Plans (Document Reference 2.3). Section 2.3 of Chapter 2: Site and Proposed Scheme Description (Volume 1) includes the parameters of assessment for the Proposed Scheme, including for the Berth Pocket, Loading Platform, Breasting Dolphins, Mooring Dolphins and Access Trestle.
General Points	"The PLA in principle welcome the proposal which is looking to utilise the Tidal Thames as a decarbonisation hub and as a potential location for hydrogen production and fuelling. As the scheme develops the Environmental Statement (ES) will	As described in Chapter 1: Introduction (Volume 1) , the Hydrogen Project is no longer included in the scope of the Proposed Scheme.



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	need to demonstrate how the use of the river for the transportation of construction and waste materials will be maximised in line with planning policy. It will also need to be made clear as the scheme develops any impacts as a result of the increased river traffic, once the facility is operational."	Middleton Jetty is used by the Applicant for waste deliveries and IBA export, to and from Riverside 1, operations that will intensify with Riverside 2 commencing operation. It is not practicable to use Middleton Jetty for the delivery of construction plant and materials for the landside or marine elements of the Proposed Scheme without compromising the effectiveness of the operations at Riverside 1 and Riverside 2 (once operational). The alternative would be to use the Proposed Jetty (if constructed in advance); however this would not have the required capacity to accommodate the construction of the Proposed Scheme. In addition, its lightweight structure is less suited for bringing in construction materials. It is therefore proposed that the construction of the landside elements transport will be road-based. Utilising landside transport for the construction of the Proposed Scheme will not result in significant effects on the local road network, as set out in Chapter 18: Landside Transport (Volume 1). Where suitable, for the Proposed Jetty transport will primarily be via the River Thames (i.e. steel piles, precast concrete units and marine equipment such as fenders).
		Based on a preliminary operational capacity assessment, up to five marine vessels will call at the Proposed Jetty each week to collect and transport LCO ₂ to meet the annual throughput, further detail is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1) . The throughput forms the basis of the operation phase assessment presented in the Appendix 19-1: Preliminary Navigation



Section ID Scoping Opinion Comments Response		Response
		Risk Assessment (Volume 3) and Chapter 19: Marine Navigation (Volume 1).
General Points	"The development site has a current river works licence, including for the existing works and use of the Safeguarded Middleton Wharf. It will be vital for discussions to be held between the PLA and the applicant at an early stage with regard to the river works licencing process (including dredging) and its incorporation as part of the DCO process."	Table 19-2 of Chapter 19: Marine Navigation (Volume 1) provides a summary of the consultation and engagement undertaken with the PLA to date. The Draft DCO (Document Reference 3.1) contains provisions dealing with the river works licensing process and has been discussed with the PLA.
Chapter 2 - Site and Proposed Scheme Description	"Paragraph 2.2.27 states that the development of the destination geological storage locations offshore and the transportation of LCO2 via the River Thames is not part of the Carbon Capture and Storage Project, although it is acknowledged that the 'downstream' effects of the transporting the LCO2 may be assessed as part of the EIA process for the Proposed Scheme, where appropriate. It is not clear what is meant by 'downstream effects of transporting LCO2' and this will require expansion in the ES."	The assessment within Chapter 13: Greenhouse Gases (Volume 1) considers the emissions associated with the transportation of LCO ₂ to the geological storage destination.
Chapter 2 - Site and Proposed Scheme Description	"As part of the decommissioning section (paragraph 2.4.11) it is stated that The Proposed Scheme is anticipated to operate for a minimum of 25 years, and that at the end of the 25-year period, the Proposed Scheme may have some residual life remaining and therefore a decision will be made as to whether to extend the operational life of the Proposed Scheme. It is essential that the PLA are included in any	The Proposed Scheme is intended to operate for at least 25 years. However, for the purpose of assessing a reasonable worst case scenario it is assumed that it could have a design life of 50 years, as per typical design life of the civil and structural elements of the Proposed Scheme. At the end of the 50 year period, the Proposed Scheme may have some residual life remaining, and an investment



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	discussions on the long term use and any potential decommissioning of the proposed river infrastructure."	decision will be made as to whether the operational life of the Proposed Scheme is to be extended. If it is not appropriate to continue operation, the plant will be decommissioned. Any decommissioning will be subject to a decommissioning environmental management plan, secured through the Draft DCO (Document Reference 3.1) .
		Further information on the approach to decomissioning is presented in Section 2.7 of Chapter 2: Site and Proposed Scheme Description (Volume 1).
Chapter 2 - Site and Proposed	"Within chapter 2 there are several references to the installation of various pipelines as part of the proposed development, including as a potential option for the export of	As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the Proposed Scheme.
Scheme Description	, ,	The above ground pipelines, ductwork and other pipework described in Chapter 2: Site and Proposed Scheme Description (Volume 1) will be located within the Site, as shown on the Works Plans (Document Reference 2.3).



Section ID	Scoping Opinion Comments	Response	
Chapter 2 - Site and Proposed Scheme Description	"Noted that during the construction stage of the development it will be ensured that Middleton Jetty will continue to operate to enable the continued operation of Riverside 1 and Riverside 2. This will need to be reflected in the associated NRA. Furthermore, as part of the construction stage detail on any temporary construction works in the river will also need to be progressed further in order for the PLA to fully understand the impacts, scale and timings of the proposed works. To highlight it will also be essential that all temporary marine related works are removed at the end of the construction phase and if required appropriate riverbed restoration undertaken."	As stated in Chapter 2: Site and Proposed Scheme Description (Volume 1), Middleton Jetty is used by the Applicant for waste deliveries and IBA export, to and from Riverside 1, operations that will intensify with Riverside 2 commencing operation. The marine operations at Middleton Jetty, including the current baseline (Riverside 1) and future baseline (Riverside 2) are considered within the and Chapter 19: Marine Navigation (Volume 1) and Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3). As evidenced in Table 19-2 of Chapter 19: Marine Navigation (Volume 1) consultation and engagement has been undertaken with the PLA to date and this has informed the submitted Appendix 19-2: Preliminary Navigational Risk Assessment (Volume 3).	
		The Applicant commits to the removal of any temporary construction plant and equipment upon completion of the construction phase for the Proposed Scheme, as stated within the Outline CoCP (Document Reference 7.4) .	
Chapter 2 - Site and Proposed Scheme Description	"Welcomed that paragraph 2.3.7 states that there is the possibility that some deliveries associated with the construction stage can be via the River Thames, in particular for the construction of the Proposed Jetty, and that the ES will provide further information in this regard. The PLA would support the full investigation of how the river can be utilised	The use of the River Thames for the delivery of construction plant and materials is detailed in Chapter 2: Site and Proposed Scheme Description (Volume 1) . For the landside elements of the Proposed Scheme it is not practicable to use Middleton Jetty for the delivery of construction plant and materials without compromising the effectiveness of the operations at Riverside 1 and Riverside 2	



Section ID	on ID Scoping Opinion Comments Response	
	as part of the construction stage, noting as above the need to continue to operate the adjacent facility at Middleton Jetty."	(once operational). However, for the construction plant and materials required for the Proposed Jetty transport will seek to primarily be via the River Thames and where appropriate, plant and materials may be temporarily stored on a jack-up barge.
UK Health S	ecurity Agency	
N/A	"It is noted that the current proposals do not appear to consider possible health impacts of Electric and Magnetic Fields (EMF)."	As guided by the Energy Networks Association Guidance Document (2012) ⁴ , Electric and Magnetic Fields (EMF) are present wherever electricity is used. The Proposed Scheme will not be generating or distributing electricity outside of the Site Boundary and as such an assessment of EMF is not considered appropriate. Further information about EMF is provided in the Energy Networks Association Guidance Document (2012) ⁵ .
N/A	"We request that the ES clarifies this and if necessary, the proposer should confirm either that the proposed development does not impact any receptors from potential sources of EMF; or ensure that an adequate assessment of the possible impacts is undertaken and included in the ES."	Further to the response above, the Proposed Scheme will not generate or cause the exposure of any sensitive receptors to EMF and as such an assessment of EMF is not considered appropriate.
N/A	"The ES should consider potential effects on mental health through risk perception / understanding of risk posed by the manufacture, storage and transportation of hydrogen and other hazardous substances."	As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the Proposed Scheme. CO ₂ and LCO ₂ are not currently classed as a Hazardous Substance under the COMAH Regulations



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		and as such the Site would remain a non-COMAH site with the Proposed Scheme in place.
	An assessment of the landside H presented within Chapter 18: La 1).	
		An assessment of potential effects of the Proposed Scheme on mental health and wellbeing is presented within Chapter 14: Population, Health and Land Use (Volume 1) .
N/A	"Determining significance for human health should follow guidance within Pyper, R et al., 2022, published by the Institute of Environmental Management and Assessment (IEMA). The final ES should provide suitable justification for any assessment of significance."	The IEMA 2022 Guidance 'Determining Significance for Human Health In Environmental Impact Assessment' ⁶ , has informed the overall assessment of human health presented in Chapter 14: Population, Health and Land Use (Volume 1).



Table 2: Scoping Opinion Response - Air Quality

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
The Plannin	g Inspectorate		
3.1.1	Operation phase impacts from: • Dust, Particulate Matter of less than 10 micrometres in diameter (PM ₁₀) and Particulate Matter less than 2.5 micrometres in diameter (PM _{2.5}); and • emissions of Nitrogen Dioxide (NO ₂), PM ₁₀ and PM _{2.5} from nonroad mobile machinery (NRMM)	"The Inspectorate agrees that operational phase impacts from dust and emissions of NO ₂ , PM ₁₀ and PM _{2.5} from any NRMM are not likely to result in significant effects. These matters can be scoped out of the ES".	No response required.
3.1.2	Road traffic emissions of NO ₂ and PM ₁₀ and PM _{2.5} from the Carbon Capture Facility – operation phase	"The Scoping Report proposes to scope out this matter on the basis that only occasional maintenance vehicle movements are anticipated for the CCS Project. The Inspectorate agrees that operational phase impacts from road traffic	As described in Chapter 1: Introduction (Volume 1), the Hydrogen Project is no longer included in the scope of the Proposed Scheme. Therefore, an



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		emissions of NO_2 , PM_{10} and $PM_{2.5}$ from the CCS Project can be scoped out of the ES.	assessment of operational road traffic emissions will not be undertaken.
		The Inspectorate notes that road traffic emissions of NO ₂ , PM ₁₀ and PM _{2.5} are scoped in for the operational phase of the Hydrogen Project (if this transport option is chosen)".	
3.1.3	Construction phase impacts from: changes to emissions of Air Quality Strategy (AQS) pollutants and other pollutants, generated in Riverside 1 and Riverside 2 following the application of the Carbon Capture process; emissions of new pollutants from Carbon Capture Facility;	"The Inspectorate is content that these impacts are primarily related to operation of the Proposed Scheme and are not likely to result in significant effects during the construction phase. An assessment of these matters for the construction phase can be scoped out".	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	 emissions of Ozone (O₃) from the Hydrogen Project; and emissions of NO₂, PM₁₀ and PM_{2.5} from new backup power generators (ancillary infrastructure and equipment). 		
3.1.4	Emissions of toxic/ flammable gases from fires – construction phase	"The Scoping Report explains that gasses that are released from battery energy storage systems are highly flammable and toxic and that following combustion, emissions could include particulate matter and other products of incomplete combustion. The Inspectorate agrees that fire risk from a battery energy storage system relates primarily to the operational phase. Therefore, the Inspectorate agrees that emissions of toxic/ flammable gases from fires during the construction phase can be scoped out of the ES".	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.1.5	Air Quality Neutral Assessment (AQNA) and Air Quality Positive Statement (AQPS) – construction phase	"The Scoping Report explains that Policy S1 1 of the London Plan ('Improving Air Quality') states that "development proposals must be at least air quality neutral" and that the Greater London Authority sets out requirements for developments to demonstrate measures taken to achieve the best possible outcomes for air quality, known as Air Quality Positive. An AQNA and AQPS are proposed for the operational phase, but not for construction. The Scoping Report does not provide evidence that these requirements relate to operation only or provide justification for why such a consideration is not required and therefore, the Inspectorate is not in a position to scope out the need for an AQNA and AQPS relating to the construction phase. The Applicant should make effort to discuss and agree the scope of the AQNA and AQPS with relevant consultation bodies. The findings of the AQNA and measures included in the AQPS should be described in the ES, where relevant to the assessment of likely significant effects".	The Applicant has engaged with the London Borough of Bexley to agree the approach to the air quality assessment. This includes the scope of Appendix 5-4: Air Quality Positive Statement (Volume 3). Details of the engagement regarding the air quality assessment undertaken to date are presented in Table 5-3 of Chapter 5: Air Quality (Volume 1). As per Chapter 5: Air Quality (Volume 1), The current methodology for assessing compliance with Air Quality Neutral guidance31 is based on a series of benchmarks for emissions of NOX and PM10 from buildings (e.g. energy provision) and transport. There are no applicable benchmarks for an industrial development such as the Proposed Scheme, neither for the specific development type nor that could be used as a proxy for the development type. Therefore, an Air Quality Neutral Assessment is not applicable nor indeed possible.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.1.6	Road traffic emissions - construction and operational phases (if relevant Institute of Air Quality Management (IAQM) indicative criteria are not exceeded)	"If the predicted numbers of construction or operational traffic movements generated by the Proposed Scheme alone or cumulatively would demonstrably not exceed the relevant indicative criteria for air quality assessment set out in the IAQM guidance, as relevant to each of the affected roads used for construction or operational traffic (once the route has been confirmed), the Inspectorate agrees that this matter can be scoped out of the ES. Where predicted construction or operational traffic flows meet the criteria, the Scoping Report confirms that this matter will be scoped into the ES".	Construction traffic data has been screened against the relevant IAQM/EPUK criteria ⁷ set out in Section 5.4 of Chapter 5: Air Quality (Volume 1) . The assessment of road traffic emissions is presented in Chapter 5: Air Quality (Volume 1) . As described in Chapter 1: Introduction (Volume 1) , the Hydrogen Project is no longer included in the scope of the Proposed Scheme. Therefore, an assessment of operational road traffic emissions has not been undertaken.
3.1.7	Stack parameters	"A description of the methods used for determining stack height and diameter should be included within the ES, including any decisions regarding Best Available Techniques (BAT) and any sensitivity testing which has been undertaken. The ES should clearly explain the assumptions that have been made in the air quality assessment regarding the number, placement, height and diameter of the stack(s)	Section 5.4 and Appendix 5.2: Operational Phase Assessment (Volume 3) provides modelling details regarding sensitivity testing around heights of the new Absorber Column(s) and Stack(s), technologies, diameters etc, which are based on the parameters set out in Chapter



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		and the Applicant should ensure these parameters are reflected in the DCO".	2: Site and Proposed Scheme Description (Volume 1).
3.1.8	Baseline conditions	"The ES should identify the locations of the local authority monitoring stations (continuous analysers) and proposed NO ₂ diffusion tubes on a plan.	The locations of local authority monitoring and the Applicant's monitoring are shown on Figure 5-1: Air Quality Baseline (Volume 2).
		In relation to the proposed NO ₂ diffusion tubes and any other monitoring to be undertaken by the Applicant, the ES should include a justification for the monitoring locations and provide details of the monitoring method, sampling period, data capture and any adjustments applied to the data, such as diffusion tube bias adjustment factors.	All justification surrounding the Applicant's air quality monitoring is provided in Section 5.4 of Chapter 5: Air Quality (Volume 1) . Section 5.6 of Chapter 5: Air Quality (Volume 1) addresses the effect of the COVID-19 restrictions on air quality monitoring.
		The ES should also consider any assumptions or limitations associated with any air quality and related data (for example traffic and transport) in relation to COVID-19 restrictions".	
3.1.9	Study Areas	"The Applicant should make effort to agree the study areas used in the assessment with relevant consultation bodies and these should be justified within the ES, with reference to	The chosen Study Areas have been taken from guidance including:



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		relevant guidance and the extent of the likely impacts. The chosen study areas should be sufficient to encompass all routes and sensitive receptors on the local road transport network and along the River Thames (including AQFAs and/ or AQMAs and their Action Plans) which could be significantly affected by changes in air quality from increased construction, operational and decommissioning road and vessel traffic emissions. The Applicant's attention is drawn to comments from Dartford Borough Council in this regard (Appendix 2 of this Opinion)".	 IAQM Dust Risk Assessment Guidance⁸; and Environment Agency Guidance on Air Emissions Risk Assessment⁹. The Applicant notes the comments provided by Dartford Borough Council with regards to the extent of the Study Areas for the air quality assessment and has referenced the Borough of Dartford within the air quality assessment presented in this technical chapter. This includes baseline concentrations presented in Section 5.6 and the assessment of effects in Section 5.8 of Chapter 5: Air Quality (Volume 1).
3.1.10	Sensitive receptors	"The ES should identify the locations of sensitive receptors on appropriate plans".	Figure 5-2: Construction Dust Study Area (Volume 2) and Figure 5-4: Operational Study Area (Volume 2) depict the locations of sensitive receptors.
3.1.11	Monitoring	"The Applicant should set out in the ES any proposals for long term air quality monitoring of emissions from the Proposed Scheme, including any provision for potential remedial action. If	The requirements for monitoring pollutants resulting from the incineration of waste are set out in the environmental permits for Riverside 1 and Riverside 2 (at the time of



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		monitoring would be undertaken as a condition of an environmental permit, this should be explained".	writing, construction works for Riverside 2 are being undertaken). The monitoring of pollutants introduced by the Carbon Capture Facility will be set within the Environmental Permit for the Proposed Scheme.
3.1.12	Modelling	"The Inspectorate notes that no specific details are given as to some of the parameters that are to be modelled in relation to air quality, as they are described as "AQS pollutants and other pollutants". The Applicant should make effort to agree the scope and methodology of air quality modelling for all relevant pollution sources with relevant consultation bodies".	Details of the engagement regarding the air quality assessment undertaken are presented in Table 5-3 of Chapter 5: Air Quality (Volume 1). Appendix 5-2: Operational Phase Assessment (Volume 3) explains the approach to modelling undertaken.
Dartford Bo	rough Council		
N/A	N/A	"There does not seem to be any reference to potential for air quality impacts and assessment of these within the Borough of Dartford. The Council consider that this is a significant omission given that impacts from both the plant/equipment itself and air quality impacts from traffic generation may have impacts within	Section 5.6 of Chapter 5: Air Quality (Volume 1) sets out baseline conditions across the Study Area including Dartford, and including the relevant AQMA, AQFA and monitoring. Section 5.8 of Chapter 5: Air Quality (Volume 1) sets out the likely significant



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		DBC's area. It should be noted that traffic (both construction and operational) that travels to/from the site using roads to the east, is likely to travel along Bob Dunn Way (within Dartford) to join the M25/A282 Dartford Crossing at junction 1a. Both Bob Dunn Way and the A282/M25 are designated as Air Quality Management Areas due to issues from existing traffic levels."	effects from changes to the emissions of pollutants from the incineration process, both in terms of maximum impacts within the Study Area and as a function of the London boroughs within the Study Area (outlined in Section 5.5). The assessment of impacts from road traffic is also presented in Chapter 5: Air Quality (Volume 1).
		"At para 4.5.2 the report highlights sensitive receptors within 10km of the site and notes that given the size of this area, it is not possible to list all such sites. However, whilst sites up to 8.5km have been mentioned, there is no mention of sites within Dartford. There are residential properties in Burnham Rd, that are both within the AQMA and also close to the eastern route from the site to the A282/M25."	For the operational assessment, a 30km x 30km Study Area has been used and the potential for exposure was assumed to exist anywhere within this area. This covers all potential receptors within the borough of Dartford. Section 5.4 of Chapter 5: Air Quality (Volume 1) sets out the key sensitive receptors for the assessment alongside that the potential for exposure of members of the public is assumed throughout the Study Area. The results of the assessment are presented in Section 5.8 of Chapter 5: Air Quality (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response		
London Boro	ough of Bexley				
N/A	N/A	"The Council is satisfied that the applicant has adequately addressed the construction phase issues at this stage."	No response required.		
		"The ES will need to reassess the impact on ground level concentrations made by the processes required for carbon capture process. This will inevitably reduce the temperature of the discharge and may also change the discharge height and efflux velocity. The ES should revisit the dispersion modelling carried out for the energy from waste facilities, and properly assess the changes in plume dispersion and ground level concentrations that result. This assessment should include all emissions that were originally assessed when these facilities were first proposed."	Section 5.4 of Chapter 5: Air Quality (Volume 1) sets out the methodology used to assess the impacts of the emissions from the incineration process. This includes consideration of the changes to the characteristics of the exhaust plumes, existing pollutants and pollutants on the Riverside Campus that are introduced as a result of Proposed Scheme.		
Metropolitan	Metropolitan Police Service and the Mayor's Office for Policing and Crime				
N/A	N/A	"MOPAC considers their facility to be a relevant sensitive commercial receptor although it is not specifically listed in paragraph 4.5.1 or 4.5.2 of	The air quality assessment of operational impacts presented in Section 5.8 of Chapter 5: Air Quality (Volume 1) and		



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		the Scoping Report for the construction and operational air quality assessments. We request that the MOPAC facility is included as a sensitive receptor for operational as well as construction impacts, due to the presence of outdoor workshops and offices at the site, where exposure may occur on a regular basis".	considers the potential for exposure to air pollution at all locations within the Study Area. This includes the MOPAC Belvedere facility.
		"The applicable legislation and proposed methods and tools for the air quality assessment of the proposed are considered appropriate i.e. Institute of Air Quality Management (IAQM) construction dust guidance, IAQM/Environmental Protection UK (EPUK) development control guidance, Environment Agency permitting guidance and the ADMS dispersion modelling software; this should be reviewed at the time the EIA is undertaken."	The most up to date guidance used for this chapter has been presented in Section 5.2 of Chapter 5: Air Quality (Volume 1) . For quantitative modelling of operational impacts, the most up to date version of ADMS has been used (version 6.0).
		"Defra's recommendation in the draft revised Air Quality Strategy (AQS) (April 2023) is for new development to consider air quality upfront in design to deliver PM2.5 improvements. The assessment of this pollutant at EIA stage should not only relate to construction and operational	Measures to minimise exposure to all air pollutants including PM _{2.5} will be incorporated into all aspects of the design of the Proposed Scheme. This is explained further in section 5.7 of Chapter 5: Air Quality (Volume 1). The detailed



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		emissions but also the potential to further mitigate impacts on local air quality through design. This should include consideration of alternatives to the standby diesel backup generators proposed, for which workers at the MOPAC facility are potentially relevant receptors. The design of the emissions from such generators should meet best practice to ensure effective dispersion."	assessment of the emissions associated with backup generators has been presented within Chapter 5: Air Quality (Volume 1).
		"Future estimates of air quality for use in the assessment should be based on robust baseline monitoring data. Monitoring data for the year 2019 are more likely to provide a more conservative basis appropriate for DCO compared to 2021, which included periods of lockdown. Ratified/verified data for 2022 should be available by the time the air quality assessment is undertaken for the EIA and should also be considered. Local diffusion tube surveys for NO2 which may form the basis of model verification, should be carried out in line with Defra good practice guidance with consideration of accuracy/precision and bias	Section 5.6 of Chapter 5: Air Quality (Volume 1) discusses the exclusion of 2020 and 2021 monitoring data from the baseline section of the assessment. Five years of data up to 2019 has been presented to show the trends in air quality before the impact of Covid-19. A Proposed Scheme specific monitoring survey has been completed, using NO ₂ diffusion tubes to aid model verification and further the understanding of the baseline air quality.



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		adjustment. For short-term (< 6 months) surveys, it is best practice to set tubes up in triplicate."	
		"The construction phase of the proposed Cory Decarbonisation Project has the potential to generate dust and combustion emissions during the five-year construction period. We note that Table 4-2 of the scoping report refers to residential property only for the purposes of the dust risk assessment. The MOPAC Belvedere facility is within the IAQM construction dust study area of 350 m. While unlikely to be at a high risk of impact, we would nonetheless welcome its consideration at EIA stage. This is due to the potential for adverse impacts of dust on outdoor vehicle storage and roof mounted solar panels at the facility, as well as potential health effects on workers at the facility."	The construction dust assessment follows IAQM dust guidance ⁸ . and considers all receptors within 350m of the Site Boundary. This includes the MOPAC Belvedere facility which under the guidance will be a medium sensitivity receptor to construction dust impacts. However, it is not necessary to list all receptors within this area.
		"The Scoping Report, paragraph 2.3.8, states that "Environmental mitigation required during construction will be recorded in an Outline Code of Construction Practice (OcoCP) to be submitted as part of the application for a DCO. A	Relevant construction dust mitigation has been set out in Section 5.8 (embedded) and Section 5.10 (additional) of Chapter 5: Air Quality (Volume 1) and included within the Outline CoCP (Document Reference



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		DCO requirement will ensure measures relevant to construction are included in a full Code of Construction Practice document (CoCP), to be prepared for the Proposed Scheme before construction commences. This CoCP will detail the environmental controls, environmental protection measures and safety procedures that will be adopted during construction. This will provide a tool to ensure the successful management of the likely environmental effects as a result of construction activities." We would expect to see appropriate dust mitigation and monitoring to be set out in a detailed dust management plan (DMP) to ensure no significant impacts on the buildings and occupants of the MOPAC facility during the construction phase."	7.4). The suggested mitigation includes the use of continuous dust monitoring.
		"We note that impacts of emissions from road traffic, Non-Road Mobile Machinery (NRMM) and marine vessels during construction and/or operation will be considered, including PM2.5. We would welcome the quantitative assessment	A quantitative assessment of vessel emissions for both construction and operation has been presented in Chapter 5: Air Quality (Volume 1) . Emissions from road traffic, traffic data have been screened against the relevant



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		of construction as well as operational emissions, as this phase will last five years."	IAQM/EPUK guidance criteria ⁷ to determine whether a quantitative assessment is required or not. This has been presented in Chapter 5: Air Quality (Volume 1) .
			For NRMM, a qualitative assessment has been undertaken and presented in Chapter 5: Air Quality (Volume 1) and Appendix 5-1: Construction Phase Assessment (Volume 3) for the construction phase. The Planning Inspectorate has agreed that operation phase NRMM emissions can be scoped out of assessment.
		"Paragraph 17.6.1 states mitigation for the construction and operation phase "may include" a Construction Traffic Management Plan (CTMP) and Workplace Travel Plan (WTP). Given the extended duration of the construction phase and the scale of Proposed Scheme, we would expect both to be produced; this should include detailed information on the traffic mitigation measures that are proposed to be implemented and how these will be effectively applied."	As per Chapter 18: Landside Transport (Volume 1) a Framework CTMP (Document Reference 7.7) has been developed, which includes reference to a Construction Workforce Travel Plan (CWTP). There are insufficient operational traffic movements to necessitate an outline workforce travel plan, but the Applicant has committed to integrating operational travel management into the Travel Plan for the overall Riverside Campus.



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		"The assessment of operational emissions will include the new CCS stack, as well as changes to the existing Riverside facilities. Table 4.2 is unclear in terms of the "other" (non AQS) pollutants that will be included in the assessment of operational emissions and whether this includes PM2.5. We note that the modelling will consider new pollutants such as amines and aldehydes, as well as standby plant emissions, and that the assessment will refer to the latest Environment Agency permitting guidance which is appropriate. Consideration should also be given to any changes in stack gas parameters such as discharge temperature and/or velocity as a result of the CO2 absorption process which may change the effectiveness of dispersion in the local area."	The methodology in Chapter 5: Air Quality (Volume 1) (Section 5.4 and Appendix 5-2: Operational Phase Assessment (Volume 3)) sets out the pollutants modelled in the assessment of the operation of the Carbon Capture Facility, including PM _{2.5} . In respect of the Riverside 1 and Riverside 2, whilst it is possible that some pollutants will be removed with the CO ₂ , to ensure a conservative assessment it is assumed that all pollutants are retained within the exhaust gases. As such, the same mass emission rates are assumed for these pollutants in both the baseline and with the Proposed Scheme scenarios. Section 5.4 of Chapter 5: Air Quality (Volume 1) and Appendix 5-2: Operational Phase Assessment (Volume 3) sets out the methodology used to assess the changes to existing emissions of existing pollutants resulting from the Proposed Scheme. The modelling



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			considers changes in plume buoyancy as a result of the change in temperature of the plume and the removal of CO ₂ .
		"If the contaminated land risk assessment identifies the potential for Volatile Organic Compound (VOC) emissions from remediation areas, we would welcome monitoring of these pollutants at the site boundary to ensure human health effects from ambient air exposure are considered as well as potential odours."	Chapter 17: Ground Conditions and Soils (Volume 1) identifies VOCs as a potential risk based on historical land use. Ground Investigations and subsequent monitoring as set out in the Outline CoCP (Document Reference 7.4) will confirm any risk and inform mitigation measures for the protection of human health.
			Proposed Scheme specific monitoring undertaken and presented in Chapter 5: Air Quality (Volume 1) includes the use of NO ₂ diffusion tubes and other pollutants.
		"Regarding accidents with potential impacts on air pollution, it is currently unclear whether consideration will be made of the explosion risk of new infrastructure for CO2 and hydrogen compression/storage/pipelines."	Accidents are considered in Chapter 20: Major Accidents and Disasters (Volume 1).



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Natural Engla	and		
N/A	N/A	"The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly, or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The ES should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk)."	Section 5.4 of Chapter 5: Air Quality (Volume 1) sets out the methodology for the air quality assessment. Information on ecological sites was obtained from the Air Pollution Information System (APIS) ¹⁰ and from consultation with the project ecologists. Section 5.8 of Chapter 5: Air Quality (Volume 1) presents the impacts on ecological sites from the changes to emissions of air pollutants as a result of the Proposed Scheme.
		"Natural England has produced guidance for public bodies to help assess the impacts of road traffic emissions to air quality capable of affecting European Sites. Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations - NEA001.	The assessment of road traffic emissions is presented in Chapter 5: Air Quality (Volume 1).



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		Information on air pollution modelling, screening and assessment can be found on the following websites:	
		 SCAIL Combustion and SCAIL Agriculture - http://www.scail.ceh.ac.uk/ 	
		 Ammonia assessment for agricultural development https://www.gov.uk/guidance/intensive- farming-risk-assessment-for-your- environmentalpermit 	
		 Environment Agency Screening Tool for industrial emissions https://www.gov.uk/guidance/air-emissions- risk-assessment-for-your- environmentalpermit 	
		 Defra Local Air Quality Management Area Tool (Industrial Emission Screening Tool) – England http://www.airqualityengland.co.uk/laqm 	



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UK Health Se	ecurity Agency		
N/A	N/A	"Our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e, an exposed population is likely to be subject to potential harm at any level and that reducing public exposure to nonthreshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to nonthreshold air pollutants, address inequalities (in exposure) and maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent."	The potential for significant effects are assessed following IAQM/EPUK guidance, as detailed in Section 5.4 of Chapter 5: Air Quality (Volume 1) . This specifies that the assessment of significance considers not only the magnitude of the impacts but the extent of future exposure to the pollutants. Consideration of air quality impacts are included in the ongoing design development of the Proposed Scheme.



Table 3: Scoping Opinion Response – Noise and Vibration

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	spectorate		
3.2.1	Assessment of noise and vibration impacts on ecological receptors and heritage receptors from the Noise and Vibration ES Chapter	"The Scoping Report proposes that the assessment of noise and vibration impacts on ecological receptors will be presented in ES Chapter 6: Terrestrial Biodiversity and ES Chapter 7: Marine Biodiversity; while impacts to heritage receptors would be considered in ES Chapter 8: Heritage. The Inspectorate is content with this approach. The	Cross-referencing has been included in the relevant topic chapters of the ES.
		Noise and Vibration ES Chapter should provide clear cross-referencing to where the relevant impacts are considered."	
3.2.2	Vibration from sources other than vehicle movements on the surrounding road network – construction	"The Inspectorate notes the presence of workplaces and infrastructure in proximity to the application site and does not consider that sufficient evidence has been provided to demonstrate the absence of a pathway for significant effects. The Inspectorate is therefore not in agreement that this matter can be scoped out. The ES should assess impacts to relevant receptors from construction vibration (from sources	The Iron Mountain Records Storage Facility, the Asda Belvedere Distribution Centre and the Asda ASC Recycling Centre, and Riverside 1 and Riverside 2 (and the staff within them), are not considered to be noise or vibration sensitive given all will have machinery working within the buildings and/or within the associated



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		other than vehicle movements on the surrounding road network) where significant effects are likely."	loading areas. It is also noted that places of work, including Riverside 1, are not considered to be noise or vibration sensitive receptors. This is supported by the guidance within LA 111 ¹¹ , which states that examples of noise and vibration sensitive receptors include dwellings, hospitals, healthcare facilities, education facilities, community facilities, international and national or statutorily designated sites, public rights of way, cultural heritage assets and buildings containing vibration sensitive equipment.
			With regards to the Travelodge London Belvedere Hotel the duration of any construction works within 180m of will be limited to less than 10 or more days or nights in any 15 consecutive days or nights or a total number of days not exceeding 40 in any six consecutive months and no percussive piling will be undertaken in Work No. 1E. Any piling within this work area will be undertaken using Continuous Flight Auger (CFA), unless otherwise approved by



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			LBB. These and other mitigation measures are outlined in Section 6.7 and 6.9 of Chapter 6: Noise and Vibration (Volume 1) will minimise the levels of vibration as far as practicable, thereby minimising any potential impact on nearby non-residential spaces. This mitigation is secured by the Outline CoCP (Document Reference 7.4).
3.2.3	Vibration from vehicle movements on the surrounding road network – construction	"Based on the temporary duration of construction traffic movements and the nature of the surrounding land use, the Inspectorate is in agreement that an assessment of construction vibration from vehicle movements on the surrounding road network can be scoped out of the ES."	No response required.
3.2.4	Vibration from sources other than traffic – operation	"Given the nature of the Proposed Development, the Inspectorate is content that impacts from operational vibration (from sources other than traffic) are not likely to result in significant effects. This matter can be scoped out."	No response required.
3.2.5	Vibration from additional traffic – operation	"In the absence of certainty around how hydrogen would be transported during operation (potentially via hydrogen tube trailers of unknown frequency), the	As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the



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		Inspectorate is not in a position to scope out this matter. If operational traffic movements would occur within 16 metres of the flood defence, the ES should provide an assessment of any likely significant effects on the flood defence resulting from vibration."	Proposed Scheme. Consequently, there will be a very limited number of heavy vehicle movements during the operation phase of the Proposed Scheme and it is considered that this aspect can remain scoped out (see Chapter 18: Landside Transport (Volume 1) for vehicle numbers).
3.2.6	Underwater noise – operation	"The Inspectorate is content that an assessment of underwater noise during operation can be scoped out of the Noise and Vibration ES Chapter. The Scoping Report (Table 7-7) confirms that impacts on fish and marine mammals from underwater noise during operation and maintenance are to be assessed in the ES Marine Biodiversity Chapter."	An underwater noise assessment has been undertaken and can be found in Appendix 6-4: Underwater Noise Assessment (Volume 3). The findings of this assessment on ecological receptors are summarised in Chapter 8: Marine Biodiversity (Volume 1).
3.2.7	Study Area	"The Scoping Report states that the study area is 300m for construction noise, 600m for construction traffic and 600m for operational noise. Whilst paragraph 5.4.2 of the Scoping Report details the potential to extend the operational study area, the Scoping Report does not state whether the construction phase study area is subject to extension based on the results of assessment.	The construction assessment described in Section 6.4 of Chapter 6: Noise and Vibration (Volume 1), demonstrates that the Study Areas proposed (see Section 6.5 of Chapter 6: Noise and Vibration (Volume 1)) are sufficient to capture receptors potentially affected by construction or operation impacts of the Proposed Scheme as all residual effects are



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		The Inspectorate considers that an extension should be considered to include a wider area of receptors and to take into consideration any as yet unconfirmed variables such as construction and piling methods which may give rise to increased noise."	not significant. Therefore, the construction and operation Study Areas have not been extended.
3.2.8	Sensitive receptors	"The Scoping Report states that places of work, including the existing Riverside campus facility, are not considered to be noise sensitive.	The nearest non-residential receptors are (from the main area of construction works to the edge of the receptor):
		The Scoping Report does not provide any evidence to support this. The ES should provide a detailed description of receptor sensitivity as part of a justification for omitting nearby receptors from assessment."	 Riverside 1 and Riverside 2 (and the staff within them), located centrally within the Site; Iron Mountain Records Storage Facility is located adjacent to the eastern side of the Site Boundary; Asda Belvedere Distribution Centre located approximately 30m to the east
			 of the Site Boundary; and Asda ASC Recycling Centre located approximately 340m to the east of the Site Boundary. Riverside 1 is not considered to be noise or vibration sensitive given the existing



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			industrial uses onsite. This is supported by the guidance within LA 1116, which states that examples of noise and vibration sensitive receptors include dwellings, hospitals, healthcare facilities, education facilities, community facilities, international and national or statutorily designated sites, public rights of way, cultural heritage assets and buildings containing vibration sensitive equipment. The Iron Mountain Records Storage Facility, the Asda Belvedere Distribution Centre and the Asda ASC Recycling Centre are not considered to be noise or vibration sensitive as all these receptors will have
			machinery working within the buildings and/or within the associated loading areas.
3.2.9	Underwater noise assessment	"The Scoping Report does not provide a commitment to undertaking an underwater noise (acoustic) assessment, explaining this would be determined at a later date when more detailed information on the Proposed Development is available. The Applicant should make effort to discuss and agree the need for	An underwater noise assessment has been undertaken and can be found in Appendix 6-4: Underwater Noise Assessment (Volume 3). The findings of this assessment on ecological receptors are



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		an underwater acoustic assessment and any baseline data required to inform such an assessment, with relevant consultation bodies."	presented in Chapter 8: Marine Biodiversity (Volume 1).
London Bo	rough of Bexley		
N/A	Noise and Vibration	Within the EIA Scoping Opinion, LBB confirmed that it will "expect the majority of noise works to be undertaken during our prescribed core hours of 08:00 to 18:00 hours Mondays to Fridays and 08:00 to 13:00 hours on Saturdays with no noisy works on Sundays/Public Holidays. It is anticipated that the applicant's appointed contractors will enter into formal prior consent arrangements with the Council under the provisions of section 61 of the Control of Pollution Act 1974. This allows for appropriate dispensations as required".	As described in Chapter 2: Site and Proposed Scheme Description (Volume 1), during construction, standard working hours for the landside activities are Monday to Friday 07:00 to 19:00. On Saturdays, standard working hours are 07:00 to 13:00, with no working on Sundays or Bank Holidays. These restrictions do not apply to construction works where these (a) are carried out within existing buildings or buildings constructed as part of Proposed Development; (b) are carried out with the prior approval of the relevant planning authority; or (c) are associated with an emergency. A precedent has been set for these construction hours, replicate those used for the construction of Riverside 2.



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			Marine construction activities are expected to be 24 hours and 7 days a week.
Mayor's Off	fice for Policing and Crin	ne (MOPAC)	
N/A	Noise and Vibration	"The proposed assessment methodology and approach stated in the noise and vibration chapter for ascertaining baseline conditions are considered to be appropriate, however, vibration impacts should be considered for buildings as well as human receptors."	The nearest non-residential receptors are (from the main area of construction works to the edge of the receptor):
			 Riverside 1 and Riverside 2 (and the staff within them), located centrally within the Site;
			 Iron Mountain Records Storage Facility is located adjacent to the eastern side of the Site Boundary;
			 Asda Belvedere Distribution Centre located approximately 30m to the east of the Site Boundary; and
			 Asda ASC Recycling Centre located approximately 340m to the east of the Site Boundary.
			Riverside 1 is not considered to be noise or vibration sensitive given the existing industrial uses onsite. This is supported by



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			the guidance within LA 1116, which states that examples of noise and vibration sensitive receptors include dwellings, hospitals, healthcare facilities, education facilities, community facilities, international and national or statutorily designated sites, public rights of way, cultural heritage assets and buildings containing vibration sensitive equipment.
			The Iron Mountain Records Storage Facility, the Asda Belvedere Distribution Centre and the Asda ASC Recycling Centre are not considered to be noise or vibration sensitive. In addition, all these receptors will have machinery working within the buildings and/or within the associated loading areas.
			At distances of 70m and greater, it is considered, based on professional experience that vibration generated would be minimal. This is evidenced as at a distance of 70m, the predicted vibration as a result of a twin-drum vibratory roller in operation is 0.1 mm/s in terms of the peak



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			particle velocity, which would be considered "just perceptible in the most sensitive situations" (as stated in BS 5228:2009+A1:2014-2 ¹²) and typically aligns with a negligible magnitude of impact.
			Furthermore, the vibration criteria for building damage (rather than for human response/disturbance) are of such a magnitude (15mm/s peak particle velocity for unreinforced or light framed structures, as presented in BS 5228:2009+A1:2014-2 ¹²) that any impacts from the Proposed Scheme (which is not expected to reach such a magnitude) are considered unlikely and insignificant. Notwithstanding this, the mitigation measures outlined in Section 6.7 and 6.9 of Chapter 6: Noise and Vibration (Volume 1) will minimise the levels of vibration as far as practicable, thereby minimising any potential impact on nearby non-residential spaces.



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Environme	nt Agency		
N/A	Underwater Noise	"Underwater noise has been scoped in, apart from that caused by vessel movements. We agree with this approach. The marine works are likely to require piling. Fish populations and migratory fish have the potential to be negatively impacted by piling noise and this will need to be addressed. Disturbance from piling activities during construction, may well be significant in terms disturbance or delay to migratory activity, or negative impacts from direct physical injury to less motile fish species or life stages. The extent of any piling noise will need to be assessed in terms of its propagation across the whole river channel and any acoustic barrier to migratory activity or associated risks to fish. Avoiding sensitive periods and selecting nonpercussive piling methods are typically used to mitigate negative impacts on fish communities in the Thames. British Standard (BS) 5228: 2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites (Part 1: Noise and Part	An underwater noise assessment has been undertaken and can be found in Appendix 6-4: Underwater Noise Assessment (Volume 3). The findings of this assessment on ecological receptors to are summarised in Chapter 8: Marine Biodiversity (Volume 1). An assessment of temporary construction noise impacts has been undertaken in line with the guidance contained in British Standard (BS) 5228: 2009+A1:2014.



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		2: Vibration) is a key document to consider the vibration and appropriate management of vibration. We welcome its inclusion".	
		"We require that vibration be scoped in. The vibration from construction activities (e.g., extraction of pile and ancillary equipment, plant, piling, traffic etc) should be included within the scope. Thresholds for vibration should be submitted to the Environment Agency for approval as part of a monitoring strategy during the construction phase to help protect the primary flood defence from adverse effects.	Vibration from demolition of the Belvedere Power Station Jetty (disused) and piling works associated with the Proposed Jetty on marine mammals and other marine receptors is assessed via the underwater noise assessment presented in Appendix 6-4: Underwater Noise Assessment (Volume 3) and in Chapter 8: Marine Biodiversity (Volume 1).
		Vibration for traffic on site for operation within 16 metres of the flood defence should be scoped in to ensure the flood defence is not adversely affected by the proposal."	As stated within the Outline CoCP (Document Reference 7.4) no activities would take place in the River Thames or within 16m of the toe of the flood defences without prior consent from the Environment Agency. It is proposed that consent for these activities will be sought through the DCO (via the Environment Agency's Protective Provisions), and as such that no separate Flood Risk Activity Permit will be required.



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PLA			
N/A	Noise and Vibration	"Within table 7-7 of this chapter, for impacts scoped in or out of further assessment, it is noted that noise and vibration (Medway Estuary MCZ, The River Thames and its Tidal Tributaries (SINC), marine habitats, intertidal and subtidal benthic communities and marine plants and macroalgae) have been scoped out. To confirm one of the reasons the River Thames and its Tidal Tributaries SINC was designated was because of the river's importance for spawning and migrating fish. Therefore, noise and vibration have the potential to affect the migration and spawning of fish, and consideration should be given to scoping this in for the Environmental Statement."	An underwater noise assessment has been undertaken and can be found in Appendix 6-4: Underwater Noise Assessment (Volume 3). The findings of this assessment on ecological receptors are presented in Chapter 8: Marine Biodiversity (Volume 1).



Table 4: Scoping Opinion Response – Terrestrial Biodiversity

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning In	spectorate		
3.3.1	Maintenance activities during operation.	"The Scoping Report states that species present in the site and immediate surroundings are acclimatised to existing levels of human activity and human activity may increase slightly during operation. The Scoping Report does not provide details regarding the type, duration and location of maintenance activities. It is also considered that as the Proposed Development proposes to use part of the Crossness LNR, there may be species present which are currently able to avoid areas which currently experience human activity. The Proposed Development would encroach onto the LNR and may create disturbance to some species. Therefore, the Inspectorate does not consider this matter can be scoped out of the ES".	Operation phase disturbance from maintenance activities is considered as a potential significant effect of the Proposed Scheme in the assessment presented in Chapter 7: Terrestrial Biodiversity (Volume 1).
3.3.2	Impacts on Badgers	"The Scoping Report states that the site does not provide suitable habitat for badger due to the high water table (preventing sett building) and its fragmented, industrialised nature. The Inspectorate agrees with this justification and is content that this matter may be scoped out".	No response required.



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3.3.3	Habitat formed of development land, hard standing buildings	"Paragraph 6.3.13 of the Scoping Opinion outlines the habitat types which have been included within the assessment. In addition to the habitat types listed, the Inspectorate considers that marshland habitat and open water habitat should also be included in the assessment.	'Marshland' habitat has been included within the assessment presented in Chapter 7: Terrestrial Biodiversity (Volume 1) through the following habitat types: Coastal and floodplain grazing marsh; intertidal mudflats and reedbeds.
		The Inspectorate is otherwise content that the remaining land can be scoped out on the basis that it is comprised of development land, hard standing and buildings which have no ecological value".	'Open water' habitat has been included in the scope as both river habitat (within the River Thames) and standing water (within drainage ditches and ponds).
3.3.4	Impacts on Great Crested Newt	"The Scoping Report states that the Manager of the Crossness LNR (from Thames Water) has confirmed there are no records of great crested newt within the LNR. The Scoping Report also notes that the London Borough of Bexley does not require surveys for great crested newts for planning applications in this location, further suggesting they are absent from both the site and immediate surroundings. Therefore, the Inspectorate agrees to scope this matter out, however evidence of the dialogue with the Thames Water Crossness LNR manager should be included within the ES or supporting appendices".	Great Crested Newt (GCN) has been scoped out of further assessment. Evidence supporting this position through communications with Thames Water is found in Appendix 7-1: Consultation with Thames Water (Volume 3) of the PEIR ³¹ .



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3.3.5	Impacts on hazel dormouse	The Scoping Report states that no records of hazel dormouse were identified in the desk study. It is considered that the majority of the site does not provide suitable habitat. A small area of woodland/scrub in the south of the site has not been surveyed due to lack of access. It is stated that other recent and nearby developments did not find evidence of hazel dormouse, however it is not clear whether these applications undertook surveys of the woodland and scrub area. The Applicant should make effort to discuss and agree with relevant consultation bodies whether hazel dormouse surveys of the woodland and scrub area are required. The ES should provide a robust justification of the approach taken and an explanation of how any uncertainties have been addressed.	As explained within Chapter 7: Terrestrial Biodiversity (Volume 1), the desk study did not return results for hazel dormouse Muscardinus avellanarius and the majority of the Site does not contain suitable habitat for this species. The small area of woodland and scrub in the south of the Site may be suitable for supporting dormouse; however, the Proposed Scheme does not intend to alter it. Given the history of recent developments within and surrounding the Site (including Riverside 2) and the lack of dormouse evidence found by their supporting ecological surveys, as well as the lack of records of this species, it is not likely that hazel dormouse is present within the Site.
3.3.6	Impacts on Otter	"The Scoping Report states that no records of otter were identified from the desk study. It also considers that the majority of the application site does not provide suitable habitat for otter holts. There is an area of scrub/ woodland in the south of the site which may be suitable to support otter, but given recent developments nearby, and lack of evidence of otter being present, the Inspectorate agrees with	No response required.



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		the justification provided and agrees to scope this matter out".	
3.3.7	Crossness LNR	"The Thames Water scoping consultation response (Appendix 2 of this Opinion) states that there are inaccuracies in the reporting of bird, invertebrate and macroinvertebrate species at the Crossness LNR as presented in the Scoping Report (for example, it states that 210 bird species have been identified at the LNR, whereas the Scoping Report states 130). The ES should ensure that each assessment is carried out using and presenting an accurate representation of the most recent data available."	The EIA Scoping Report ¹² was based on data made available by Greenspace Information for Greater London (GiGL), rather than records directly supplied by Thames Water. Biological records have been received from Thames Water for Crossness LNR and have been incorporated into the baseline for the Chapter 7: Terrestrial Biodiversity (Volume 1) updating that provided by the EIA Scoping Report ¹² .
3.3.8	Freshwater Fish	"The Scoping Report states that the Environment Agency's Ecology and Fish Data Explorer returned no records of fresh fish from within the site boundary. However, the Environment Agency's scoping consultation response (Appendix 2 of this Opinion) states that monitoring has not taken place for many years. The ES should assess potential impacts on freshwater fish, supported by robust baseline survey data, unless otherwise agreed with relevant consultation bodies."	Chapter 7: Terrestrial Biodiversity (Volume 1) assesses potential impacts from the Proposed Scheme on freshwater fish, supported by baseline eDNA survey data of ditches and water bodies within the Site Boundary Chapter 7: Terrestrial Biodiversity (Volume 1) and the associated technical appendices.



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3.3.9	Guidance	"The Applicant is advised that CIEEM's guidelines for Ecological Impact Assessment (EcIA) was updated in 2019. The Applicant should have regard to the most recent version of the guidelines when undertaking the assessment of ecological impacts. The London Environment Strategy has not been referenced in relation to biodiversity, this document should be referenced within the ES."	Table 7-1 of Chapter 7: Terrestrial Biodiversity (Volume 1) includes reference to both the London Environment Strategy 2018 ¹³ and the updated CIEEM EcIA guidelines.
3.3.10	Mitigation and Compensation	"The ES should demonstrate how the mitigation measures proposed have followed the mitigation hierarchy. The ES should clearly explain the measures which are considered to be mitigation, and which are compensation measures in respect of any habitat loss from Crossness LNR. The mitigation and compensation package should be progressed with key stakeholders such as Natural England and Thames Water".	Where residual effects of the Proposed Scheme are identified, appropriate measures are proposed in Chapter 7: Terrestrial Biodiversity (Volume 1) following the mitigation hierarchy, comprising avoidance measures to remove effects of the Proposed Scheme, mitigation to manage effects of the Proposed Scheme on retained ecological features, and where features cannot be retained compensation for effects both on and offsite. Chapter 3: Consideration of Alternatives (Volume 1) also explains the design evolution for the Proposed Scheme, to explain where impacts could not be avoided in the context of surrounding constraints, and the nature of the Proposed Scheme meaning that it needs to be located adjacent to the



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			Riverside Campus, further information is provided in Terrestrial Site Alternatives Report (Document Reference 7.5). Compensation (including using off site areas) will only be sought where no other design option is feasible. With respect to Crossness LNR, avoidance of habitat loss has been pursued where practicable, as detailed in Chapter 3: Consideration of Alternatives (Volume 1). Dialogue about habitat loss in Crossness LNR and compensation proposals (within and outside of the Site) for such loss is central to the consultation that has been undertaken with a range of stakeholders.
3.3.11	Description of Impacts	"The ES should assess impacts on the Crossness LNR and the Erith Marshes MSINC from shading as a result of the Proposed Development".	Shading as a result of the Proposed Scheme has been added as a potential impact within Chapter 7: Terrestrial Biodiversity (Volume 1). The assessment of potential effects on Crossness LNR and the Erith Marshes Metropolitan SINC (MSINC), as well as water voles and other ecological features, that may be affected by shading, are presented in Appendix 7-11: Shading Study (Volume 3) and Chapter 7: Terrestrial Biodiversity (Volume 1). The methodology for this



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			assessment is described in Section 7.4 of Chapter 7: Terrestrial Biodiversity (Volume 1).
3.3.12	Description of Impacts	"It is unclear from the project description how much new hard standing and impermeable surfaces would be introduced as a result of the Proposed Development. The ES should assess the potential for effects from surface water run off on species which are dependent on certain salinity levels. Cross reference should be made to the Water Environment and Flood Risk chapter of the ES".	Effects of salinity changes are considered under the impact of surface water run-off within Chapter 7: Terrestrial Biodiversity (Volume 1). The assessment cross references the assessment presented in Chapter 11: Water Environment and Flood Risk (Volume 1).
3.3.13	Assessment Methodology	"The Inspectorate considers that Thames Water, as owners of the Crossness LNR, should be kept informed regarding the methodology for ecological surveys together with the results of all survey work undertaken within the Crossness LNR".	It is confirmed that Thames Water has been a consultee for the Proposed Scheme with regards to ecological surveys and the results of them (as confirmed by consultation, see Table 7-3 in Chapter 7: Terrestrial Biodiversity (Volume 1), with further information in the associated technical appendices).
3.3.14	Ecological Surveys	"There appears to be a discrepancy between the zone of influence (ZoI) for effects from the Proposed Development which are set out in Table 6-3 and the extent of the ecological surveys. The detail in Table 6-3 states for many of the species, the Proposed	It is confirmed that Study Areas, particularly those used for ecological surveys, are sufficient to address consideration of impacts on all species likely to be affected by the Proposed Scheme. Survey data collected



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		Development may create effects within the site boundary and 25 metres beyond. However, the majority of the surveys listed in paragraph 6.8.2 of the Scoping Report only include land within the site boundary. The ES should clearly explain the reasoning for the spatial extents of the surveys undertaken, recognising the mobility of species which may use both land within and outside of the site boundary. The description of baseline conditions and assessment in the ES should be sufficient to address impacts on all species likely to be affected by the Proposed Development".	from within the Site will be sufficient to inform the assessment of effects that may extend outside it a short distance (approximately 25m) through extrapolation, reasoning and consideration of ecological records. Thus, the Zone of Influence (ZOI) and survey extents are appropriate for the scale of the Proposed Scheme. Chapter 7: Terrestrial Biodiversity (Volume 1) explains the reasoning for the spatial extents of the surveys undertaken, which recognise the mobility of species that may use both land within and outside of the Site.
3.3.15	Reptile Surveys	"The Scoping Report states that reptile surveys will be undertaken during September and October 2023. Reptile surveys are typically undertaken on several visits between March and October. The ES should explain how many surveys were undertaken and why it is considered that surveying in this short time period would provide a robust level of results to inform the assessment".	Reptile surveys use artificial refugia to attract reptiles, which use them to warm their bodies so they may become mobile for foraging and other activities. However, best practice is that such surveys avoid summer months when artificial refugia are either not used due to high environmental temperatures or used only briefly as they heat up quickly. For this reason, surveys were undertaken in late summer and early autumn of 2023 when environmental temperatures are relatively low and most effective at attracting reptiles ¹⁴ .



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3.3.16	European eel surveys and water supply	"Paragraph 6.3.36 of the Scoping Report states that "it can be assumed that European eel may be present within the site". The Scoping Report identifies a number of ditches on and around the site and explains that surveys will be undertaken in these ditches for water voles and aquatic macroinvertebrates and macrophytes. The ES should confirm that surveys of the ditches have been undertaken for European eels which may use this habitat or justify why these are not required, in agreement with relevant consultees. The Applicant should consider the use of an Eel Recovery Plan. The ES should confirm where the water supply required for the Proposed Development will be derived from. If water from the Thames River will be used, then additional components may be required such as fine mesh and low velocity intake screening in order to prevent adverse effects to fish including European eels."	Although European eel breed in saltwater, the transboundary nature of their ecology means they inhabit both marine and freshwater environments ¹⁵ . European eel has therefore been covered in both Chapter 7: Terrestrial Biodiversity (Volume 1) (for their freshwater phase) and Chapter 8: Marine Biodiversity (Volume 1) (for their migratory/marine phase). The points raised by the Planning Inspectorate's response 3.3.16 are covered in both chapters. Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the water supply required for the Proposed Scheme. This will not involve abstraction from the River Thames.
3.3.17	Confidential Annexes	"Public bodies have a responsibility to avoid releasing environmental information that could bring about harm to sensitive or vulnerable ecological features. Specific survey and assessment data relating to the presence and locations of species such as badgers, rare birds and plants that could be	Chapter 7: Terrestrial Biodiversity (Volume 1) complies with the highlighted responsibilities with respect to confidential information on species. Badgers have been scoped out of the assessment.



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		subject to disturbance, damage, persecution, or commercial exploitation resulting from publication of the information, should be provided in the ES as a confidential annex. All other assessment information should be included in an ES chapter, as normal, with a placeholder explaining that a confidential annex has been submitted to the Inspectorate and may be made available subject to request".	
Environmen	nt Agency		
N/A	Ecology (Fisheries)	"Limited records are available for freshwater fish species in the Great Breach system. Historically it was known to support Tench, Rudd, crucian carp and some eels, however, there has been no monitoring for many years and the extent of these fish populations is no longer known. Survey by e-DNA will give an indication of the species now present, but if the project plans entail any major changes to channels or watercourses, then physical fish surveys may be required to assess risk to fish populations."	Fish surveys, using the e-DNA technique, have been completed and survey results inform the assessment presented in Chapter 7: Terrestrial Biodiversity (Volume 1) .
		"The plans entail the demolition of the existing derelict Belvedere Power Station Jetty. such redundant jetty structures can have an important ecological function in terms of a high tide	Consideration of impacts of demolition of the Belvedere Power Station Jetty (disused) are included in the scope of the assessment. Wintering bird surveys have been undertaken



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		roosting/refuge area for many important species of overwintering wading birds. These jetties, that are free from terrestrial predators and disturbance, provide a valuable roost that wading birds can retreat to and rest over the high tide periods when the intertidal mud is covered. Given its current lack of use, and the presence of the two isolated mooring dolphins, then this jetty may well be an important roosting structure. This will need to be accounted for in the PEIR and consideration given to suitable mitigation if it is found to be important. Additionally, the underwater structure and replacement of should be assessed for its current contribution (or not) to biodiversity and the proposal should aim to ensure a betterment for ecological niches and fish refuge to help fulfil biodiversity net gain. The jetty is used by wintering birds should be picked up by the proposed surveys. Identification of terrestrial and marine INNS required with mitigation measures."	and will provide baseline data for this assessment. In addition, data from terrestrial invasive non-native plant species surveys have informed the assessment, further information is available in Chapter 7: Terrestrial Biodiversity (Volume 1). The choice between demolition or retention of the Belvedere Power Station Jetty (disused) will not change the outcomes of the assessment of impacts and effects reported within the chapter. The demolition or retention of the Belvedere Power Station Jetty (disused) is further considered within Chapter 8: Marine Biodiversity (Volume 1). A detailed assessment is undertaken and presented in Chapter 8: Marine Biodiversity (Volume 1).
London Bo	rough of Bexley		
N/A	Terrestrial Biodiversity	"The Sites of Importance for Nature Conservation (SINC) network ensures that the majority of the most important habitats and species are protected	SINC have been included in the assessment. Table 7-1 in Chapter 7: Terrestrial Biodiversity (Volume 1) includes reference



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		through the land use planning process. Consequently, SINCs receive a significant degree of protection through the planning process (London Environment Strategy and LES Appendix 2). The London Environment Strategy has not been referenced in relation to biodiversity and should be included."	to the London Environment Strategy ¹³ and its appendices.
N/A	Terrestrial Biodiversity	"The application site boundary includes areas designated for their significant ecological importance, for example, the Crossness Nature Reserve and several Metropolitan and borough sites of importance for nature conservation and strategic green wildlife corridors. Any potentially negative impacts on these designations will need careful consideration. London Plan Policy G6 and GG2 along with Local Plan Policies SP8, SP9 and DP20 are the main planning policies providing planning protection for these designated sites. Policy GG3 has not been listed in table 6-1 and should be included."	SINC and Crossness LNR have been included in the assessment. Cited policies have been included and referenced in Table 7-1 in Chapter 7: Terrestrial Biodiversity (Volume 1), including relevant parts of London Plan ¹⁶ , notably policies GG2 and GG3.
N/A	Terrestrial Biodiversity	"References to Sites of Importance for Nature Conservation (SINC) should reflect their strategic significance. For example, table 6-2 refers to the River Thames and Tidal Tributaries MSINC and the	Strategic significance, and the overall importance of SINC, has been considered in the evaluation of these ecological features. We have attached M (to indicate Metropolitan



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		Erith Marshes MSINC. These are both Metropolitan SINC (MSINC) designations, reflecting that they are highly significance sites, not just to the borough, but also to the whole of London. The term metropolitan should be included when referencing these SINC. Ref 2.4 refers to the Addendum to the SINC Report 2016, however, the 2016 report is only partially replaced by the addendum, and so both reports should be referred to https://www.bexley.gov.uk/services/planning-and-building-control/planning-policy-and-guidance/biodiversity-and-geodiversity The published Bexley Green Infrastructure Study also provides background evidence on green infrastructure in the borough including both open space and biodiversity, and supports the implementation of the Local Plan."	grade) to the SINC designations for River Thames and Tidal Tributaries MSINC and Erith Marshes MSINC in Chapter 7: Terrestrial Biodiversity (Volume 1). References have been updated to show the 2016 SINC Report.
N/A	Terrestrial Biodiversity	"Ecological surveys should be undertaken at the most appropriate optimum times of year. Paragraph 6.8.2. of the Scoping Opinion refers to further surveys planned for 2023 and states that 'Reptile surveys will be undertaken from September to October 2023'. Generally, reptiles are active from March to October. However, the best time to survey is a mixture of time of year, time of day and weather	Reptile surveys use artificial refugia to attract reptiles, which use them to warm their bodies so they may become mobile for foraging and other activities. However, best practice is that such surveys avoid summer months when artificial refugia are either not used due to high environmental temperatures or used only briefly as they heat up quickly. For this



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		conditions, with peak months being April and May, when reptiles are most visible. Several survey visits are typically required; therefore, it is recommended surveys are carried out across the survey season, including peak months, to provide the most accurate picture of the reptile population."	reason, surveys were undertaken in late summer and early autumn of 2023 when environmental temperatures are relatively low and most effective at attracting reptiles ²⁶ .
N/A	Terrestrial Biodiversity	"Table 6-4 of the Scoping Opinion scopes out maintenance activities during the operational phase. However, it is unclear to the Council at this stage if access to ecologically sensitive areas will be needed for maintenance to take place, such access may have the potential for negative impacts such as disturbance to nesting birds."	Operation phase disturbance from maintenance activities is considered as a potential significant effect of the Proposed Scheme in the assessment presented in Chapter 7: Terrestrial Biodiversity (Volume 1).
N/A	Terrestrial Biodiversity	"It is noted that enhancement measures to improve the environment, will be included. Local Plan Policy DP20 requires development to demonstrate measurable Biodiversity net gain (BNG) will be achieved. It is therefore recommended that the applicant commits to a minimum 10% BNG. Any ecological enhancement proposed should demonstrate additionality after taking into account enhancement and BNG commitments agreed through already approved planning consents."	The BNG assessment (see Appendix 7-1: Biodiversity Net Gain Report (Volume 3)) considers existing habitats forming baseline conditions within the Site and quantify their biodiversity value using DEFRA's Biodiversity Metric (the current version at the time of writing being 4.0 ¹⁷). Post-development habitat creation and enhancement is a feature of the Proposed Scheme which aims to achieve 10% BNG. This gain for biodiversity will be over and above those already secured in



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			existing planning consents, ensuring net gain will be achieved as a result of the Proposed Scheme alone, and thus demonstrate additionality.
Natural Eng	yland		
N/A	Biodiversity and Geodiversity	"The assessment will need to include potential impacts of the proposal upon sites and features of nature conservation interest as well as opportunities for nature recovery through biodiversity net gain (BNG). There might also be strategic approaches to take into account. Ecological Impact Assessment (EcIA) is the process of identifying, quantifying, and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal. Guidelines have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM)."	The assessment presented in Chapter 7: Terrestrial Biodiversity (Volume 1) includes sites and features of nature conservation interest. Consideration of Biodiversity Net Gain is presented in Appendix 7-1: Biodiversity Net Gain Report (Volume 3). The assessment uses CIEEM guidelines.
N/A	Designated Nature Conservation Sites: International and European Sites	"The ES should thoroughly assess the potential for the proposal to affect internationally designated sites of nature conservation importance / European sites, including marine sites where relevant. This includes	Chapter 7: Terrestrial Biodiversity (Volume 1) assesses the potential impacts of the Proposed Scheme on internationally designated sites of nature conservation



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		Special Protection Areas (SPA), Special Areas of Conservation (SAC), listed Ramsar sites, candidate SAC and proposed SPA. Article 6 (3) of the Habitats Directive requires an appropriate assessment where a plan or project is likely to have a significant effect upon a European Site, either individually or in combination with other plans or projects."	importance/European sites, including SPA, SAC, listed Ramsar sites, candidate SAC and proposed SPA. Marine sites are considered in Chapter 8: Marine Biodiversity (Volume 1). A Habitats Regulations Assessment has been undertaken, presented at Appendix 7-2: Information to Inform a Habitat Regulations Assessment (Volume 3), which has included engagement with Natural England.
N/A	Designated Nature Conservation Sites: Sites of Special Scientific Interest	"The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within the SSSIs outlined in the scoping report and identify appropriate mitigation measures to avoid, minimise or reduce any adverse significant effects."	Potential effects on SSSI have been considered within the scope of the assessment for Chapter 7: Terrestrial Biodiversity (Volume 1).
N/A	Designated Nature Conservation Sites: Regionally and Locally Important Sites	"The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. Local Sites are identified by the local wildlife trust, geoconservation group or other local group. The ES should set out proposals for mitigation of any impacts and if appropriate, compensation measures and opportunities for enhancement and improving connectivity with wider	Potential effects on LNR and SINC have been included within the scope of the assessment in Chapter 7: Terrestrial Biodiversity (Volume 1) and highlight the requirements for mitigation and, where necessary, compensation for such effects. Chapter 7: Terrestrial Biodiversity (Volume 1) and the Outline LaBARDS (Document Reference



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		ecological networks. They may also provide opportunities for delivering beneficial environmental outcomes."	7.9) provide detailed proposals for mitigation and compensation, including habitat creation and enhancement.
			Geological sites are not within the scope of Chapter 7: Terrestrial Biodiversity (Volume 1). They are assessed in Chapter 17: Ground Conditions and Soils (Volume 1).
N/A	Protected Species	"The conservation of species protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017 is explained in Part IV and Annex A of Government Circular 06/2005 Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System. Applicants should check to see if a mitigation licence is required using NE guidance on licencing NE wildlife licences. Applicants can also make use of Natural England's (NE) charged service Pre Submission Screening Service for a review of a draft wildlife licence application. NE then reviews a full draft licence application to issue a Letter of No Impediment (LONI) which explains that based on the	Water voles are present within the Site and will be subject to a programme of translocation as required to move animals present within works areas to newly created compensatory habitat within the Mitigation and Enhancement Area (shown on Figure 1-1: Site Boundary Plan (Volume 2)). This work would be carried out under a protected species mitigation licence for water vole obtained from Natural England, comprising specific mitigation and monitoring measures for this species, laid out in a method statement. The Applicant is currently seeking to obtain a Letter of No Impediment in respect of this.
		information reviewed to date, that it sees no impediment to a licence being granted in the future	Geological sites are not within the scope of Chapter 7: Terrestrial Biodiversity (Volume



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		should the DCO be issued. This is done to give the Planning Inspectorate confidence to make a recommendation to the relevant Secretary of State in granting a DCO. See Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate National Infrastructure Planning For details of the LONI process.	1). They are assessed in Chapter 17: Ground Conditions and Soils (Volume 1).
		The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law. Records of protected species should be obtained from appropriate local biological record centres, nature conservation organisations and local groups. Consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area.	
		The area likely to be affected by the development should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES. Surveys should always	



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		be carried out in optimal survey time periods and to current guidance by suitably qualified and, where necessary, licensed, consultants.	
		Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures. A separate protected species licence from Natural England or Defra may also be required."	
N/A	Priority Habitats and Species	"Priority Habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. Lists of priority habitats and species can be found here. Natural England does not routinely hold species data. Such data should be collected when impacts on priority habitats or species are considered likely.	These details are noted; it is confirmed that they have informed the approach to survey and assessment.
		Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. Sites can be checked against the (draft) national Open Mosaic Habitat (OMH) inventory published by Natural	



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		England and freely available to download. Further information is also available here.	
		An appropriate level habitat survey should be carried out on the site, to identify any important habitats present. In addition, ornithological, botanical, and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present.	
		The Environmental Statement should include details of:	
		 Any historical data for the site affected by the proposal (e.g., from previous surveys) 	
		 Additional surveys carried out as part of this proposal 	
		The habitats and species present;	
		 The status of these habitats and species (e.g., whether priority species or habitat); 	
		 The direct and indirect effects of the development upon those habitats and species 	
		 Full details of any mitigation or compensation measures 	



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		Opportunities for biodiversity net gain or other environmental enhancement"	
N/A	Priority Habitats and Species	"The Environment Act 2021 includes NSIPs in the requirement for Net Gain but NSIPs will not have to comply with BNG until 2025. Natural England encourages the consideration of BNG as part of the development proposals.	A BNG assessment for the Proposed Scheme is submitted as part of the application for development consent (see Appendix 7-1: Biodiversity Net Gain Report (Volume 3)), using the UK Government's Statutory
		The ES should use an appropriate biodiversity metric such as Biodiversity Metric 3.0 together with ecological advice to calculate the change in biodiversity resulting from proposed development and demonstrate how proposals can achieve a net gain.	Biodiversity Metric.
		The metric should be used to:	
		 assess or audit the biodiversity unit value of land within the application area 	
		 calculate the losses and gains in biodiversity unit value resulting from proposed development 	
		 demonstrate that the required percentage biodiversity net gain will be achieved 	
		Biodiversity Net Gain outcomes can be achieved on- site, off-site or through a combination of both. On- site provision should be considered first. Delivery	



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		should create or enhance habitats of equal or higher value. When delivering net gain, opportunities should be sought to link delivery to relevant plans or strategies e.g., Green Infrastructure Strategies or Local Nature Recovery Strategies."	
Thames Wa	iter		
N/A	Inclusion of Thames Water Land	"As a preliminary comment, we would note that the Proposed Development site boundary includes land owned by Thames Water associated with Crossness Sewage Treatment Works and which forms part of the Thames Water Crossness Nature Reserve. While there has been initial contact by Cory with Thames Water about the inclusion of Thames Water's land within the Proposed Development site boundary, no formal agreement has been given by Thames Water to use this land. Cory has also not provided any detailed Proposed Development plans for the Thames Water land to date, although an illustrative site layout plan has been shown at meetings which shows significant development utilising the Thames Water land.	These points are noted. All ecological features mentioned in the response are covered within Chapter 7: Terrestrial Biodiversity (Volume 1), its figures and as part of this ES.



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		The development of Thames Water land shown within the Proposed Development site boundary would involve:	
		 loss of 5.7 acres of Crossness Nature Reserve habitat (East Paddock 4.5 acres; Stable Paddock 1.2 acres). The Crossness Nature Reserve was required to be provided by a S106 legal agreement associated with the Sludge Powered Generator planning permission dated 21/01/1994 on Crossness Sewage Treatment Works. The S106 agreement also sets out that the Crossness Nature reserve should be maintained as such for at least 99 years; 	
		 potential loss of 756 metres of ditch habitat containing Water Voles, as well as an important invertebrate fauna; 	
		 loss of Dittander along East Paddock's south ditch – a scarce coastal plant; 	
		 loss of the part of the Crossness Nature Reserve that is favoured by passage migrant bird species Wheatear, Whinchat, and Stonechat; 	
		 loss of stables that were paid for with public money. The stable block (located in Stable Paddock) was delivered via the London Borough 	



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		of Bexley's 'Belvedere Green Links' regeneration programme and funded by the Homes and Communities Agency, European Regional Development Fund and the London Development Agency.	
		 loss of part of the Thames Water access road that runs out to Norman Road and bisects the Cory Fields. This is an access to the Crossness Nature Reserve, but also a secondary/emergency access to Crossness Sewage Treatment Works. Crossness is Thames Water's second largest sewage treatment works and is of strategic importance to London's infrastructure. 	
		Whilst discussions are ongoing with Cory in relation to the inclusion of Thames Water land within the site boundary and what development may take place on it, Thames Water's position in this respect is fully reserved, to the extent that such land is proposed to be included as part of the Proposed Development the Environmental Statement will need to fully assess the above effects."	
N/A	Light Impacts	"Light impacts have been scoped out (see 3.10.1) and yet nocturnal protected species are present at Crossness Nature Reserve in the form of foraging	It is confirmed that the effects of lighting on terrestrial biodiversity have not been scoped out of the assessment. They are considered



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		bats (European Protected Species) and by the presence of breeding Barn Owls (a Schedule 1 bird species) – both are species that are at risk of light pollution.	for both the construction and operation phases in Chapter 7: Terrestrial Biodiversity (Volume 1).
		Light impacts should therefore not be scoped out of the ES and will need to be assessed as part of Cory's Environmental Impact Assessment."	
N/A	Excluded Habitat data	 Fig.6.1 'Habitats of Principal Importance' excludes Thames Water's Sea Wall Field and Protected Area North, thereby excluding a further 7.3 acres / 3ha of habitat. This habitat is located outside the red line area but adjoins it and is located within the 250m study area. The rest of the Crossness Nature Reserve is marked as Coastal and Floodplain Grazing Marsh on Fig.6.1; the Sea Wall Field and Protected Area North areas should have the same classification. 6.3.13 Other Habitats – As well as the marshland habitat missing as above, it is considered that 	These points are noted and are considered within Chapter 7: Terrestrial Biodiversity (Volume 1).
		habitat missing as above, it is considered that other areas of open water habitat is missing such as Great Breach Lagoon and Island Field Lagoons and these should also be included."	
N/A	Section 6.3	It is understood that the below ecological issues in Section 6.3 will be addressed as the EIA/scheme	These points are noted. The Applicant has continued to liaise with Thames Water and



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		develops, but it will be important to use the most up to date data. By way of update the following information is available from Crossness Nature Reserve:	obtained data for Crossness LNR. This data is used to inform Chapter 7: Terrestrial Biodiversity (Volume 1) , with records received discussed in relevant species survey
		 it states in Table 6-2 that 130 bird species have been recorded, but 210 bird species have been recorded at Crossness Nature Reserve 	reports as a desk study resource. A summary of the consultation undertaken to date is provided in Table 7-3 in Chapter 7 :
		 6.3.31 states that there are 23 notable Terrestrial Invertebrates. From Crossness Nature Reserve data there are 56 nationally scarce terrestrial invertebrates on the reserve, 5 Nationally Rare/Red Data Book, 5 Biodiversity Action Plan, and 3 species that do not have conservation status but that are uncommon in Britain. So, there are 69 notable terrestrial invertebrates within their project area 	Terrestrial Biodiversity (Volume 1).
		 6.3.38 refers to Environment Agency data of 2013 which makes reference to only to 3 non- native species, and no protected macroinvertebrate species. A 2019 Aquatic Invertebrate survey report, states that Crossness Nature Reserve has 99 species of aquatic Coleoptera (beetles) and Heteroptera (true bugs) in its ditches, of which 3 are Red Data Book 	



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		Species (Nationally Rare) and 14 are Nationally Scarce.	
		 Some old data is being used, i.e., reference in 6.3.18 to 'closest record of a bat was a Noctule in 2014'. There are far more up-to-date bat records available which we can make available. 	
		 6.3.28 Reptile Surveys – states that 2 Common Lizard were recorded during the reptile survey in 2022. Crossness Nature Reserve was a receptor for over 1000 reptiles (Slow Worm and Common Lizard) a few years ago, and we frequently stumble across Slow Worm and Grass Snake on site so there is believed to be a healthy population 	
		 6.3.36 states no records of fish, only Eels. As demonstrated by herons, egrets and kingfishers fishing in Crossness Nature Reserve's water bodies, fish are present and further surveys would therefore be required. 	



Table 5: Scoping Opinion Response – Marine Biodiversity

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning In	spectorate		
3.4.1	Internationally designated sites – construction and operation	"The Inspectorate is content that significant effects are not likely and agrees to scope this matter out."	No response required.
3.4.2	Nationally designated sites (with the exception of Medway Estuary Marine Conservation Zone (MCZ)) - construction and operation	"The Inspectorate agrees to scope this matter out."	No response required.
3.4.3	Impacts from any changes arising from the Proposed Development to deposition of airborne contaminants - construction and operation	"The Inspectorate agrees to scope this matter out."	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.4.4	Effects on phytoplankton - construction and operation	"At this stage, no details have been provided regarding the duration and frequency of dredging activities and therefore the Inspectorate does not agree to scope this matter out."	For both capital dredging and maintenance dredging the method will be backhoe, further details regarding the volume, frequency and duration of dredging is provided in Chapter 2: Proposed Scheme and Site Description (Volume 1).
			Phytoplankton and zooplankton recorded within the Study Area are considered to be of low sensitivity to changes in water quality and releases of contaminants.
3.4.5	Vagrant marine mammal species - construction and operation	"The Scoping Report states that vagrant marine mammals such as humpback whale and beluga whale have been scoped out as they are not resident species within the Thames Estuary. The Inspectorate agrees this matter may be scoped out."	No response required.
3.4.6	Loss or disturbance of habitat (fish and marine mammals) - construction and operation.	"The area of habitat loss and its importance to species has not been detailed within the Scoping Report and the Inspectorate does not consider that sufficient information regarding the extent, duration and frequency of proposed activities has not been provided in order to confirm the absence of a significant effect. As such, the Inspectorate does not agree to scope this matter out of the ES. The	As detailed in Chapter 2: Proposed Scheme and Site Description (Volume 1), the capital dredge volume for is approximately 110,000m ³ . Chapter 2: Proposed Scheme and Site Description (Volume 1) states that once operational up to five marine vessels will call at



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		assessment of effects during the operational phase should explain how the frequency of maintenance activities has been determined. If this remains to be determined at the point of assessment, then the assessment should be based on a worst-case scenario."	the Proposed Jetty each week to collect and transport LCO ₂ to meet the annual throughput. An assessment of the likely effects on the loss or disturbance of habitats (fish and marine mammals) during the construction and operation phase for all activities (including but not limited to dredging) (including maintenance) is included in Chapter 8: Marine Biodiversity (Volume 1). It should be noted that the dredging will be located within an already highly turbid area (the Study Area is within the most turbid area of the Thames ¹⁸). Further information regarding the proposed dredging is provided in Chapter 2: Proposed Scheme and Site Description (Volume 1).
3.4.7	Water quality and release of contaminants (marine mammals) - construction and operation	"The Scoping Report does not quantify the volume or type of contaminants that would be carried on board vessels or provide any detail regarding an accident management plan. In the absence of sufficient information to confirm the absence of a pathway for significant effects on marine mammals, or evidence demonstrating clear agreement with relevant statutory bodies, the	An assessment of the likely impacts of water quality and the release of contaminants on marine mammals during construction and operation have been assessed in Chapter 8: Marine Biodiversity (Volume 1). In addition, the Outline EPRP (Document Reference 7.11) considers the release of chemicals into the marine environment.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		Inspectorate is not in a position to agree to scope this matter out from the assessment. Accordingly, the ES should include an assessment of impacts from changes to water quality and release of contaminants on marine mammals, or information to demonstrate agreement with the relevant consultation bodies and the absence of a LSE."	It is assumed vessels will operate in accordance with industry guidance and standard good practice.
3.4.8	Noise and vibration (Medway Estuary MCZ, the River Thames and its Tidal Tributaries (SINC), marine habitats, intertidal and subtidal benthic communities and marine plants and macroalgae) - construction and operation	"The Inspectorate agrees that flora associated with these designated sites and habitats can be scoped out of further assessment. However, an assessment of noise and vibration impacts on fish and marine mammals during construction and operation is proposed. This should include impacts on spawning and migrating fish (including those associated with the River Thames and its Tidal Tributaries SINC) where significant effects are likely."	Details of noise propagation associated with the Proposed Scheme are detailed in Appendix 6-4: Underwater Noise Assessment (Volume 3). An assessment of the likely effects of noise and vibration on marine mammals and fish (including those associated with the River Thames and its Tidal Tributaries SINC) during construction and operation have been assessed in Chapter 8: Marine Biodiversity (Volume 1).
3.4.9	Lighting – effects on the Medway Estuary MCZ, The River Thames and its Tidal	"The Scoping Report does not provide sufficient information regarding the location, duration and type of lighting that will be deployed, and therefore, the Inspectorate does not consider that this matter	The proposed lighting that will be used during the construction of the Proposed Scheme is described in the Outline CoCP (Document Reference 7.4) . The proposed lighting that will



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	Tributaries (SINC), marine habitats, subtidal and	may be scoped out of the assessment. The ES should either provide information to demonstrate the absence of a pathway for significant effects or	be used during the operation of the Proposed Scheme is described in the Outline Lighting Strategy (Document Reference 7.3) .
	intertidal benthic communities, marine plants and macroalgae marine mammals and Invasive Non-Native Species (INNS) - construction and	present an assessment of likely significant effects on these receptors resulting from lighting."	An assessment of the likely effects of lighting during construction and operation have been assessed in Chapter 7: Terrestrial Biodiversity (Volume 1), Chapter 8: Marine Biodiversity (Volume 1) and Chapter 10: Townscape and Visual (Volume 1).
3.4.10	Vessel strikes (Medway Estuary MCZ, The River Thames and its Tidal Tributaries (SINC), marine, habitats, subtidal and intertidal benthic communities, marine, plants and macroalgae, fish and INNS) - construction and operation	"The Inspectorate agrees that this matter can be scoped out."	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.4.11	Changes in suspended sediment concentrations and subsequent sediment deposition on the benthic environment	"The Report does not provide details to justify this approach, such as the volumes and frequency of disturbed sediment, vessel types and nature of movements. Therefore, the Inspectorate does not agree to scope this matter out."	Periodic maintenance dredging will be required to ensure the Proposed Jetty remains accessible. The volumes and frequency of the maintenance dredging are described in Chapter 2: Site and Proposed Scheme Description (Volume 1).
	(Medway Estuary MCZ, The River Thames and its Tidal Tributaries (SINC), subtidal and intertidal benthic communities, marine plants and macroalgae; fish, marine mammals and INNS) - operation		As outlined in Chapter 2: Site and Proposed Scheme Description (Volume 1) once operational up to five marine vessels will call at the Proposed Jetty each week to collect and transport LCO ₂ . To provide flexibility to prospective changes in vessel types, the Proposed Jetty will be designed to accommodate marine vessels with a capacity of up to 15,000m ³ per vessel, which would result in a lower number of calls per week than the five referenced above. There will also be up to ten tug movements from the rear of the structure of the Proposed Jetty.
			An assessment of the likely effects of changes in suspended sediment concentrations and subsequent sediment deposition in presented in Appendix 11-4 Coastal Modelling Studies (Volume 3). Potential effects on sensitive



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			receptors have been discussed in Chapter 8: Marine Biodiversity (Volume 1).
3.4.12	Increased wave wash (marine plants and macroalgae, fish,	"The Scoping Report does not contain information regarding the existing number of vessel movements using this section of the River Thames.	The Proposed Jetty is designed to accommodate marine vessels with a capacity of up to 15,000m³ per vessel.
	marine mammals and INNS) - construction and operation	The Scoping Report states that up to five vessels will arrive at the site per week, which equates to ten vessel movements per week and 520 additional vessel movements per year. In other sections of the Scoping Report, the implementation of reduced vessels speeds is suggested, but no information is provided as to what speed is recommended or the mechanism by which it would be secured. The Inspectorate is therefore not in a position to scope this matter out. The ES should assess impacts from increased wave wash on marine plants and macroalgae, fish, marine mammals and INNS (including on the intertidal foreshore (a BAP priority habitat), during construction and operation, where significant effects are likely."	As detailed in Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3) total annualised east downstream transits were 9,828, and west transits were 9,480. Total upstream annualised transits were 11,688 for east and 11,688 for west. Construction vessel speeds will be moderated by following standard operating procedures. Where practicable, there will be an implementation of reduced vessel speeds (3 knots) to reduce the potential for vessel strike with marine mammals and fish and to reduce the risk of any potential damage to intertidal habitats from wave wash. This is stated in the Outline CoCP (Document Reference 7.4). Operational vessel speeds will be moderated by following standard operating procedures. Where practicable, there should be reduced vessel speeds in proximity of piers to reduce the



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			potential for vessel strike with marine mammals and fish and to reduce the risk of any potential damage to intertidal habitats from wave wash.; This is clearly stated in the Mitigation Schedule (Document Reference 7.8) and the DCO requires the Operational EMP to include the relevant commitments set out in that Mitigation Schedule (Document Reference 7.8). An of the likely effects of increased wave wash on sensitive receptors in this context have been assessed in Chapter 8: Marine Biodiversity (Volume 1).
3.4.13	INNS	"The Scoping Report states that INNS are likely to be present within the site boundary. The ES should explain any mitigation measures or biosecurity precautions required to prevent the spread of INNS. Any measures relied upon in the ES should be discussed with relevant consultation bodies, including Natural England and the Environment Agency, in effort to agree the approach. Measures relied upon in the ES should be adequately secured."	The Outline CoCP (Document Reference 7.4 and the Operational EMP, which will be prepared prior to the Proposed Scheme commencing operation, will include mitigation measures and biosecurity precautions required to prevent the spread of INNS. Further information is provided within Chapter 8: Marine Biodiversity (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.4.14	Fish Spawning	"The Scoping Report states that consideration will be given to the timings of construction activities to avoid fish migration and spawning. The Inspectorate advises that effects from maintenance/ dredging activities on fish migration and spawning should also be considered and that the ES should refer to the mechanism by which timing of activities will be controlled."	Mitigation measures regarding sensitive fish periods have been included within Section 8.7 of Chapter 8: Marine Biodiversity (Volume 1). The Operational EMP will be the mechanism by which timing of activities will be controlled for operational activities (including maintenance dredging). The Operational EMP will be prepared prior to the Proposed Scheme commencing operation and secured a requirement in the Draft DCO (Document Reference 3.1).
3.4.15	Belvedere Power Station Jetty	"The Scoping Report states that the Belvedere Power Station Jetty will need to be decommissioned and dismantled. The ES should include an assessment of likely significant effects resulting from removal of the jetty, such as additional vessel movements and potential habitat loss/ change including loss of roosting structures."	An assessment of impacts of demolition or retention (with modifications) of the Belvedere Power Station Jetty (disused) on marine receptors have been assessed in Chapter 8: Marine Biodiversity (Volume 1).
3.4.16	Shellfish	"The ES should identify any potential impacts on shellfish and provide an assessment of any likely significant effects on these species."	Records from the desk study and results from the intertidal and subtidal benthic surveys state that shellfish of conservation and commercial importance are unlikely to be present within Study Area of the Proposed Scheme. Furthermore, the nearest Classified Bivalve



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			Mollusc Harvesting Area and Shellfish Waters are located approximately 39.6km downstream of the Proposed Scheme. The dredged arisings will be managed in accordance with relevant legislation and will be disposed of offsite (via vessel and only if dredged arisings are deemed suitable for this disposal method and conform with the permits for disposal sites). The removal of the dredged arisings will be undertaken by an appropriately licenced waste carrier, thus not impacting shellfish waters. Therefore, potential impacts to shellfish are scoped out of further assessment.
3.3.16	European eel surveys and water supply	"Paragraph 6.3.36 of the Scoping Report states that "it can be assumed that European eel may be present within the site". The Scoping Report identifies a number of ditches on and around the site and explains that surveys will be undertaken in these ditches for aquatic macroinvertebrates and macrophytes. The ES should confirm that surveys of the ditches have been undertaken for European eels which may use this habitat or justify why these are not required, in agreement with relevant	Although European eel breed in freshwater, the transboundary nature of their ecology means they inhabit both marine and freshwater environments ¹⁹ . European eel has therefore been covered in both Chapter 7: Terrestrial Biodiversity (Volume 1) (for their freshwater phase) and Chapter 8: Marine Biodiversity (Volume 1) (for their marine phase). The points raised by the Planning Inspectorate's response 3.3.16 are covered in both technical chapters.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		consultees. The Applicant should consider the use of an Eel Recovery Plan. The ES should confirm where the water supply required for the Proposed Development will be derived from. If water from the Thames River will be used, then additional components may be required such as fine mesh and low velocity intake screening in order to prevent adverse effects to fish including European eels."	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the water supply required for the Proposed Scheme. This will not involve abstraction from the River Thames.
Environme	nt Agency		
Noise and Vibration Chapter	Noise and vibration have been scoped in for marine mammals and fish, apart from that caused by vessel movements.	"The EA agree to scope in underwater noise for marine mammals and fish. The marine works are likely to require piling. Fish populations and migratory fish have the potential to be adversely impacted by piling noise and this will need to be addressed. Disturbance from piling activities during construction, may well be significant in terms of disturbance or delay to migratory activity, or adverse impacts from direct physical injury to less motile fish species or life stages. The extent of any piling noise will need to be assessed in terms of its propagation across the	An assessment of the likely impacts of noise and vibration on marine mammals and fish has been assessed in Chapter 8: Marine Biodiversity (Volume 1). Embedded and additional mitigation measures are included in Section 8.7 and Section 8.9 of Chapter 8: Marine Biodiversity (Volume 1) respectively, and they consider the impacts resulting from noisy activities such as piling).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		whole river channel and any acoustic barrier to migratory activity or associated risks to fish.	
		Avoiding sensitive periods and selecting non- percussive piling methods are typically used to mitigate adverse impacts on fish communities in the Thames."	
7.3.43	N/A	"Environment Agency Transitional and Coastal (TraC) fish monitoring site at West Thurrock will also provide an indication of species that may be present in low flow periods."	Fish data available for the West Thurrock site is included in the baseline text in Section 8.6 of Chapter 8: Marine Biodiversity (Volume 1) . The Site is located approximately 13km downstream of the Study Area.
7.3.48	N/A	"Sprats and Herring are regularly caught downstream at the Environment Agency TraC site at West Thurrock. During low flow years, when salinity increases upstream, it is likely that they may be present in the development area. As a hearing specialist species, this should be considered in the noise and vibration assessment for fish. Whilst spawning will not occur, these species will be using the environment in this area affected by the development."	An assessment of the likely impacts of noise and vibration on fish (including sprats and herring) derived from operational activities have been assessed in Chapter 8: Marine Biodiversity (Volume 1) .



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
7.3.51	N/A	"European eel are abundant throughout Halfway Reach and were previously commercially exploited (via an authorised fyke net fishery) in this area. Juvenile glass eels will be migrating past the project site from late March onwards, whilst adult silver eels will be returning to sea from October onwards. There are also large numbers of eel resident in this area. For these reasons, the EA would apply the Eel Regulations 2009 fully if considering any proposal for any new abstraction of water from the tidal river."	As discussed in Chapter 3: Consideration of Alternatives (Volume 1), there are no plans for abstraction of water from the River Thames associated with the Proposed Scheme. The Eel Regulations ²⁰ have been, and will continue to be, taken into consideration for all aspects of the Proposed Scheme, further information is provided in Chapter 7: Terrestrial Biodiversity (Volume 1) and Chapter 8: Marine Biodiversity (Volume 1).
7.3.52	N/A	"All of these species are known to be present and migrating through the Tideway. Environment Agency TraC fish monitoring tends not to pick up on these species, as it is primarily targeting juvenile fish. Additionally, sampling may not occur when these species are present. Historic monitoring, which included power station screen and fish traps sampling has shown that low numbers of salmon and the more abundant sea trout are present and are occasionally caught by recreational anglers. Twaite (and possibly Allis) shad have been observed, with captures of juvenile fish made during fish rescues during the Tideway Tunnel works, and scientific sampling in	The potential presence of these species is considered in Section 8.6 of Chapter 8: Marine Biodiversity (Volume 1) and an assessment of the likely impacts is included within Section 8.8 of Chapter 8: Marine Biodiversity (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		the Mucking area. These species are therefore known to be present in the estuary, although their behaviour and movements is not yet understood. River and sea lamprey are also known to be present, with spawning populations in the Medway estuary, it is likely that they are beginning to return to the Thames."	
7.6.2	N/A	"Avoidance of sensitive periods for fish species for dredging and piling operations is likely to be a key mitigation measure and should be clearly stated in the CoCP. There should be a justification for any use of percussive piling methods, in order to demonstrate that silent or vibro piling is not technically feasible."	Embedded and additional mitigation measures are included in Section 8.7 and Section 8.9 of Chapter 8: Marine Biodiversity (Volume 1) respectively, and they include avoiding sensitive periods for fish species (April to September). The most appropriate timing will be agreed pursuant to the Deemed Marine Licence in the Draft DCO (Document Reference 3.1) .
			Piling for the foundations of the Proposed Scheme will be required. Piling methods are described in Chapter 2: Site and Proposed Scheme Description (Volume 1).
7.7	The Scoping Report ³⁴ states the effects of loss or disturbance of habitat on marine	"We disagree that loss or disturbance of habitat (fish and marine mammals) should be scoped out at the stage. Whilst designated sites may not be directly affected, fish will be impacted by the scheme and appropriate mitigation and/or	An assessment of the likely impacts of loss or disturbance of habitat on fish and marine mammals have been assessed in Chapter 8: Marine Biodiversity (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	mammals and fish should be scoped out.	compensation for loss of physical habitat will need to be identified and agreed. E.g., loss of intertidal areas of vegetated margins. This should be addressed within the PIER."	Additional mitigation measures are included in Section 8.9 of Chapter 8: Marine Biodiversity (Volume 1).
London Bo	rough of Bexley		
N/A	Marine Biodiversity	"The Council has no expertise in this subject and will therefore leave it up to other Statutory Bodies to comment on this chapter of the Scoping Opinion."	Please see responses to comments from other Statutory Bodies within the other rows of this table.
Port of Lon	don Authority		
7.6	N/A	 "Section 7.6 on Design, Mitigation and Enhancement Measures includes some information on embedded mitigation measures during the construction phase including: Confirming the need for an Ecological Clerk of Works (ECoW) to be present during dredging/piling; and Implementation of reduced vessel speed to minimise impact on intertidal habitats from wash. 	Mitigation measures to minimise potential effects to marine receptors during the construction phase and operation phase are described in Section 8.7 and Section 8.9 of Chapter 8: Marine Biodiversity (Volume 1). The mitigation measures consider the potential impacts upon construction techniques and their practicality, as well as potential impacts upon marine ecology in order to balance them appropriately. The Outline CoCP (Document Reference 7.4) includes mitigation measures associated with dredging/piling and vessels speeds during the construction phase. These



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		To highlight, by proposing embedding mitigation before an assessment of its need has been carried out, this has a potential effect to restrict the applicant in their construction and operational	are supplemented by the Deemed Marine Licence and PLA Protective Provisions contained within the Draft DCO (Document Reference 3.1) .
		phases without any assessed benefits."	Operational mitigation measures will be set out in the Operational EMP, which will be prepared prior to the Proposed Scheme commencing operation and is secured by a requirement in the Draft DCO (Document Reference 3.1) .
Table 7-7	N/A	"Within table 7-7 of this chapter, for impacts scoped in or out of further assessment, it is noted that noise and vibration (Medway Estuary MCZ, The River Thames and its Tidal Tributaries (SINC),	Effects from noise and vibration on fish during construction and operation were scoped in within the Chapter 7: Marine Biodiversity of the Scoping Report ¹² .
		marine habitats, intertidal and subtidal benthic communities and marine plants and macroalgae) have been scoped out. To confirm, one of the reasons the River Thames and its Tidal Tributaries SINC was designated, was because of the rivers importance for spawning and migrating fish. Therefore, noise and vibration have the potential to affect the migration and spawning of fish, and consideration should be given to scoping this in for the ES."	Noise levels derived from construction activities and their effects on fish are described in Appendix 6-4: Underwater Noise Assessment (Volume 1). An assessment of the likely effects of noise and vibration on marine mammals and fish derived from operational activities presented in Chapter 8: Marine Biodiversity (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
7.6.3	N/A	"Paragraph 7.6.3 includes a statement with regard to habitat creation, including on the potential creation of new areas to replace those that may be lost as a result of the Proposed Scheme, and that if this cannot be completed on site, potential alternative options may include offsetting or creation of a compensation site. Further detail on this will be required as the scheme develops, including on whether any potential habitat creation is proposed within, or outside of the red line boundary."	Appendix 7-1: Biodiversity Net Gain Report (Volume 3) details on the potential habitat creation to replace those that may be lost as a result of the Proposed Scheme. The PLA, Environment Agency and MMO will be updated with evolution of the BNG process throughout the detailed design of the Proposed Scheme.
1.1.9	N/A	"Paragraph 1.1.9 states that further work is being undertaken in respect of the ecological mitigation areas that may be required for the Proposed Scheme, which may expand the Site Boundary. The PLA must be kept informed on how this is progressed."	At this stage there is no intention to expand the Site Boundary to account for marine ecological mitigation. The PLA, Environment Agency and MMO will be updated with evolution of the BNG assessment throughout the detailed design of the Proposed Scheme.
7.7.2	N/A	"Paragraph 7.7.2 makes reference to the long-term loss of subtidal and intertidal habitat from the new footprint of the Proposed Jetty and maintenance dredging. Here, it is considered that there will also need to be full consideration of habitat changes as a result of the decommissioning and	An assessment of the likely impacts of demolition or retention (with modifications) of the Belvedere Power Station Jetty (disused) on marine receptors is included in Chapter 8: Marine Biodiversity (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		dismantlement of the existing Belvedere Power Station Jetty as part of the Proposed Scheme, as referenced in Paragraph 18.3.5."	
7.7.8	N/A	"It is welcomed in paragraph 7.8.3 that the proposed assessment methodology on Marine Biodiversity will be discussed, and agreement sought with various relevant agencies including the PLA."	No response required.



Table 6: Scoping Opinion Response – Historic Environment

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	spectorate		
3.5.1	Potential physical effects on unknown buried heritage assets within the Site (archaeological remains), including potential submerged remains within the Thames foreshore (marine) – operational phase.	"If scour from vessel movements during operation or impacts from maintenance activities (for example any maintenance dredging) are likely to result in significant effects on heritage assets, these should be assessed in the ES. The Inspectorate is otherwise content that physical effects on unknown buried heritage assets, including submerged remains, are not likely to result in significant effects during the operational phase and that this matter can be scoped out."	Potential physical effects on unknown buried heritage assets within the Site have been considered and assessed in Chapter 9: Historic Environment (Volume 1). This includes the construction phase and the operation phase (for potential submerged remains within the Thames foreshore).
3.5.2	Potential indirect effects on unknown buried heritage assets within the Site (archaeological remains), including potential submerged remains within the Thames foreshore	"Impacts on archaeological remains from dewatering and from the movement of contaminants or pollutants during construction (or operation), should be assessed where significant effects are likely. The Inspectorate is otherwise content that indirect effects on unknown buried heritage assets, including submerged remains, are not likely to result in significant effects during the construction phase and that this matter can be scoped out."	Extensive dewatering works do not form part of the construction approach for the Proposed Scheme. Chapter 9: Historic Environment (Volume 1) includes cross-reference to Chapter 17: Ground Conditions and Soils (Volume 1), where relevant, ground remediation activities are assessed.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	(marine) – construction phase.		
3.5.3	Potential temporary effects on designated above-ground heritage assets, which are located beyond the Site Boundary and within the Study Area – construction phase.	"The Scoping Report (Table 8-2) proposes that this matter is scoped out on the basis that construction impacts would be short term (60 months), temporary and not considered significant. The Inspectorate is content that significant effects are not likely and that this matter can be scoped out."	No response required.
3.5.4	Impacts to the setting of non-designated above ground heritage assets – construction and operational phases.	"The Scoping Report explains that a single non-designated above ground heritage asset has been identified within a 500m Study Area, a locally listed building (an early 20th century concrete police box). The Scoping Report does not identify the specific location of this asset on a plan or explain its heritage significance but proposes that it is scoped out of the settings assessment "Due to its nature and location". The Scoping Report therefore proposes that no non-designated above-ground heritage assets will be assessed, with no other such assets having been identified within the Study Area. Justification for use of a 500m Study Area has not	Impacts to the setting of non-designated above ground heritage assets have been included in the assessment presented within Chapter 9: Historic Environment (Volume 1). The chapter also explains its approach to establishing the significance of heritage assets and study areas. As stated in Paragraph 8.4.2 of Chapter 8: Historic Environment of the EIA Scoping Report ¹² , a Study Area of 500m around the Site Boundary was applied for identifying non-designated above ground heritage assets beyond the Proposed Scheme. In



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		been provided and whilst paragraph 8.8.2 of the Scoping Report lists the data sources that will be used to inform the description of baseline historic environment conditions in the Preliminary Environmental Information Report (PEIR) and ES, it is unclear what sources have been consulted at this stage to identify relevant non-designated above ground heritage assets which may be impacted. Based on the limited information and justification provided, the Inspectorate is not in a position to scope out this matter. Impacts to the setting of non-designated above ground heritage assets should therefore be scoped into the ES where significant effects are likely to occur. The assessment of impacts to the setting of any non-designated above ground heritage assets should be supported by baseline data which is sufficient to identify all such assets which could be impacted by the Proposed Development. The ES should explain the approach to determining the significance of non-designated heritage assets. The ES should justify the choice of Study Area with reference to the refined Zone of Theoretical Visibility (ZTV) developed for the Townscape and Visual Impact Assessment (TVIA),	accordance with best practice and NPPF Guidance ²¹ on proportionality, professional judgement has been applied to choose this Study Area, which is limited to locally listed assets only. The only locally listed building within 500m is the early 20th century concrete structure, similar in style to a police box, which is located approximately 450m to the west of the Site. While the Proposed Scheme may be visible in the long view out from this asset towards the east, this view does not make a substantial contribution to the asset's significance. The Proposed Scheme would not affect the relationship of the asset to the surrounding industrial landscape. The Proposed Scheme is unlikely to result in a material change to the asset's setting or significance. As such the asset has been scoped out for further assessment. The Study Areas (described in Section 9.5 of Chapter 9: Historic Environment (Volume 1)) and impact assessment have been informed by a digital Zone of Theoretical



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		which should be used to confirm whether any non- designated above ground heritage assets may experience visual impacts from the Proposed Development. The Applicant should make effort to discuss and agree any relevant non-designated above ground heritage assets for assessment with the relevant local planning authority/ies."	Visibility (ZTV), produced as part of the Townscape and Visual Impact Assessment (TVIA) presented in Chapter 10: Townscape and Visual Impact (Volume 1).
3.5.5	Setting of non- designated above ground heritage assets not afforded protection in the Local Plan, which are located beyond the Site Boundary – construction and operational phases.	"Table 8-2 (rows 5 and 6) of the Scoping Report states that the heritage significance of nondesignated above-ground heritage assets outside of the Site Boundary that are not afforded protection within the Local Plan, is not considered high enough to warrant a settings assessment. However, the Scoping Report goes on to propose that "The assessment will therefore focus on the most sensitive receptors, designated by Historic England as being of significance". This introduces confusion around the proposed approach given that locally listed buildings and structures within a Local Plan are not designated by Historic England. The Inspectorate agrees that impacts to the setting of non-designated above-ground heritage assets not afforded protection in the Local Plan, which are located beyond the Site Boundary, are not likely to	It is agreed that impacts to the setting of non-designated above ground heritage assets not afforded protection in the Bexley Local Plan³, which are located beyond the Site Boundary, are not likely to result in significant effects and can be scoped out. The distinction between Historic England national designations and local listings has been clarified in Section 9.4 of Chapter 9: Historic Environment (Volume 1). As stated above, the only locally listed building within 500m of the Site Boundary is the early 20th century concrete structure, similar in style to a police box, which is located approximately 450m to the west of the Site. The Proposed Scheme is unlikely to



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		result in significant effects and can be scoped out. However, impacts on non-designated above ground heritage assets which are locally listed, should be assessed where significant affects are likely (as per the row above)."	result in a material change to the asset's setting or significance. As such the asset has been scoped out for further assessment.
3.5.6	Impacts to setting	"The Scoping Report explains that the 2km TVIA Study Area (as presented in the Scoping Report) will be refined through ZTV modelling and site work. The refined ZTV should be used to confirm which heritage assets may experience visual impacts from the Proposed Development.	The digital ZTV, produced as part of the TVIA presented in Chapter 10: Townscape and Visual Impact (Volume 1) , together with a site walkover and professional judgement, have been used to confirm which heritage assets may experience visual impacts from
		The ES should fully justify the choice of heritage assets included in the setting assessment and their locations should be depicted on a supporting plan. The assessment should be supported by appropriate visualisations such as photomontages to help illustrate the likely impacts of the Proposed Development. Effort should be made to agree appropriate viewpoint locations for such visualisations with relevant consultation bodies including local authorities and Historic England. Cross reference can be made to the TVIA ES assessment to avoid duplication."	the Proposed Scheme. Appendix 10-4: Photomontages (Volume 3) has informed the impact assessment on heritage assets, where relevant.



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3.5.7	Archaeological baseline	"Paragraph 8.3.5 of the Scoping Report explains that the application site lies within the Thamesmead and Erith Marshes Archaeological Priority Area. The Inspectorate notes that Historic England (Appendix 2 of this Opinion) consider a detailed deposit modelling exercise will be necessary. It is unclear whether any intrusive field work is proposed to inform the baseline (in addition to any previously undertaken for Riverside 1 and Riverside 2). The Applicant should make effort to discuss and agree the need for any intrusive investigations and trial trenching with relevant consultation bodies, along with details of the timing, scope and methodology of any such works. Where necessary, any intrusive investigations and trial trenching should be completed prior to submission of the DCO application."	The strategy for further survey and mitigation is set out in Section 9.9 of Chapter 9: Historic Environment (Volume 1). In particular a programme of archaeological mitigation will be approved by LBB in consultation with GLAAS.
Historic Eng	land		
Table 8-2	N/A	"Given the location, scale of the proposed work, it is recommended that archaeology is scoped-in."	Archaeological remains have been included in both the construction and operation phase assessments presented within Chapter 9: Historic Environment (Volume 1) .



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8.2	N/A	"Legislation, Policy and Guidance section should make reference to borough wide SPD: Archaeological Priority Areas Appraisal, Jan 2020."	This policy has been included in Table 9-1 of Chapter 9: Historic Environment (Volume 1) .
8.2	N/A	"Reference should also be made to the Bexley Riverside Opportunity Area as noted in the London Plan 2021."	This policy has been included in Table 9-1 of Chapter 9: Historic Environment (Volume 1) .
8.3	N/A	"8.3.8 identifies the potential risk to the archaeological resource from the effects in the area of the foreshore this statement is supported."	No response required.
8.6	N/A	"The scope of the design, mitigation and enhancement measures was supported."	No response required.
8.7	N/A	"The description of potential likely significant effects was supported."	No response required.
Table 8-2	N/A	"Support of the elements proposed to be scoped-in and scoped out."	No response required.
N/A	N/A	"In respect of assessing impact and effects, a detailed deposit modelling exercise was recommended, referring to Deposit Modelling and Archaeology: Guidance for Mapping Buried Deposits."	Deposit modelling is included as an additional design, mitigation and enhancement measure within Section 9.9 of Chapter 9: Historic Environment (Volume 1).



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London Bor	ough of Bexley		
Table 8-1	N/A	"Table 8-1 of the Scoping Opinion outlines a summary of key legislation, policy and guidance. This section should reference the Tier 3 Area of Archaeological Potential (Thamesmead and Erith Marshes), as identified in the London borough of Bexley Archaeological Areas Appraisal (prepared by Historic England, January 2020)."	This policy has been included in Table 9-1 of Chapter 9: Historic Environment (Volume 1) .
Table 8-1	N/A	"The Crossness Conservation Area Appraisal and Management Plan does not appear to be referenced. As the conservation area is a designated heritage asset, this document should be acknowledged and addressed."	The Conservation Area Appraisal and Management Plan ²² for the Crossness Conservation Area is included within the Section 9.6 of Chapter 9: Historic Environment (Volume 1) .
Table 8-1	N/A	"With regards to the Local Plan policies, Policy SP1-Achieving Sustainable Development – the spatial strategy covers all new proposals for development under part 2 of the policy. This policy should be referenced within the ES."	The Local Plan is included in Table 9-1 of Chapter 9: Historic Environment (Volume 1). Policy SP1 relates to sustainable development and is therefore not considered relevant to the historic environment. Policy SP1 is referenced within Chapter 10: Townscape and Visual Impact (Volume 1).



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Table 8-1	N/A	"The setting of heritage assets is referenced within the chapter; however, Table 8-1 of the Scoping Opinion does not mention the key Legislation of the Planning (Listed Buildings and Conservation Areas) Act 1990. Sections 66 and 72 are directly relevant to the assessment of the impact of any development upon the setting of Listed Buildings and Conservation Areas."	The Planning (Listed Buildings and Conservation Areas) Act 1990 is included in Table 9-1 of Chapter 9: Historic Environment (Volume 1) although it is noted that for DCO projects, this is superseded by the Infrastructure Planning (Decisions) Regulations 2010.
Table 8-2	N/A	"Table 8-2 of the Scoping Opinion outlines the impacts which will be scoped in or out of further assessment. It is considered (based on Legislation requirements, and existing policy and guidance) that the conclusions for further assessment are appropriate."	No response required.



Table 7: Scoping Opinion Response – Townscape and Visual

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Insp	pectorate		
3.6.1	Potential impacts on topography - construction and operation	"The Scoping Report states that the Proposed Development is not likely to result in significant changes to the underlying topography. On the basis that significant topographical changes to facilitate the Proposed Development (via an increase in land levels) are not required, the Inspectorate agrees that potential impacts on topography during construction and operation are not likely to result in significant effects and this matter can be scoped out. If as part of the evolution of the design of the Proposed Development it is determined that a significant increase in land levels is required (for example, to protect against flooding), then the ES should assess any impacts on topography which are likely to result in significant effects".	Significant changes to topography will be required to create a development platform upon which to locate the equipment above the flood breach level. Flood plain compensation is envisaged to be achieved via lowering selected bank levels within the Site. Further information on this is provided in Chapter 11: Water Environment and Flood Risk (Volume 1). These matters have been considered within Chapter 10: Townscape and Visual (Volume 1) in line with the methodology set out in this chapter and using the parameters of the assessment described in Section 2.3 of Chapter 2: Site and Proposed Scheme Description (Volume 1), which account for the increase in ground levels.
3.6.2	Potential impacts on National Character Areas (NCAs) –	"The Scoping Report explains that "major developments including ports, waste disposal, marine dredging, and prominent power stations plus numerous other industry-related activities" are a key characteristic of the NCA within which	No response required.



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	construction and operation	the Proposed Development is located. Due to the industrial and marine nature of the Proposed Development, the Scoping Report states that changes arising from the Proposed Development are not expected to give rise to potential impacts on any of the NCAs within the TVIA Study Area.	
		Considering the nature and location of the Proposed Development and the characteristics of the surrounding area, the Inspectorate agrees that impacts on NCAs during construction and operation can be scoped out".	
3.6.3	Potential effects on the London View Management Framework (LVMF) views - construction and operation	"On the basis that the Proposed Development does not fall within the viewing corridor of the LVMF views, the Inspectorate is content that this matter can be scoped out".	No response required.
3.6.4	Impacts to existing arboricultural features (from the Arboricultural Impact Assessment (AIA) to be appended to the ES Chapter 10:	"The Scoping Report states that operation of the Proposed Development will not result in loss of or damage to arboricultural features. Considering the nature and characteristics of the Proposed Development, the Inspectorate agrees that impacts to existing arboricultural features during operation can be scoped out".	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	Townscape and Visual (Volume 1)) - operation		
3.6.5	Effects on receptors located beyond the refined TVIA study area – construction and operation	"The Scoping Report explains that the 2km TVIA study area (as presented in the Scoping Report) will be refined through ZTV modelling and site work. The Scoping Report states that beyond the refined TVIA study area, significant effects on townscape and visual receptors are not anticipated.	Consultation and engagement with stakeholders on the Zone of Theoretical Visibility (ZTV) methodology, visual receptors, viewpoints and Study Area extent is described in Table 10-2 of Chapter 10: Townscape and Visual (Volume 1).
		The Inspectorate considers that the study area and ZTV should represent the extent of the likely impacts from all elements and phases of the Proposed Development. The Applicant should make effort to agree the methodology for the ZTV with relevant consultation bodies including local authorities. On this basis, Inspectorate agrees that any impacts on receptors located outside of the TVIA study area, once refined through ZTV modelling and site work, are unlikely to result in significant effects. This matter can be scoped out of the ES".	
3.6.6	Viewpoints	"The Scoping Report proposes ten viewpoint locations and states that the exact number and	Number and location of viewpoints and visualisations has been agreed with relevant stakeholders following consultation and



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		location of viewpoints will be refined during the assessment process. The number and location of viewpoints and visualisations should be justified in the ES and effort should be made to agree these details with relevant consultation bodies, including local planning authorities and Historic England".	engagement, which is described in Table 10-2 of Chapter 10: Townscape and Visual (Volume 1).
3.6.7	Limitations and assumptions	"The ES should clearly present any assumptions made with regards to the height that the proposed mitigation planting would have reached by the assessment years, for the purposes of generating photomontages and reaching the assessment conclusions".	The Outline LaBARDS (Document Reference 7.9), sets out the ecological, landscape (including planting and assumed heights) and BNG proposals for the Proposed Scheme. This information has been used to inform indicative planting heights for Years 1 and 15 which are presented within Chapter 10: Townscape and Visual (Volume 1).
3.6.8	Impacts from lighting	"Impacts on townscape and visual amenity resulting from the introduction of lighting which are likely to result in significant effects should be assessed in the ES. Any proposed mitigation measures should be described and appropriately secured. The assessment should cross refer to other relevant aspect assessments and sensitive receptors (such as ecology and heritage)".	The Outline Lighting Strategy (Document Reference 7.3) describes the proposed lighting for the Proposed Scheme during operation, which includes measures to minimise adverse lighting effects on townscape and visual receptors. The assessment of townscape and visual amenity incorporates a qualitative appraisal



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			of potential effects from the introduction of lighting associated with the Proposed Scheme on the night-time character of the area and is presented within Chapter 10: Townscape and Visual (Volume 1).
London Borou	igh of Bexley		
Townscape and Visual (including Arboriculture)	N/A	"Policy SP1 of the Bexley Local Plan (2023) covers all new development proposals. This policy should be referenced in Table 9-1 of the Scoping Opinion".	The Bexley Local Plan 2023 ³ and its relevant policies, including, but not limited to SP1, are considered as part of Chapter 10 : Townscape and Visual (Volume 1) alongside other relevant policy, legislation and guidance. Further details are provided in Table 10-1 in Chapter 10 : Townscape and Visual (Volume 1) .
Townscape and Visual (including Arboriculture)	N/A	"Table 9-3 of the Scoping Opinion outlines the impacts which will be scoped in or out of further assessment. It is detailed that any potential impacts on topography (for both the construction and operation phases) be scoped out. The Council would suggest that this should only be the case if there are no significant changes proposed to topography. The Scoping Opinion states that there will not be, but it would be helpful to understand what 'no significant changes'	Significant changes to topography will be required to create a development platform upon which to locate the equipment above the flood breach level. Flood plain compensation is currently envisaged to be achieved via lowering selected bank levels within the Site. Further information on this is provided in Chapter 11: Water Environment and Flood Risk (Volume 1). These matters have been considered within Chapter 10:



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		means. Should the topography of the application site be required to change to facilitate the development (via an increase in level), then this should be required to be scoped in as part of the further assessment".	Townscape and Visual (Volume 1) in line with the methodology set out in this chapter and using the parameters of the assessment described in Section 2.3 of Chapter 2: Site and Proposed Scheme Description (Volume 1), which account for the increase in ground levels.
Townscape and Visual (including Arboriculture)	N/A	"It is considered (based on Legislation requirements, and existing policy and guidance) that the other conclusions for further assessment are appropriate".	No response required.



Table 8: Scoping Opinion Response – Water Environment and Flood Risk

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Insp	pectorate		
3.7.1	Water Framework Directive (WFD) Groundwater Bodies	"The Scoping Report indicates that there is one WFD surface water body within the study area, which falls within a management (but not operational) catchment. The Scoping Report does not make reference to any WFD groundwater bodies within the study area, despite Table 10-5 noting that groundwater quality is to be scoped in. The ES and/ or accompanying WFD assessment should include any relevant groundwater bodies."	The Greenwich Tertiaries and Chalk Water Body WFD Groundwater Body (GB40602G602500) is the only WFD groundwater body located within the Study Area and has been considered within Appendix 11-1: Water Framework Directive Assessment (Volume 3). Information on the Greenwich Tertiaries and Chalk Water Body WFD Groundwater Body is also included within Chapter 11: Water Environment and Flood Risk (Volume 1).
3.7.2	Requirement to assess geomorphology and other physical marine processes	"The Inspectorate notes that the Scoping Report does not specifically refer to geomorphology or marine physical processes with the exception of the sediment transport regime, instead referring to "coastal processes". The Inspectorate considers it is appropriate to provide an assessment of these effects within the ES, due to the construction and operation of a permanent jetty and the dredging works which form part of the Proposed Development description.	Direct morphological change and hydrodynamic regime: Changes to the estuary morphology and hydrodynamics are assessed within Chapter 11: Water Environment and Flood Risk (Volume 1). This includes effects associated with capital dredging (construction phase) and maintenance dredging (operation phase). Sediment transport processes and water quality: Sediment transport modelling is assessed within Chapter 11: Water



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		 The Inspectorate considers that the following matters are required to be scoped into the ES where significant effects are likely to occur during construction and/ or operation: Direct morphological change from the presence of the marine infrastructure and any associated dredging works, including any identified riverbed restoration works; Changes to the hydrodynamic regime; Changes to sediment transport processes (including erosion, deposition/ accretion and scour from vessel movements); Changes to water and sediment quality (including suspended sediment concentrations and contaminants); and Changes to wave climate (including both wind waves and vessel generated waves). The ES should identify where geomorphological changes could impact on other relevant aspect topics." 	Environment and Flood Risk (Volume 1) and Appendix 11-4: Coastal Modelling Studies (Volume 3). This includes erosion, deposition/ accretion bed levels and suspended sediment concentrations during the construction and operation phases. Particle tracking has been undertaken to understand the sediment dispersion and suspended sediment concentrations due to the proposed capital dredging activities. Changes to wave climate were not included within Appendix 11-4: Coastal Modelling Studies (Volume 3) due to the sheltered location and short fetch lengths within the Site. These assessments are set out in the Chapter 11: Water Environment and Flood Risk (Volume 1) and the associated technical appendices.
3.7.3	Groundwater Quality – Operation	"The Scoping Report seeks to scope out groundwater quality during operation due to the anticipated implementation of standard mitigation measures and controls. However, the Scoping Report acknowledges that there is a risk to surface	An assessment of risk to groundwater quality has been included in Chapter 11: Water Environment and Flood Risk (Volume 1) for both the construction phase and operation phase.



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		water during operation due to an increased pollution risk from the new potential sources introduced (use and storage of chemicals and hazardous wastes etc). The Inspectorate considers that this risk may also be applicable to groundwater, and therefore is not in agreement that this can be scoped out of the assessment."	
3.7.4	WFD screening assessment for water bodies which are not WFD designated – construction and operation	"The Inspectorate is in agreement that a WFD screening assessment is not required for non WFD (undesignated) water bodies. However, the ES should consider whether any of the biological, physio-chemical and hydromorphological parameters are to be assessed under general surface water/ groundwater quality as per the first two lines of Table 10-5."	The Chapter 11: Water Environment and Flood Risk (Volume 1) includes an assessment of the effects of the Proposed Scheme on the biological, physicochemical and hydromorphological quality elements of the non WFD designated watercourses (shown in Figure 11-2: Surface Water Features (Volume 2)).
3.7.5	Flood associated groundwater and groundwater flooding risk – construction and operation	"The Scoping Report proposes to scope out flood associated groundwater and groundwater flooding risk during construction and operation, based on the Proposed Development being unlikely to increase the risk of groundwater flooding and the absence of any planned large excavations.	An assessment of groundwater flood risk has been included in Chapter 11: Water Environment and Flood Risk (Volume 1) for both the construction phase and operation phase.
		The Inspectorate notes comments from the London Borough of Bexley (Appendix 2 of this Opinion), which state that the marshland nature of the site can result in unexpected flooding from	



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		groundwater, and from the interaction of groundwater with other sources. In view of this, together with the absence of defined locations of principal development components within the application site, the Inspectorate is not in a position to scope out this matter. The ES should assess impacts from flood associated groundwater and groundwater flooding risk, during construction and operation, where significant effects are likely to occur."	
3.7.6	Impacts to groundwater associated users – construction and operation	"Based on the distance from the site to the mapped/ licenced abstractions, and intervening land uses, the Inspectorate is in agreement that an assessment of licenced water abstractions can be scoped out of the assessment. However, the Scoping Report proposes that the ES will obtain information on private and unlicenced abstractions. The ES should describe any potential impacts on private and unlicenced abstractions and provide an assessment of any likely significant effects."	At the PEIR ²³ stage, impacts to groundwater associated users were scoped out as no data had been received from the Environment Agency or local authority. Data received shows groundwater abstractions located within the Groundwater Study Area and so impacts to groundwater associated users has since been scoped into the assessment. (as described in Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1)).
3.7.7	Springs – construction and operation	"Based on the absence of any known springs within the study area, the Inspectorate is in agreement that an assessment of springs can be	No response required.



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		scoped out of the assessment."	
3.7.8	Groundwater Dependent Terrestrial Ecosystems (GWDTE's) – construction and operation	"Based on the absence of any GWDTEs, the Inspectorate is in agreement that an assessment of GWDTE can be scoped out of the assessment."	No response required.
3.7.9	Baseline Environment	"It is noted that there are discrepancies in baseline information presented within this chapter, specifically in relation to flood risk zones. The ES should present the baseline information in a consistent manner with reference to all available sources."	Engagement and consultation has been undertaken with the Environment Agency, as detailed in Table 11-2 of Chapter 11: Water Environment and Flood Risk (Volume 1) which provided more detailed information in relation to the local flood risk and flood zones. Although engagement remains ongoing, the latest and most refined flood risk data for the Site is the Environment Agency's 2018 Thames Estuary Breach Assessment ²⁴ and has been used to inform the assessment presented in Appendix 11-2: Flood Risk Assessment (Volume 3) and Chapter 11: Water Environment and Flood Risk (Volume 1). Reference to the other available sources is included where appropriate.



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3.7.10	Previous removal of mapped watercourse	"The Scoping Report indicates that the construction of Riverside 1 required the removal of a watercourse that is currently shown on flood risk mapping. The ES should clarify, where known, the diversion route of this waterbody, and confirm how this is to be assessed within the ES if it is not shown on existing mapping."	The Environment Agency's Long Term Risk of Flooding from Surface Water Map ²⁵ shows flooding to the east of Riverside 1 (to the east of the Site Boundary). Aerial imagery taken prior to its construction appears to show a watercourse (essentially a stub end of OW4 (shown in Figure 11-2: Surface Water Features (Volume 2)). It is likely that the associated groundworks infilled this and it was replaced with elements of the Outline Drainage Strategy for Riverside 1, which in turn discharges into OW4, in a very similar manner, north of the Site Boundary. Thus, no further assessment is considered to be required. All existing watercourses on site are mapped on Figure 11-2: Surface Water Features (Volume 2).
3.7.11	Published mapping	"The Scoping Report considers that the available mapping from 2013 is not representative of current flood risk. The ES should detail how this is to be considered within the ES and accompanying Flood Risk Assessment."	As detailed in the response to 3.7.9, post submission of the EIA Scoping Report ¹² , the Environment Agency has confirmed that the 2018 Thames Estuary Breach Assessment is the best available data for the area, and as such, has been used to inform the assessment presented in



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			Appendix 11-2: Flood Risk Assessment (Volume 3).
3.7.12	Groundwater Study Area	"The ES should include a justification for why the groundwater study area is 2km within this chapter and 1km within the ground conditions and soils chapter."	Considering the complexity of ground resources (i.e. groundwater bodies) a Study Area (2km) is considered appropriate for the purpose of assessing any potential risk (groundwater quality and quantity) to groundwater receptors on a water body scale.
			The Study Area for Chapter 17: Ground Conditions and Soils (Volume 1) is 1km for controlled water receptors. This is considered appropriate for indirect effects from potential offsite sources of contamination based on the specifics of the Study Area such as the underlying geology (composition and permeability for example), an appreciation of the water environment and previous land use.
3.7.13	Coastal processes Study Area	"The Scoping Report states that the study area for coastal processes is the site boundary; however this will be reviewed as a result of coastal modelling. The Inspectorate considers that a wider study area should be considered given the potential for the	The coastal processes assessment including numerical modelling which is presented Appendix 11-4: Coastal Modelling Studies (Volume 3) considers the Thames Estuary from Coryton to the tidal limit at Richmond. A detailed



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		construction and operational works to mobilise sediments and affect other receptors off site as detailed in paragraph 10.8.11 of the Scoping Report, which refers to the coastal modelling over a larger area. The ES should detail the selected methodology for coastal modelling, including a justification for the use of either qualitative or quantitative modelling methods. The Applicant's attention is drawn to the Environment Agency's scoping consultation response in this regard (Appendix 2 of this Opinion). The Applicant should make effort to agree the approach to coastal modelling with relevant consultation bodies including the Environment Agency."	description of changes is presented with a higher level of resolution applied over the immediate Site. Consultation and engagement with the Environment Agency has been undertaken about the approach to the numerical modelling, as detailed in Table 11-2 of Chapter 11: Water Environment and Flood Risk (Volume 1).
3.7.14	Sensitive Receptors	"Thames Water have identified that the Proposed Development is located within the Riverside Water Flow Monitoring Zone (FMZ), where there is concern over having sufficient water supply to meet future growth. The Inspectorate considers that the FMZ should be included within the list of sensitive receptors to be assessed. Any assessment of this or other impacts related to water supply should have reference to the relevant local plans or other local planning documents (such as the London Plan identification of	As detailed in the Charlton to Bexley Riverside Integrated Water Management Strategy Thames Water has developed a plan for addressing the forecast deficit in the London Water Resource Zone through a combination of measures to tackle leakage, manage and reduce water demand, and install new water supply schemes. The plan is reliant on significant demand reduction measures from existing property and highlights the need for new



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		opportunity areas and the Riverside growth study)."	developments to minimise water use and help identify innovative solutions to delivering alternative supplies. The Riverside Water Flow Monitoring Zone is encompassed by the Charlton to Bexley Riverside Integrated Water Management Strategy and the London Water Resource Zone.
3.7.15	Mitigation – wastewater treatment	"The Scoping Report states that "wastewater" will be treated at a wastewater plant. However, wastewater is not defined, and could refer to sewage, surface water, trade effluent / process water etc. The ES should clarify this terminology and ensure to clearly describe the disposal/run off methodology for any type of water to be discharged from the Proposed Development. In relation to this, the Scoping Report states that water that is to be discharged to the existing water environment will meet the relevant Environmental Quality Standards (EQS). The ES should also consider how the discharged wastewater would be able to comply with any required environmental permits or other discharge consents in the event that the permitted limits within these are lower than the EQS."	Paragraphs 2.2.57 to 2.2.60 in Chapter 2: Site and Proposed Scheme Description (Volume 1) provides a description of the types of wastewater generated by the Proposed Scheme and how it will be treated. Appropriate mitigation is described in Chapter 11: Water Environment and Flood Risk (Volume 1), which includes environmental permits or other discharge consents where appropriate.



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3.7.16	Site specific surface and groundwater monitoring data	"The Scoping Report states that for the authoring of the ES, no quantitative assessment or site-specific ground investigation will be undertaken. The ES should confirm if these are to be undertaken at any point of the design, construction or operation of the Proposed Development, and how the baseline can be sufficiently defined without this information."	No additional ground investigation works will be undertaken to acquire further baseline information and data to support the application for development consent in respect of water receptors. A ground investigation is proposed to be undertaken as part of the detailed design of the Proposed Scheme, pursuant to DCO Requirement. Previous and historical ground investigation data, for various areas of the Site is available. Data from these previous and historical ground investigations is
			considered within Chapter 11: Water Environment and Flood Risk (Volume 1), and Chapter 17: Ground Conditions and Soils (Volume 1).
3.7.17	Potable water supply and other water sources	"As noted above, the current water supply for the Proposed Development is not yet known. The Scoping Report provides an assumption that a potable water supply beyond welfare is not needed. The ES should assess the potential for effects on groundwater or surface water quality and quantity resulting from the water supply options which form part of the Proposed	Details on the water supply options and requirements are provided in Chapter 2: Site and Proposed Scheme Description (Volume 1) and Chapter 3: Consideration of Alternatives (Volume 1). The feed water supply will likely use a combination of potable water from Thames Water (Water Supply Zone: 0105) and recycled effluent from the Carbon Capture



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		Development."	Facility. The design of the Carbon Capture Facility has included water recycling where practicable, to minimise potable water demand and wastewater generation from the Carbon Capture Facility.
			Therefore, impacts on groundwater or surface water quality and quantity resulting from the water supply options during construction and operation are not considered likely to be significant (as described in Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1)).
3.7.18	Clarity of assessment scope	"The Inspectorate notes that similar receptors and potential effects are to be assessed in both this chapter and the geology and soils chapter. The ES should define the scope of assessment in each of these chapters and provide clear cross reference to where the relevant assessments are presented."	Although some inherent cross-over exists between Chapter 17: Ground Conditions and Soils (Volume 1) and Chapter 11: Water Environment and Flood Risk (Volume 1) the assessment of risks is different. Chapter 17: Ground Conditions and Soils (Volume 1) assesses contamination risks (existing and/or potential to create from development activities) to controlled waters (locally). Whereas Chapter 11: Water Environment and Flood Risk (Volume 1) provides an assessment from



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			a groundwater resources (quantity and quality) and waterbody perspective. Therefore, risks and impacts to groundwater receptors from the Proposed Scheme are assessed at a local scale (i.e. groundwater flow and level) and regional scale (i.e. source protection zone) within Chapter 11: Water Environment and Flood Risk (Volume 1).
Environment Ag	gency		
Geomorphology	-	"We query as to whether sediment deposition should be scoped out? Whilst the statement relates to the operational activities of boats etc, there is potentially going to be some geomorphological changes associated with the construction of the new pier. This new permanent structure will potentially cause changes to accretion and deposition locally, so unless the extent and rate of any sediment deposition is assessed, then it shouldn't be scoped out at this stage. Unless the Proposed Jetty is identical to the existing structure, the replacement/Proposed Jetty and any dredge pocket will need hydrodynamic modelling to understand the impact on: Tidal currents;	Chapter 11: Water Environment and Flood Risk (Volume 1) outlines the assessment of the sediment transport regime (coastal processes) during both the construction and operation phases, which is considered within that chapter. Further information is presented in Appendix 11-4: Coastal Modelling Studies (Volume 3). Chapter 11: Water Environment and Flood Risk (Volume 1) provides the methodology for the assessment in Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1).



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		 Wind waves; and Wave wash from vessels using the jetty (wake) or passing nearby. 	The assessment in the Coastal Modelling and Sediment Processes Report (see Appendix 11-4: Coastal Modelling Studies (volume 3)) summarises the hydrodynamic modelling (undertaken in a 2D model with flexible mesh in 'MIKE' by DHI) to understand the impact of the Proposed Scheme on: tidal currents; sediment dispersion, sediment transport. Appendix 11-4: Coastal Modelling Studies (volume 3) also includes an assessment of the impacts of ship/wave wash from vessels using the Proposed Jetty (wake) and associated impacts on sea bed scour (as a result of propeller/jet action). The assessment does not include either the impacts of ship wake resulting from passing vessels (which are part of the baseline scenario) or wind waves (given the limited/negligible fetch length). Chapter 2: Site and Proposed Scheme Description (Volume 1) includes a
			description of the Proposed Jetty. Further information relating to the design of the Proposed Jetty, refinement of its location and the extent of the dredge pocket



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			required is included in Chapter 2: Site and Proposed Scheme Description (Volume 1).
			The effects of wave wash (from wind and vessels) are assessed in Section 8.8 of Chapter 8: Marine Biodiversity (Volume 1) .
Water Quality		"In general we feel that water quality potential concerns have been correctly identified and we are confident that Water Framework Directive (WFD) water quality compliance will be fully considered within appropriate impact assessments that should follow once more appropriate data has been gathered. The report states that they are proposing to scope in water quality for an "impact assessment" which we support. We do not support the qualifying phrase Scoped in as a precaution_pending design options as leaves room for the design options to allow water quality to be "scope out" later. If any dredging or piling is undertaken, then the proposal will not be able to "scope out" those activities. We would prefer the final WFD impact assessment to be a standalone document (for ease of comment without the need to cross-reference to larger documents where facts may be embedded in large chapters).	The scope of the water quality effects assessed is detailed within Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1), which accords with the Environment Agency's request. The WFD impact assessment included as a technical appendix (see Appendix 11-1: Water Framework Directive Assessment (Volume 3)).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Specific Comments 2.2.36.		"Abstraction from the Thames will require an abstraction licence. The WFD impact of abstraction of water on Thames Middle waterbody will need to be considered. Whilst the impact might be anticipated to be relatively small scale in terms of the proportional volume of Thames Middle (so may "impact assess" as WFD compliant when fully considered in relation to WFD water quality), the flow in the Thames is very seasonally variable. Summer droughts (and abstraction in the freshwater reaches for public supply) can severely limit the freshwater flows. Should any of this water be returned to the river as post process water (effluent) we note that it will need to conform to the relevant EQS limits. Any thermally elevated (relative to natural riverine temperature) discharges will require an assessment of potential impacts on physico-chemical water quality."	The Proposed Scheme will not require a new abstraction licence. It is intended that the water supply for the Carbon Capture Facility will use a combination of potable water from Thames Water (Water Supply Zone: 0105) and recycled effluent from the Carbon Capture Facility. In additon, there will be a new potable water connection for the Ancillary Infrastructure in Thame Water's water main, located within the southern area of Norman Road. Further information on the water supply for the Proposed Scheme is presented in Chapter 2: Site and Proposed Scheme Description (Volume 1). Extreme temperatures events and droughts are assessed in Chapter 12: Climate Resilience (Volume 1). Appendix 11-1: Water Framework Directive Assessment (Volume 3) considers the Thames Middle Transitional WFD Water Body and the Greenwich Tertiaries and Chalk Groundwater Body. Further information on these Water Bodies is presented in Chapter 11: Water



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			Environment and Flood Risk (Volume 1). Chapter 2: Site and Proposed Scheme Description (Volume 1) provides a description of the types of wastewater and how wastewater will be generated and treated as part of the Proposed Scheme. Appropriate mitigation is presented in Chapter 11: Water Environment and Flood Risk (Volume 1), including environmental permits or other discharge consents where appropriate.
Flood Risk and Coastal Processes		 "We welcome the other Impacts being Scoped in but believe that additional topics should be Included and Scoped in as follows: The offset between the new structures horizontally and vertically relative to the Thames Tidal Defences. The impact on the Thames Tidal Flood defences, as well as the ability to uprate, maintain and if needed replace those structures in the future. Any displacement of fluvial floodplain. Works in close proximity to, or impacting, a fluvial watercourse. 	The design of the Proposed Scheme has considered flood risk as detailed throughout Chapter 11: Water Environment and Flood Risk (Volume 1) and is explained in Appendix 11-2: Flood Risk Assessment (Volume 3). As detailed within Section 11.4 of Chapter 11: Water Environment and Flood Risk (Volume 1) the following sensitive receptors, in addition to others, have been considered in this assessment: • Waterbodies (i.e. the River Thames, Marsh Dykes and Ponds);



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		The potential impact on the Thames Tidal Defences of the demolition of the existing derelict Belvedere Power Station Jetty, and how that will be mitigated."	 Floodplain (associated with a breach of the River Thames flood defences); and Floodplain (associated with Marsh Dykes). The Proposed Jetty is designed in such a manner that the River Thames flood defences could be raised in the future as part of the Thames Estuary 2100 Plan²⁶. The demolition, if undertaken, of the Belvedere Power Station Jetty (disused) will not impact the River Thames flood defences.
Flood Risk and Coastal Processes 10.8.2.	-	"Design Manual for Roads and Bridges (DMRB) LA 113 – Road Drainage and the Water Environment considers the current receptors only, but this may change in the future during the proposed scheme. The Applicant could alternatively consider the source-pathway receptor model in the context of tidal flooding to ensure that the flood risk is adequately managed e.g., by providing fit-forpurpose defences which mitigates the pathway to the receptor."	As detailed in Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1) the assessment for both the construction and operation of the Proposed Scheme has been undertaken following the principles set out within the DMRB LA 113. Although not directly applicable to the nature of the Proposed Scheme, the DMRB guidance provides a good basis for assessing effects of developments on the water environment and flood risk.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			With regards to future receptors the assessment presented in Chapter 11: Water Environment and Flood Risk (Volume 1), considers the future baseline, including Riverside 2. Further information on the future baseline with regards to water environment and flood risk is provided in Section 11.6 in Chapter 11: Water Environment and Flood Risk (Volume 1).
Flood Risk and Coastal Processes	-	"Sediment Transport Regime – We note that this impact is described in terms of this localised section of the River Thames. The area of interest should not be drawn too narrowly."	As described in Section 11.5 in Chapter 11: Water Environment and Flood Risk (Volume 1) and Appendix 11-4: Coastal Modelling Studies (Volume 3) the Study Area for the coastal processes model (sediment transport) is broad and covers the reach of the Thames between Richmond (approximately 32km west of the Site Boundary) and Coryton (approximately 27km east of the Site Boundary). A higher level of model resolution (approximately 1km) has been defined over the immediate project frontage to capture the Proposed Scheme design changes.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Flood Risk and Coastal Processes		"We disagree with the categorization of significance set out in table 10-7, which appears to somewhat trivialise impacts. Adverse impacts on water and flood risk infrastructure are unacceptable, as is creating any increase in peak flood levels. Even small increases in peak water levels in combination with other developments can have a cumulative effect and thus must be prevented and necessary opposed."	It is acknowledged that any magnitude of impact on the water environment and flood risk could be perceived as unacceptable or significant. For the purposes of this assessment significance has been undertaken using the principles set out within the DMRB LA 113. Although not directly applicable to the nature of the Proposed Scheme, the DMRB guidance provides a good basis for assessing effects of developments on the water environment and flood risk. Further information on the significance criteria is provided in Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1) and Appendix 11-2: Flood Risk Assessment (Volume 3). Additionally, this ES considers cumulative impacts in Chapter 21: Cumulative Effects (Volume 1).
Coastal Processes 10.8.12.	-	"We disagree with the proposed approach to assessing the impact of the in-channel works on sediment movement in the River Thames. Detailed quantitative sediment transport modelling should be carried out. That should include assessing the cumulative effects with the existing jetty and also	A detailed hydrodynamic site-specific modelling study has been undertaken in the "MIKE by DHI" software package to establish the sensitivity and magnitude of any changes to the hydrodynamics (coastal processes) of the River Thames



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		with other nearby in-channel structures. The former sediment study that was undertaken for Middleton Jetty should be provided and compared to the changes that have taken place since that jetty was constructed."	during the construction and operation phase of the Proposed Scheme. Engagement to reach agreement on the modelling approach has been undertaken with the Environment Agency and the PLA, (with data provided by the PLA being used as part of Appendix 11-4: Coastal Modelling Studies (Volume 3)) as described in Section 11.3 in Chapter 11: Water Environment and Flood Risk (Volume 1). The results of the detailed study are presented in Appendix 11-4: Coastal Modelling Studies (Volume 3).
Coastal Processes	-	"Mitigation measures to address the risks to flood defence infrastructure, outfalls and the river habitats associated with scour and sediment accretion should be proposed, along with a contingency plan and trigger values for intervention. This can then be measured by surveying to the foreshore levels during construction/operation of the proposal."	Section 11.7 and 11.9 in Chapter 11: Water Environment and Flood Risk (Volume 1) outline the embedded and additional design, mitigation and enhancement measures for the Proposed Scheme during for the construction and operation phases.
Flood Risk 10.8.14 and 10.9	-	"The Environment Agency has undertaken revised in-channel extreme water level flood modelling for the Tidal River Thames. However, we are still in the process of planning further flood modelling to update the breach modelling based on the new in	The Applicant has engaged with the Environment Agency about this matter as outlined in Table 11-2 in Chapter 11:



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		channel modelling. Revising the breach modelling would therefore provide an up-to-date assessment of the residual flood risk affecting the scheme."	Water Environment and Flood Risk (Volume 1). The Environment Agency's 2018 Thames Estuary Breach Model has informed the Flood Risk Assessment presented in Appendix 11-2: Flood Risk Assessment (Volume 3).
Flood Risk	-	"The need for flood modelling of the ditch network should be reviewed considering any changes to the network of surface water features or the floodplain."	The ordinary watercourses (including ditches) located within the Study Area are labelled in Figure 11-2: Surface Water Features (Volume 2) and listed in Table 11-9 in Chapter 11: Water Environment and Flood Risk (Volume 1). The water environment and flood risk assessment presented within Chapter 11: Water Environment and Flood Risk (Volume 1) includes an assessment of the effects of the Proposed Scheme upon waterbodies (including ditches) and the surrounding floodplain. The Environment Agency has provided the outputs from the 2018 Thames Estuary
			Breach Assessment and confirmed that this the best information available. As such, this data has been used to inform the flood risk assessment presented in



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			Appendix 11-2: Flood Risk Assessment (Volume 3).
Flood Risk	-	"The application should consider the TE2100 Plan."	The Applicant has considered the TE2100 Plan during baseline data collection for Chapter 11: Water Environment and Flood Risk (Volume 1).
Flood Risk	-	"The responsibility of maintenance to the flood defence is that of the Flood Defence Owner rather than the Environment Agency as stated in section 10.3.22."	No response required.
Flood Risk	-	"The relevant legislation should include the Metropolitan Flood Acts."	The Applicant notes this comment and has considered the application of those Acts to the Proposed Scheme as part of the development of the application for development consent.
London Boroug	gh of Bexley		
Water Environment and Flood Risk	-	"The Scoping Report states that the risk from groundwater flooding is classified as moderate, which agrees with the records the Council holds. However, impacts from groundwater have been scoped out due to the area not being at 'high risk'. Whilst the Council accept that there is only a moderate risk within the site boundaries, the marshland nature of the site can result in	As described in Section 11.4 in Chapter 11: Water Environment and Flood Risk (Volume 1) an assessment of potential impacts of the Proposed Scheme on groundwater quantity and quality has been undertaken for groundwater features and other groundwater dependent receptors. The assessment is presented in Chapter



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		unexpected flooding from groundwater, and from the interaction of groundwater with other sources. For this reason, the Council believes that it should be scoped in."	11: Water Environment and Flood Risk (Volume 1).
Water Environment and Flood Risk	-	"Table 10-1 should also reference the Bexley Local Flood Risk Management Strategy and the Bexley SuDS Design & Evaluation Guide."	The Bexley Local Flood Risk Management Strategy 2017 ²⁷ is included in Table 11-1 in Chapter 11: Water Environment and Flood Risk (Volume 1) .
			The Bexley SuDS Design & Evaluation Guide has been considered and adhered to in the development of the new drainage system for the Proposed Scheme. Further information on the drainage system is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1). An Outline Drainage Strategy (Document Reference 7.2) has been developed and included within the application for development consent.
Water Environment and Flood Risk	-	"Section 2.1.28 incorrectly identifies the site boundary as within Flood Zone 2 whist Section 10.3.22 states that it is within Flood Zone 3. This needs to be addressed."	Chapter 2: Site and Proposed Scheme Description (Volume 1) refers to the Site being within a Flood Zone 3 (as shown on Sheet 2 of the Environmental Features Plan (Document Reference 2.7)), and the Proposed Scheme has been assessed on



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			that basis.
Water Environment and Flood Risk	-	"Table 10-1 refers to Policies DP32 and DP33 of the Bexley Local Plan (2023). However, there are additional policies in the Local Plan relating to the water environment and flood risk which should also be referred to, such as DP18, DP19, DP29."	These policies have been included in Table11-1 in Chapter 11: Water Environment and Flood Risk (Volume 1).
Water Environment and Flood Risk	-	"Design, mitigation and enhancement should address the need to raise flood defenses along the River Thames."	The evolving design of the Proposed Scheme hastake into account the requirements of the Thames Estuary 2100 Plan ²⁸ , which requires raisings of the defences in the future to a specified height. Further detail is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1) .
			Appendix 11-2: Flood Risk Assessment (Volume 3), considers design, mitigation and enhancement measures specific to the Proposed Scheme.
Water Environment and Flood Risk	-	"The Council would like to be consulted during the preparation of the Flood Risk Assessment for the application site."	Response welcomed, the Applicant has engageed with LBB, as described in Table 11-2 of Chapter 11: Water Environment and Flood Risk (Volume 1) .
Port of London	Authority		



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Chapter 10: Water Environment and Flood Risk	-	"In the operational phase of this section, it is stated that water discharges into the river. Within the ES it will be essential that further detail is provided on this including where this will be discharged, and of what velocity, volume and frequency."	Further information on the discharge options for the Proposed Scheme, including provisional outfall locations and flow velocities is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1). As per Chapter 3: Consideration of Alternatives (Volume 1) the option to discharge into the River Thames has not been progressed. The impacts upon the water environment are assessed within Chapter 11: Water Environment and Flood Risk (Volume 1).



Table 9: Scoping Opinion Response – Climate Resilience

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
The Plannin	g Inspectorate		
3.8.1	Vulnerability assessment and use of this to define scope	"The Scoping Report states that the vulnerability assessments presented in Tables 11-9 and 11-11 are used to define the scope of the ES, whereby a vulnerability is scoped out if it is assessed as low. Whilst the Inspectorate does not disagree with this method, no evidence or criteria is provided within these tables to justify the conclusions of low, medium or high sensitivity, exposure and consequently the requirement to scope these in or out. Specifically, the Ancillary Infrastructure lists 9 sources of medium to high vulnerability, whereas the main carbon capture and hydrogen production lists only 6, and no information is given as to why ancillary structures are considered to be more vulnerable. The ES should provide further detail on the assessment methodology used and justification for the scoping out of selected vulnerabilities."	There is no prescribed standard or guidance on the methodology for scoping climate resilience for EIA. As outlined in Paragraph 11.7.2 in Chapter 11: Climate Resilience of the EIA Scoping Report ¹² , the IEMA Guidance ²⁹ notes that scoping should identify the key climatic variables relevant to the Proposed Scheme. DMRB LA 114 ³⁰ provides further guidance, indicating that EIA Scoping should focus on the identification of any likely potential significant climate changes and likely exposure of the Proposed Scheme to these changes, to identify vulnerable elements that have required further assessment in the ES. Although DMRB LA 114 ³⁰ is used to understand the requirements for assessing and reporting the effects of climate on transport infrastructure, the methodology is applicable to other developments. The bullet points under Paragraph 11.7.3 in Chapter 11: Climate Resilience of the EIA Scoping Report ¹² provide the methodology and criteria for assigning sensitivity and exposure ratings, whereby the level of sensitivity is determined by considering the impact of the climate on specific receptors, predominantly



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			based on literature reviews and professional judgement and rated as high, medium or low. The level of exposure is based on current climate and the future climate projections identified in the baseline information and rated as high, medium or low.
			Chapter 11: Climate Resilience of the EIA Scoping Report ¹² (Paragraphs 11.7.6 to 11.7.16) presents a summary of the sensitivity of the Proposed Scheme's receptors to climate variables. This information is used to assign a sensitivity score during the vulnerability assessment.
			The future baseline, presenting climate projections, was detailed in Paragraphs 11.3.16 to 11.3.27 of Chapter 11: Climate Resilience of the EIA Scoping Report ¹² . The climate projections are used to inform the exposure element of the vulnerability assessment.
			The number of low, medium or high ratings assigned per climate variable and receptor is a function of the sensitivity and exposure rating, as defined within the matrix presented in Table 11-7 in Chapter 11: Climate Resilience of the EIA Scoping Report ¹² . Each climate variable for each receptor is assessed individually to assign the vulnerability score. The number of medium or high ratings per receptor



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			should not be compared directly given that the assessment is made per variable and per receptor. The vulnerability assessment is undertaken only at scoping stage, with this ES stage having assessed the likelihood and consequence of climate change impacts on the receptors. Therefore, the rationale behind the vulnerability assessment has been explained within the PEIR ³¹ . Chapter 12: Climate Resilience (Volume 1) has not provided further explanation of the vulnerability assessment methodology. Ancillary Infrastructure has more vulnerability scores of 'medium' to 'high' compared to the Carbon Capture Facility as the Ancillary Infrastructure is deemed more sensitive to changes in annual averages (precipitation and temperature) and drought. Ancillary Infrastructure covers a wider area, including roads and drainage, which is more likely to be affected by these climate variables – e.g. Ancillary Infrastructure is more sensitive to risk of overheating, damage to ground infrastructure and blockage of drainage infrastructure - but such impacts will not affect the operation of the Carbon Capture Facility as significantly.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.8.2	Climate impacts during construction	"Based on the short duration of construction works, the Inspectorate is in agreement that climate impacts during construction can be scoped out of the assessment for all identified receptors, with the exception of sea level rise and associated impacts. As noted in the Environment Agency's scoping consultation response (Appendix 2 of this Opinion), sea level rise and associated impacts are required to be scoped in for the construction phase to account for the TE2100 plan and associated works."	Sea level rise (SLR) and associated impacts have been assessed for the construction and operation phase in this ES. Matters scoped out of the operation phase (including the Carbon Capture Facility, Proposed Jetty, Ancillary infrastructure and Operation Staff) have been considered unlikely to be vulnerable to climate change hazards such as changes in annual precipitation, drought, and change in annual average temperature. Therefore, these have not been assessed further.
3.8.3	Other climate impacts during operation	"The Scoping Report confirms in the second row of Table 11-12 that impacts from flooding, extreme temperature events, gales/winds, storms and sea level rise/storm surges during operation are scoped into the assessment. On this basis and taking into account the vulnerability assessment, the Inspectorate is in agreement that all other climate impacts during operation can be scoped out of the assessment.	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.8.4	Relative humidity – all receptors	"Based on the vulnerability assessment, the Inspectorate is in agreement that relative humidity can be scoped out of the assessment for all identified receptors."	No response required.
3.8.5	Current baseline data sources	"Paragraph 11.3.1 of the Scoping Report states that data is available from 1981 – 2010. The ES should confirm whether more recent data is available, in particular in relation to the noted increase in extreme climate events since this dataset."	The current baseline climate data has been updated from the 1981-2010 projections to the most recent available projections (1991-2020). Recent past extreme weather events since the 1981-2010 dataset have also been updated using Met Office records and research of locally documented cases.
3.8.6	Assessment methodology	"The Scoping Report provides an outline description of the "RCP8.5" (high emissions scenario), however no information is given in relation to the background, use or relevance of this methodology or any alternatives. The ES should provide a detailed methodology for the assessment and ensure that any acronyms are defined in full within the ES."	The use of RCP8.5 aligns with the IEMA Guidance ²⁹ . RCP8.5 considers the high emissions scenario where a change in temperature of 4°C by 2100 is considered and combines assumptions about high population and relatively slow income growth with modest rates of technology change and energy intensity improvements. The approach is considered to represent a 'worst case' scenario aligning with the overall EIA assessment approach. Further background is provided within this ES.
3.8.7	Terminology	"Table 11-1 of the Scoping Report interchangeably uses the terminologies medium and moderate. The ES should use consistent language and terminology within each individual chapter."	Terminology has been clarified throughout this ES.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.8.8	Consequences and likelihood definition	"It is not clear within the Scoping Report as to whether there is a link within the methodology between the vulnerability assessment presented in Tables 11-9 and 11-11 and the assessment of consequences presented in Tables 11-13 and 11-14. The ES should clearly detail the methodology used."	The vulnerability assessment used at the scoping stage to identify the climate variables has been taken into the ES. The outcome of the vulnerability assessment was detailed in Table 11-9 and Table 11-11 in Chapter 11: Climate Resilience of the EIA Scoping Report ¹² . The proposed assessment methodology (Section 11.8 in Chapter 11: Climate Resilience of the Scoping Report ¹²) outlines the methodology that has been used in the ES. In summary, following the vulnerability assessment completed at scoping, the next stage is to consider the consequence and likelihood of the climate impact on the receptors, as determined by the criteria set out in Table 11-13 and Table 11-14 of Chapter 11: Climate Resilience of the EIA Scoping Report ¹² and now followed through to this ES. These definitions relate to the assessment that has been undertaken as part of this ES. Section 12.4 of Chapter 12: Climate Resilience (Volume 1) details the methodology used.
3.8.9	Definition of significance	"The Scoping Report indicates that the climate assessment will only categorise effects as significant or not significant. No explanation is given as to why this chapter deviates from the overarching methodology to define significance of effect as, for	The climate resilience assessment considers the impact of climate on the Proposed Scheme, rather than the impact that the Proposed Scheme will have on the environment, as is typically assessed in other technical topics. Given the nature of the climate resilience assessment, the overarching methodology



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		example, negligible or moderate. The ES should present a justification of this methodology with reference to guidance where relevant."	to define significance of effect is not suitable, and therefore not used. The assessment methodology and criteria for determining likelihood, consequence and significance of effect is presented in Section 12.4 of Chapter 12: Climate Resilience (Volume 1) , and aligns to good practice guidance, such as the IEMA Guidance ¹⁹ and DMRB LA 114 ³⁰ .
Environmen	nt Agency		
Climate Resilience	SLR and tidal flood risk	"Table 11-1: Climate Resilience – Summary of Key Policy, Legislation and Guidance" "The issue of sea level rise (SLR) and the need to address the Thames Estuary 2100 plan has not been included here." "11.3.11 and 11.3.12 is not a sound description of the issue of sea level rise and tidal flood risk at this location. The sea level risk needs to be managed by uprating the Thames Tidal Flood Defences including raising the crest level of the flood defences within the site boundary, not by the open channels and pumped and gravity outfalls." "Table 11-9 and 11-10: SLR considered in operation but not construction phase (which is 5 years).	The Thames Estuary 2100 Plan ²⁶ has been included in Section 12.2 of Chapter 12: Climate Resilience (Volume 1). Sea level rise (SLR) has been assessed for the construction and operation phase in this ES. Further comments made by the Environment Agency regarding SLR are responded to in Chapter 11: Water Environment and Flood Risk (Volume 1).



Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	 SLR needs to be considered at construction phase to account for TE2100 Plan and raisings as required. Within this there should be consideration of adequate strength for raising and a design life commensurate with the development i.e., 75 years for non-residential development. SLR should not be scoped out for construction or operation for any receptors." "Application should consider: TE2100 Plan London Plan SI12 Bexley Local Plan 2023 is POLICY DP19 1. e. 5.8" 	



Table 10: Scoping Opinion Response – Greenhouse Gases

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	pectorate		
3.9.1	Emissions sources during construction arising from: • A5 disposal of waste; and • A5 land use, land use change and forestry.	"Table 12-3 omits a description of disposal of waste land use, land use change and forestry from category A5 listed in Table 12-5. Whilst it is noted that these are proposed to be scoped out, where legislation or guidance is referred to, all relevant sections should be described. The Inspectorate also considers that insufficient evidence has been provided to justify the conclusions reached within the Scoping Report, as the composition of waste from the construction works (including waste high in carbon content such as stripped topsoil or green waste and excess excavation arisings or other material), or area of vegetation and carbon sequestration from the Crossness LNR to be removed, is not specified at present. Therefore, the Inspectorate is not in agreement that these matters can be scoped out."	An assessment of the emissions associated with the disposal of waste (A5) land use, land use change and forestry (A5) has been included within Chapter 13: Greenhouse Gases (Volume 1).
3.9.2	B6 operational energy use; and	"Table 12-4 of the Scoping Report is noted to omit a description of use category B6, and land	An assessment of the emissions associated with operational energy use (B6) and operational land



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	B8 operational land use, land use change and forestry.	use, land use change and forestry from category B8 which is listed in Table 12-5. Whilst it is noted that these are proposed to be scoped out, where legislation or guidance is referred to, all relevant sections should be described. The Inspectorate also considers that	use, land use change and forestry (B8) has been included within Chapter 13: Greenhouse Gases (Volume 1).
		insufficient evidence has been provided to justify the conclusions reached within the Scoping Report, as the operational energy use and area of vegetation and carbon sequestration from the Crossness LNR to be removed, is not specified at present. Therefore, the Inspectorate is not in agreement that these can be scoped out."	
3.9.3	Category B9 – End user emissions	"The assessment of operational category B9 proposes to scope in the transport of liquified carbon dioxide off site (which is not assessed in any other chapters) but scope out the storage and development of storage locations. The ES should clearly define the project scope and any assumptions made (e.g., vessel movements and routes) and ensure that any aspects of the Proposed Development which	The scope and assumptions made for the Proposed Scheme is described within Chapter 2: Site and Proposed Scheme Description (Volume 1) and Section 13.4 in Chapter 13: Greenhouse Gases (Volume 1).



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		require assessment are included in each relevant chapter."	
3.9.4	Categories C1, C2, C3 and C4 (Decommissioning)	"As noted above there is limited and contradictory information provided in relation to decommissioning, and as such the Inspectorate is not in agreement that this can be scoped out of assessment."	The Applicant has no plans to decommission and remove the Proposed Scheme. However, removal would be likely to require a similar degree of plant, equipment, and disturbance to that predicted during construction and so similar effects would arise (or indeed could be improved given expected developments in technology over time). Given that the Applicant has no plans to decommission the Proposed Scheme, further consideration of decommissioning is not considered appropriate. Further information on this is provided in Chapter 2: Site and Proposed Scheme Description (Volume 1).
			In specific relation to GHG, and in the context of the UK achieving net zero by 2050 ¹³ , there are uncertainties around deconstruction techniques at the Proposed Scheme's end of life relating to the carbon intensity of fuels used within these deconstruction techniques.
3.9.5	Study Area	"Paragraph 12.4.1 states "Construction emissions from the Proposed Scheme footprint but also relating to the transport of materials to	The Study Area for the construction phase assessment is to include emissions within the Site Boundary but also related to the transport of



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		and from the Site and their manufacture. This may be distant from the Proposed Scheme location, for example, GHG emissions associated with the manufacture of concrete in terms of embodied carbon and energy in the production process". This is also repeated in product stage A1-A3 in Table 12-3." "These statements contradict Table 15-10 of the Scoping Report which states that "The impacts of extraction and manufacture of materials cannot be assured with any accuracy and are subject to separate environmental consent and permitting processes, and hence are scoped out of the assessment. Furthermore, neither the construction nor the operation of the Proposed Scheme requires direct extraction, processing and manufacture of raw resources".	materials to and from the Proposed Scheme and their manufacture (this may be distant from the Proposed Scheme location). Further details on the assessment methodology and the Study Area are provided in Section 13.5 in Chapter 13: Greenhouse Gases (Volume 1). The scope of the assessment (including upstream emissions) is defined in Section 13.4 in Chapter 13: Greenhouse Gases (Volume 1), which includes the benchmarks used within the assessment. The manufacture and transport of raw materials to suppliers (A1-3) has been included in the assessment presented in Chapter 13: Greenhouse Gases (Volume 1).
		The ES should be consistent in its approach to the assessment of "upstream" emissions and embodied carbon between chapters, and clearly define what parameters are scoped into and out of the assessment. The ES should also provide details on the scope of the embodied carbon assessment, and where	



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		appropriate, indicate benchmarks in the lifecycle of materials used within the Proposed Development.	
		In relation to categories A1-A3, whilst noting this is required to be scoped in for the construction phase, the ES should provide clarity on the statement "Furthermore, neither the construction nor the operation of the Proposed Scheme requires direct extraction, processing and manufacture of raw resources" as it is not clear how the Proposed Development could be constructed without the use of raw materials."	
3.9.6	Methodology	"It is not clear within the methodology whether the assessment of greenhouse gas emissions will consider the Proposed Development alone (construction and operation of carbon capture and hydrogen production) or consider the cumulative effects of the potential reduction in greenhouses gases from the operational Riverside 1 and future operational Riverside 2 as a result of the Proposed Development.	The baseline and future baseline conditions take into account the emissions associated with the operation of Riverside 1 and future Riverside 2; further detail is provided in Section 13.4 in Chapter 13: Greenhouse Gases (Volume 1) . The assessment considers the changes in the GHG emissions from the operation of those facilities with the implementation of the Proposed Scheme.
		The ES should clearly specify the methodology used for the greenhouse gas assessment	



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		including the scope of emissions and how these relate to the statement in paragraph 1.1.5, which states that at least some of the overall Riverside facilities will be carbon negative as a result of the Proposed Development. The ES should demonstrate that the project meets its overall purpose taking into account emissions across the lifecycle."	As described in Chapter 1: Introduction (Volume 1), the Hydrogen Project is no longer included in the scope of the Proposed Scheme.



Table 11: Scoping Opinion Response – Population, Health and Land Use

0 11 12			
Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning In	spectorate		
3.10.1	Impacts on terrestrial businesses – operation	"The Scoping Report explains that access may be temporarily disrupted during construction but does not identify any operational impacts. Considering the nature and characteristics of the operational Proposed Scheme, the Inspectorate agrees that impacts on terrestrial businesses during operation are not likely to result in significant effects and that this matter can be scoped out."	No response required.
3.10.2	Impacts on community land and assets – construction and operation	"Having regard to the nature and characteristics of the Proposed Scheme and the distance from community land and assets (as set out in paragraph 13.3.11 of the Scoping Report), the Inspectorate agrees that impacts on community land and assets during construction and operation are not likely to result in significant effects. This matter can be scoped out."	No response required.
3.10.3	Impacts on private property and housing – construction and operation	"Due to the nature of the Proposed Scheme, its location within an existing industrial area and the temporary duration of construction works, the Inspectorate does not consider that significant	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		effects are likely. Impacts on private property and housing during construction and operation can be scoped out of the ES."	
3.10.4	Standalone Human Health ES Chapter	"The Scoping Report proposes that impacts on human health will be considered within the ES Technical Chapters on Air Quality, Noise and Vibration, Townscape and Visual, Socio-Economics and Landside Transport. It is proposed that the ES would include an appendix to cross-reference to where impacts on human health are considered. The Inspectorate is content that a standalone Human Health ES Chapter is not required. To ensure that relevant assessments can be easily located, the Inspectorate recommends that the EIA Methodology ES chapter (rather than an ES appendix) provides clear cross-referencing to where the relevant impacts on human health are considered." The assessment should be Informed by relevant guidance such as the Institute of Environmental Management and Assessment (IEMA) 2022 guidance 'Determining Significance for Human Health In Environmental Impact Assessment'.	Section 14.8 of Chapter 14: Population, Health and Land Use (Volume 1) provides clear cross-referencing to where human health has been considered within other environmental topics. As set out in Section 14.8 of Chapter 14: Population, Health and Land Use (Volume 1), the outcomes of the other environmental assessments have been considered and the overall impact on human health determined in this chapter. The IEMA 2022 Guidance 'Determining Significance for Human Health In Environmental Impact Assessment' ⁶ , has informed this exercise (and is included in Table 14-1 of Chapter 14: Population, Health and Land Use (Volume 1)). Mental health and wellbeing has been included within Chapter 14: Population, Health and Land Use (Volume 1). The methodology for the assessment is set out in Section 14.4 and the assessment findings are set out in Section 14.8 of Chapter 14: Population, Health and Land



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		The Applicant's attention is drawn to comments from the UK Health Security Agency (UKHSA) (Appendix 2 of this Opinion) regarding potential impacts on mental health through risk perception/understanding of risk posed by the manufacture, storage and transportation of hydrogen and other hazardous substances. The Applicant should make effort to discuss and agree the requirement for and approach to any assessment of this matter with the UKHSA."	Use (Volume 1). Whilst the Hydrogen Project and the battery energy storage system are no longer a part of the ongoing Proposed Scheme design as set out in Chapter 2: Site and Proposed Scheme Description (Volume 1), the UKHSA has been consulted regarding the approach to the human health, mental health and wellbeing assessment as part of Chapter 14: Population, Health and Land Use (Volume 1).
3.10.5	Scope of assessment – tourism	"The Scoping Report identifies recreational facilities that may be impacted by the Proposed Scheme (some of which appear to be tourism facilities) but does not specifically explain if/ how impacts on tourism are to be considered as part of the socio-economic assessment. Impacts on tourist businesses should be assessed in the ES where significant effects are likely."	Section 14.4 of Chapter 14: Population, Health and Land Use (Volume 1) sets out the methodology used to assess the impacts of the Proposed Scheme on terrestrial and marine businesses as well as recreational users of the River Thames. Section 14.8 of Chapter 14: Population, Health and Land Use (Volume 1) provides the findings of the assessments in relation to these receptors. Additionally, the chapter sets out where these receptors are also considered to be tourist receptors and the impacts to them are set out.
			Chapter 15: Socio-economics (Volume 1) sets out the socio-economics assessment, which considers employment generation and Gross



Section ID Applicant's Proposed Scoping Opinion Comments Response Matters to Scope Out Value Added (GVA) as a result of the Proposed Scheme. A separate tourism economy assessment has not been included in **Chapter** 15: Socio-economics (Volume 1) as those businesses affected are not tourism related businesses due to the industrial location of the Proposed Scheme. 3.10.6 Impacts on users of "The Scoping Report notes that the Proposed As set out in **Section 14.4** and **Section 14.8** of pRoW, long distance Scheme is likely to impact on users of pRoW, **Chapter 14: Population, Health and Land Use** walking routes and long distance walking routes and/or NCN routes, (Volume 1), the potential impacts to users National Cycle Network including from a likely permanent diversion of a (walkers and cyclists) of PRoW, long distance (NCN) routes pRoW. walking routes and NCN routes (including severance, delay, amenity and fear/intimidation) (severance, delay, The ES should assess impacts to users of amenity and fear/ have been considered during construction and pRoW. long distance walking routes and NCN operation of the Proposed Scheme. As detailed intimidation) routes (including severance, delay, amenity and in Section 14.8 of Chapter 14: Population, fear/intimidation) during construction and Health and Land Use (Volume 1), the potential operation which are likely to result in significant interactions between assessments (for example effects. Any such assessment should be traffic and transport, noise, dust, recreation and supported by pedestrian/ user counts where visual impact) on such users has been necessary and possible (if adequate usage data considered within Chapter 21: Cumulative cannot be obtained from the LPA), with effort Effects (Volume 1). made to agree the locations for such counts with Consultation has been undertaken with LBB to relevant consultation bodies. Where relevant, the ascertain further information on the current ES should assess potential interactions between aspect assessments (for example traffic and conditions and user counts for the affected



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		transport, noise, dust, recreation and visual impact). The locations of any diversions or closures should be illustrated on suitable figures in the ES."	PRoW, long distance walking routes and NCN routes. A usage and condition survey has been undertaken to inform this ES, the results of which are presented in Appendix 14-1: Public Rights of Way and Open Land Surveys Report (Volume 3). Further details on the consultation with LBB are provided in Table 14-3 of Chapter 14: Population, Health and Land Use (Volume 1). The diversion(s) have been assessed within this ES.
London Bo	rough of Bexley		
N/A	N/A	Policies SP9 and DP15 of the Bexley Local Plan (2023) set out the local policy approach to protect Social and community services and facilities. Examples of types of social and community services and facilities identified in Table 10 of the Local Plan, include accessible open space and accessible nature areas. The Crossness Nature Reserve and accessible parts of the Sites of Importance for Nature Conservation provide an important community service and facility.	Policies SP9 and DP15 have been included in Table 14-1 of Chapter 14: Population, Health and Land Use (Volume 1).
N/A	N/A	The Crossness Nature Reserve and SINC are designated not only for their significance for	The baseline presented within Chapter 14: Population, Health and Land Use (Volume 1)



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		wildlife, but also for their value to people. Access to nature has significant health and wellbeing benefits by allowing people to connect with nature.	makes it clear that the Crossness LNR and SINC are designated not only for their significance for wildlife, but also for their value to people, recognising the health and wellbeing benefits brought through connection with nature.
			Chapter 14: Population, Health and Land Use (Volume 1) assesses the impacts of the Proposed Scheme on users of the Crossness LNR and SINC.
		Paragraph 13.3.24 of the Scoping Opinion provides a limited summary of these assets. It is noted that table 13-2 scopes in Terrestrial Recreation, referring to the Crossness Nature Reserve under justification. However, the importance of these designations is not clearly reflected in the Significance Criteria.	Erith Marshes SINC has been incorporated within the baseline and assessed within Chapter 14: Population, Health and Land Use (Volume 1).
			In line with the sensitivity criteria, both receptors have been given a medium sensitivity score, reflecting their classification as recreational facilities that are of regional status and/or medium visitor numbers.
			Chapter 14: Population, Health and Land Use (Volume 1) assesses the impacts of the Proposed Scheme on users of the Crossness LNR and SINC.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Port of Lon	don Authority		
N/A	N/A	Noted here that the design of the scheme will be such that the existing Thames Path route will remain open where practicable and accessible to users during the construction stage, with suitable diversions identified. It must be made clear as the project progresses on how the Thames Path will be affected during the construction phase of the development. Further detail will also be required as part of the operational stage with regard to the access over the Thames Path for pedestrians / vehicles to the proposed jetty, as well as any pipelines which will be situated over the path, and any associated safety & security matters that will need to be considered as part of the design.	Temporary and permanent PRoW closures and diversions will be required as a result of the Proposed Scheme. FP2 is located within the Site and would need to be permanently diverted as a result of the construction activities and for the operational requirements of the Carbon Capture Facility. The effect of these diversions and closures is assessed in Chapter 14: Population, Health and Land Uses (Volume 1). The start and end points of permanent PRoW diversions are shown on the Access and Rights of Way Plans (Document Reference 2.4). The effects on the England Coast Path (FP3/NCN1) have been assessed in Section 14.8 of Chapter 14: Population, Health and Land Use (Volume 1).
N/A	N/A	During the operational phase of the development there is reference in paragraph 13.6.2 of potential additional barge moorings which should be positioned on the southern side of the River Thames and west of the proposed jetty in order to lessen the impact of regular vessel movements by the applicant's vessels and	The assessment of potential effects on and as a result of these moorings has been included within Chapter 19: Marine Navigation (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		operation vessels on passing vessels. The potential impacts of these additional moorings will need to be considered in the associated NRA.	
UK Health S	Security Agency (UKHSA	A)	
N/A	N/A	We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the Environmental Statement (ES). We believe the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health.	The potential effects on human health, and those health determinants likely to be affected by the Proposed Scheme have been assessed in Chapter 14: Population, Health and Land Use (Volume 1). Specific human health effects have been assessed and detailed within other chapters such as Chapter 5: Air Quality (Volume 1) and the outcomes of these individual assessments have been considered to determine the overall impact on human health.
Compliance with Policy Statements	Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.	Proposed mitigation measures for human health are outlines in Section 14.9 and the residual effects are outlined in Section 14.11 of Chapter 14: Population, Health and Land Use (Volume 1).	
			Table 14-1 of Chapter 14: Population, Health and Land Use (Volume 1) outlines relevant



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			guidance and standards used to inform this assessment, which includes the National Policy Statement EN-1.
N/A	N/A	In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. UKHSA and OHID's predecessor organisation Public Health England produced an advice document Advice on the content of Environmental Statements accompanying an application under the NSIP Regime', setting out aspects to be addressed within the Environmental Statement. This advice document and its recommendations are still valid and should be considered when preparing an ES. Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.	Further engagement with UKHSA has been undertaken to agree the level of detail to be included within the ES. UKHSA agreed to the scope and methodology for the human health, mental health and wellbeing assessment. Further details on this consultation are provided in Table 14-3 of Chapter 14: Population, Health and Land Use (Volume 1). Public Health England's advice note has been reviewed and included as applicable guidance within Table 14-1 of Chapter 14: Population, Health and Land Use (Volume 1).



Table 12: Scoping Opinion Response – Socio-economics

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	pectorate		
3.11.1	Increased demand for accommodation and community facilities due to an influx of construction workers	"The Scoping Report states that given the level of facilities in the vicinity of the application site, good transport linkages and workforce to be utilised, it is not anticipated that there would be a significant increase in demand for accommodation or social infrastructure such as community and recreational resources from construction workers relocating close to the Proposed Development. Whilst details of the estimated construction workforce have not been provided, in view of the location and nature of the Proposed Development and the anticipated duration of the construction works, the Inspectorate considers that significant effects are unlikely to occur. Increased demand for accommodation and community facilities due to an influx of construction workers can be	No response required.
		scoped out of the ES."	
3.11.2	Crime and safety – construction and operation	"The Scoping Report explains that site security arrangements during construction will be in line with relevant regulatory requirements and with appropriate levels of security, CCTV and fencing in place during both construction and operation. It is also stated that consultation is likely to be	A description of the security arrangements is included in the Outline CoCP (Document Reference 7.4).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		undertaken with the Metropolitan Police Liaison Officer and Port of London Authority as part of the design of the Proposed Development.	The PLA will get advance notice of works through the operation of their Protective Provisions.
		On this basis, and subject to the ES explaining what mechanism would be in place to ensure that advance notice of construction activities in the River Thames is provided to the Port of London Authority, the Inspectorate is content that significant effects are not likely. Crime and safety during construction and operation can be scoped out of the ES."	
3.10.5	Scope of assessment - tourism	"The Scoping Report identifies recreational facilities that may be impacted by the Proposed Development (some of which appear to be tourism facilities) but does not specifically explain if/ how impacts on tourism are to be considered as part of the socio-economic assessment. Impacts on tourist businesses should be assessed in the ES where significant effects are likely".	Chapter 14: Population, Health and Land Use (Volume 1) sets out the effects of the Proposed Scheme on terrestrial and marine businesses, users of Public Rights of Way, recreational users of the River Thames and terrestrial recreation. The chapter also identifies where these receptors may serve tourists, and any associated tourism impacts. The socio-economics assessment does not include a separate tourism economy assessment as those businesses affected by the Proposed Scheme are not tourism related businesses due to the industrial location of the



Table 13: Scoping Opinion Response – Materials and Waste

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	spectorate		
3.12.1	Impacts associated with extraction of raw resources – construction and operation	"The Inspectorate is in agreement that the nature of the Proposed Development means that it will not require the consumption of large quantities of raw materials during operation, and therefore this matter can be scoped out of the ES."	No response required.
3.12.2	Consumption of material resources - operation	"Based on the nature of the Proposed Development, the Inspectorate considers that the consumption of material resources has the potential to be significant, in particular the consumption of chemicals in relation to the removal of carbon from emissions (amine based solvents). No information is provided in relation to the anticipated volume of this material to be used, disposed and recycled, and the source of this material, for example UK manufacture, or imported from other countries. In addition, Chapter 12 of the Scoping Report (Greenhouse Gases) scopes in emissions from operational activities including maintenance (category B2-B5). The Inspectorate is therefore not in agreement that the consumption of material resources during operation can be scoped out of the assessment.	Chapter 2: Site and Proposed Scheme Description (Volume 1) describes the chemicals used in the Carbon Capture Facility and sets out that small volumes of amine- loaded sludge will be produced as a by-product of the carbon capture process. This will be temporarily stored onsite prior to being transported offsite to an appropriate waste treatment facility as hazardous waste. The volume of amine wastewater effluent will also be comparatively small; therefore, the waste will be disposed of by specialised contractors, taking the waste offsite for disposal via road tanker. Chapter 16: Materials and Waste (Volume 1), includes information where available, assesses any potential significant effects from the consumption of amine-based solvents



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		It is noted that the consumption of water as a raw material is scoped into the Water Environment and Flood Risk ES Chapter and as such, is not required to be assessed within the Materials and Waste ES chapter."	during the operational phase of the Proposed Scheme. Chapter 11: Water Environment and Flood Risk (Volume 1) assesses any potential significant effects on the consumption of water as a raw material. Chapter 13: Greenhouse Gases (Volume 1) assesses any potential significant effects from emissions from operational activities.
3.12.3	Operational waste arisings beyond the first year of operation	"As the specific quantities and offsite reuse or disposal routes for operational wastes including Incinerator Bottom Ash, filter cake and amine wastes, is not known at present, the Inspectorate considers that there is insufficient evidence provided in order to justify scoping out operational waste arisings (especially as Chapter 19 of the Scoping Report notes that new hazardous wastes and materials will be stored on site). It is also not clear why the Scoping Report seeks to differentiate between the first year of operation and future operation beyond this, as no evidence is provided to determine why there would be separate waste streams or volumes. Therefore, an assessment of the effects on the production and reuse/ disposal of operational	A description of potential impacts arising from the reuse, recovery or disposal of operational waste is provided in this ES where significant effects are likely to occur. By way of clarification though, the Proposed Scheme would not result in the generation of any Incinerator Bottom Ash (IBA). The key waste 'products' will be filter cake and amine solvent wastes. It is assumed that due to the nature of the Proposed Scheme, the quantities of operational waste to be generated will be small. Notwithstanding this, the likely types and estimated quantities of waste to be generated by the Proposed Scheme has been assessed. Furthermore, an assessment into the



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		waste is required to be scoped into the assessment for all operational years. The assessment should identify any implications for other relevant aspect chapters."	treatment, reuse or disposal options for operational waste has been estimated for the operational phase of the development, including a sensitivity analysis upon local, regional and/or national treatment facilities, using the methodology described in Section 16.4 of Chapter 16: Materials and Waste (Volume 1). Where relevant, the implications for other assessments is assessed in the relevant technical chapters of inform this ES, which includes Chapter 13: Greenhouse Gases (Volume 1) and Chapter 18: Landside Transport (Volume 1).
3.12.4	Transportation of material resources and waste – construction and operation	"Based on the Scoping Report stating that the transportation of material resources and waste is to be assessed within the ES Chapters on Air Quality, Noise and Vibration, Greenhouse Gases and Landside Transport, the Inspectorate is in agreement that an assessment of transportation of material resources and waste can be scoped out of the Materials and Waste ES chapter. The Materials and Waste ES chapter should provide clear cross-referencing to where the relevant assessments are presented."	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.12.5	Contaminated arisings from construction and operation	"Based on the Scoping Report stating that this matter is to be assessed within the Ground Conditions and Soils ES Chapter, the Inspectorate is in agreement that contaminated arisings can be scoped out of the Materials and Waste ES chapter."	 Chapter 16: Materials and Waste (Volume 1) has made a number of assumptions around contaminated waste, notably: a contingency of 20% of the total dredged arisings has been allocated as potentially contaminated. This would be disposed to landfill; a contaminated arisings would be sent to landfill if it was not possible to treat them for reuse on the Proposed Scheme; and hazardous waste has not (to date) been identified in the data provided, however, it is best practice that any such waste would be disposed of by being sent to a licensed hazardous landfill.
3.12.6	Change in capacity	"Table 15-7 of the Scoping Report omits a calculation of the volumetric change in capacity for hazardous merchant and restricted wastes, as both are listed as 0 (however a % is given). The presentation of data should be consistent within tables of the ES."	The data has been amended in Table 16-11 of Chapter 16: Materials and Waste (Volume 1) .
3.12.7	Reuse of dredged material	"Table 15-9 of the Scoping Report notes that a mitigation or design measure would include the use of a Materials Management Plan which is typically	Material resource efficiency and waste minimisation measures, including the potential reuse of dredge material, is included in the



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		refers to the potential reuse of dredged material from the River Thames on-site and if this option is pursued, the ES should identify any permissions or supporting assessments required to allow this (for example, CEFAS testing suites)."	Outline CoCP (Document Reference 7.4). These measures will lead to the development of the (post-consent) Materials Management Plan (MMP).
			Cross reference has been made to Chapter 17: Ground Conditions and Soils (Volume 1), where the Outline MMP and supporting assessments, where appropriate, has been discussed further.
			No onsite use of dredged materials is assumed. Any offsite disposal of material is assessed in the relevant technical chapters of inform this ES, including Chapter 7: Marine Biodiversity (Volume 1) and Chapter 13: Greenhouse Gases (Volume 1).
3.12.8	Site Waste Management Plan	"The Site Waste Management Plan should detail any opportunities to either reuse waste material onsite or reduce off site disposal by sending for processing (incineration, anaerobic digestion etc) in the existing or under construction Riverside 1 and 2 facilities.	An Outline SWMP (Document Reference 7.10) has been produced. This document sets out the key procedures for managing waste during the construction of the Proposed Scheme, specifically detailing opportunities to reuse waste material onsite or reduce offsite
		The ES should also specify where indicative waste streams and volumes are required to be processed off site (landfill, incineration or reuse etc) if they are not permitted to be processed at the facility, and	disposal. Within Chapter 16: Materials and Waste (Volume 1), the anticipated quantities and



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		why the wastes are required to be sent to a specific disposal route (for example, paragraph 15.7.2 indicates that filter cake will be sent to a hazardous landfill, whereas amine loaded wastes and hydrogen desiccant beds are to be incinerated off site)."	disposal route (landfill, reuse, recycling) of waste streams are identified. As described in Chapter 1: Introduction (Volume 1), the Hydrogen Project is no longer included in the scope of the Proposed Scheme.
Port of Lone	don Authority		
N/A	Materials and Waste	The ES will need to demonstrate how the use of the river for the transportation of construction and waste materials will be maximised in line with planning policy.	The proposed management of the use of the River Thames for the transportation of construction and waste materials is presented in Chapter 2: Site and Proposed Scheme Description (Volume 1).
N/A	Materials and Waste	Under the policy legislation and guidance section, the Marine Management Organisation (MMO) South East Marine Plan (2021) is referenced, including policy SE-DD03 on the disposal of dredge material. Whilst this is welcomed this appears to be the only chapter where the South East Marine Plan is referenced – this requires review by the applicant as there are other policies (such as SE-BIO-1 on Biodiversity and SE-PS-1 on Ports and Shipping) within the Marine Plan which will also be relevant for the Proposed Scheme and must be considered.	The South East Inshore Marine Plan ³² has been included in the relevant chapters of the of this ES.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Environmer	nt Agency		
N/A	Environmental Permitting Regulations	"The operation of the proposed facility may require a new environmental permit or a variation to an existing permit (EfW/AD) and added as a Directly Associated Activity (DAA) We would encourage early engagement with National Permitting Service so we can advise on what is needed for permit and licence applications. A good quality application is the best way of avoiding delay during determination. The developer can make the case for applications to be prioritised so that they are not on the permit queue. Technical assessment cannot be expedited however so quality of application is key. Note that we now assess the intake and discharge of biota as part of large scale abstractions from estuarine/sea water in terms of potential polluting effect. The abstraction licence would also cover possible impacts on species population".	The Proposed Scheme will not be processing or handling waste therefore a variation to the existing permit for waste is not applicable. The requirements for monitoring pollutants resulting from the incineration of waste are set out in the Environmental Permits for Riverside 1 and Riverside 2 (at the time of writing, construction works for Riverside 2 are being undertaken). The monitoring of pollutants introduced by the Carbon Capture Facility will be set within the Environmental Permit for the Proposed Scheme which will be granted by the Environment Agency. Further detail is provided in Chapter 5: Air Quality (Volume 1). Chapter 11: Water Environment and Flood Risk (Volume 1) considers potential effects on water quality.
N/A	Waste effluents.	"We note the two proposed projects (carbon capture and hydrogen production) will produce waste effluent. It is assumed these will either be treated on-site and disposed of to foul sewer (under consent) or taken for treatment at an appropriately licensed facility. Any discharge to the	As described in Chapter 1: Introduction (Volume 1), the Hydrogen Project is no longer included in the scope of the Proposed Scheme. Operational Waste (including waste effluent (amine sludge)) has now been scoped



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		environment would be subject to environmental permitting regulations. It may be beneficial to include waste effluents in Chapter 14 (Materials and Waste)".	in for assessment in Chapter 16 Materials and Waste (Volume 1).
London Boi	ough of Bexley		
N/A	General.	"The Council is generally satisfied at the details submitted in this chapter and that the applicant has adequately addressed this issue at this stage".	As LBB was satisfied with the assessment methodology set out in Chapter 14: Socio-economics of the EIA Scoping Report ¹² , the Council has not been contacted further.



Table 14: Scoping Opinion Response – Ground Conditions and Soils

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	spectorate		
3.13.1	Effects of sand and gravel extraction and other natural or manmade ground stability impacts	"The Scoping Report notes that part of the site of the Proposed Development was used for sand and gravel extraction. With the exception of sinkholes referenced as a natural hazard in Scoping Report Chapter 19, no reference is made to ground stability or other ground related hazards which may be present. The ES should provide a description of how ground stability hazards are to be assessed, and in the event that this is undertaken outside of the ES (for example a geotechnical risk register or as part of detailed design), provide a justification for this."	Information on potential ground stability hazards assessed by the BGS and presented in the Groundsure Report is summarised in Table 17-15 of Chapter 17: Ground Conditions and Soils (Volume 1). The Groundsure Report shows the distribution of ground stability hazards across the Site and is presented within Appendix 17-1: Preliminary Risk Assessment (Volume 3). As shown in Figure 17-3: Connections between the Ground Conditions and Soils Mitigation Tasks and Design (Volume 1), geotechnical risk assessments will be completed as part of the detailed design of the Proposed Scheme. Geotechnical risk assessments will include a Geotechnical Risk Register to assess ground stability hazards.
3.13.2	Third party receptors	"As it is acknowledged that the risk to third party receptors is required to be scoped in, the ES should also consider the risk to third party non-human receptors such as building fabric and utilities."	The risk to non-human receptors of below ground services and building structures within the Site has been assessed in Chapter 17: Ground Conditions and Soils (Volume 1) .



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.13.3	Agricultural land and soils	"Based on the urban location of the Proposed Development, the Inspectorate in in agreement that agricultural land uses and land classification can be scoped out of the assessment for the construction and operational phases."	No response required.
3.13.4	Human heath, controlled waters, building fabric and services during the operation phase	"Based on the Scoping Report stating that any contamination would be remediated prior to the operational phase, and the mitigation measures proposed, the Inspectorate is in agreement that human heath, controlled waters, building fabric and services can be scoped out for the operational phase only in relation to ground conditions and soils. Comments related to the risk to surface water and groundwater from the ongoing operation of the Proposed Development (storage and use of liquids etc) are provided in Table 3-7 of this Scoping Opinion."	Risk to surface water and groundwater is considered further in Chapter 11: Water Environment and Flood Risk (Volume 1).
3.13.5	Methodology	"The Inspectorate notes that the qualitative risk assessment criteria and probability classification in Tables 16-4 to 16-6 are not directly linked to the significance criteria in Tables 16-7 and 16-8. The ES should detail how the qualitative risk assessment is to be used to determine the significance of effects."	Clarification of the terminology is provided in Section 17.4 of Chapter 17: Ground Conditions and Soils (Volume 1) , linking the risk assessment and probability classification to the significance criteria and subsequently to determine the significance of effects.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.13.6	Ecological and other non-human receptors	"Paragraph 16.8.3 of the Scoping Report states that ecological receptors are to be considered, however the remainder of this chapter does not mention this receptor. For clarity, the Inspectorate considers that an assessment of ecological receptors is required to be scoped into the ES."	Risks posed to ecological receptors by the release of potential contamination from sediments are considered in Chapter 7: Terrestrial Biodiversity (Volume 1) and Chapter 8: Marine Biodiversity (Volume 1).
3.13.7	Groundsure Report	"The Scoping Report includes reference to a Groundsure report purchased in January 2023. The ES should confirm if this is to be updated, as the datasets provided as part of this report are regularly updated."	As Riverside 2 is not due to be completed prior to the submission of the DCO application, it is not considered necessary to update the Groundsure Report included in Appendix 17-1: Groundsure Report (Volume 3). However, this will be kept under review in case of any material amendments to the Site that merit an update although this is not expected.
3.13.8	Groundwater Dependent Terrestrial Ecosystems (GWDTEs)	"The Scoping Report is not consistent in its description of the sensitivity of GWTDE. Paragraph 16.5.1 states that they are considered to be a sensitive receptor, whereas 16.3.9 states that there are no GWTDE close enough to the site to be affected. The ES should be consistent in the description of receptors identified within each chapter."	The GWTDE has been removed as a sensitive receptor as there is not considered to be a plausible pathway present. Table 3.7 of the Planning Inspectorate's Scoping Opinion, specifically 3.7.8, states that the Planning Inspectorate agrees that an assessment of GWTDE can be scoped out.
3.13.9	Mitigation plans	"The ES should clearly state how the mitigation plans and specifications interact with each other, as it is considered likely that some aspects of	Any interaction between mitigation plans and specifications are included within this preliminary assessment and has been



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		remediation or material reuse will be common to several of the plans."	assessed within Chapter 17: Ground Conditions and Soils (Volume 1).
London Bor	ough of Bexley		
N/A	N/A	"The Council is generally satisfied at the details submitted in this chapter and that the applicant has adequately addressed this issue at this stage."	No response required.
Environmen	t Agency		
6	N/A	"the Environment Agency does not provide detailed site-specific advice or comments with regard to land contamination issues apart from identifying the site sensitivity [that]This site partly overlies a Secondary A	No response required.
6	N/A	 "The evaluation of any risks to human health arising from the site should be discussed with the Environmental Health Department. We recommend that the applicant: Refers to the Environment Agency Land Contamination: Risk Management guidance; Uses BS 10175:2011+A2:2017, Investigation of potentially contaminated sites – Code of Practice as a guide to undertaking the desk study and site investigation scheme; 	Assessments have been undertaken in accordance with industry legislation, guidance and best practice including those that are recommended by the Environment Agency. Risks to human health arising from the Proposed Scheme, identified through Chapter 17: Ground Conditions and Soils (Volume 1) have been discussed with LBB Environmental Health Department and all other relevant regulators.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		 Uses MCERTS accredited methods for testing contaminated soils at the site; and Consult our website at www.environmentagency.gov.uk for further information about any permissions that may be required." 	
6	N/A	"The scope of the proposed EIA is acceptable in principle in that it outlines key issues of concern including water quality (Chapter 10) and land contamination (Chapter 16). We welcome the proposed inclusion of a piling risk assessment in Chapter 10, and that sediment plume modelling will be undertaken."	A piling risk assessment will be completed if considered necessary as the detailed design of the Proposed Scheme is progressed – this is subject to DCO requirement. Refer to Chapter 11: Water Environment and Flood Risk (Volume 1) for details of the sediment modelling that has been undertaken.
6	N/A	"We note the two proposed projects (carbon capture and hydrogen production) will produce waste effluent. It is assumed these will either be treated on-site and disposed of to foul sewer (under consent) or taken for treatment at an appropriately licensed facility. Any discharge to the environment would be subject to environmental permitting regulations. It may be beneficial to include waste effluents in Chapter 14 (Materials and Waste)."	Please refer to Chapter 16: Materials and Waste (Volume 1) for information concerning the management of waste during the Proposed Scheme. As described in Chapter 1: Introduction (Volume 1), hydrogen production is no longer included in the scope of the Proposed Scheme.



Table 15: Scoping Opinion Response – Landside Transport

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
The Plannin	ng Inspectorate		
3.14.1	Landside hazardous loads – operation	"The Inspectorate considers the Scoping Report does not provide sufficient certainty that the Proposed Development will not generate any landside hazardous loads during operation. Scoping Report Chapter 19 (Major Accidents and Disasters) indicates that there is a risk of land and water pollution from the storage and use of hazardous materials on site during operation. There is also no certainty at present that potentially hazardous materials such as liquified gases (CO2 and hydrogen) and hazardous wastes would be removed from the site by barge only. Chapter 2 of the Scoping Report lists "hydrogen tube trailers" as a potential export option, and no information is provided as to the transport methodology of deliveries to site for the chemicals to be used during operation. The Inspectorate is therefore not in a position to agree that landside hazardous loads during operation can be scoped out".	As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the Proposed Scheme. Consideration of landside Hazardous Loads has been presented within Chapter 18: Landside Transport (Volume 1).
3.14.2	Consultation	"The Applicant should make effort to agree the scope and methodology for the assessment with relevant consultation bodies including the	Consultation has been undertaken with the relevant authorities (see Table 18-2 of Chapter 18: Landside Transport (Volume 1)) and will



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		relevant local highway authority, relevant local planning authorities and National Highways".	be continued throughout ongoing design development.
Environmen	t Agency		
N/A	N/A	 "7: Landside Transport Construction Traffic Management Plan needs to consider loading to the flood defence e.g., by plant or HGV. During operation any landside transport within 16 metres of the flood defence should consider possible adverse effects to the flood defence e.g., vibration and loading from HGV." 	A Framework CTMP (Document Reference 7.7) has been developed that outlines matters relating to construction vehicles and plant, vehicle access routes and general arrangements.
Port of Lond	lon Authority		
N/A	N/A	"Paragraph 17.6.1 states that a Construction Traffic Management Plan (CTMP) will be provided as part of the Proposed Scheme, which will set out measures to mitigate construction effects. As part of the CTMP further information will be required on the proposed use of the River Thames during the construction phase of the scheme. With regard to paragraph 17.8.12, the operational phase assessment where relevant should also highlight the hydrogen export/use options	The Framework CTMP (Document Reference 7.7) developed outlines matters relating to construction vehicles and plant, vehicle access routes and general arrangements. Matters relating to construction activities in the River Thames are included within Appendix 19-1: Preliminary Navigational Risk Assessment (Volume 3). As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the Proposed Scheme.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		particularly the option to utilise Hydrogen tube trailers – requiring a road tanker loading facility on-site. This section of the ES will also need to refer to the potential for vehicular access to the proposed jetty, which is referenced in paragraph 2.2.56 of the Scoping Report."	
Metropolitai	Police Service and the	Mayor's Office for Policing and Crime	
N/A	N/A	"Crabtree Manorway North is not included in the traffic modelling/assessment study area (it is not listed in paragraph 17.4.2). There are existing issues with traffic congestion in the locality, and therefore we would like this road to be included."	This road will not be providing access to the Site (noting the defined routes in the Framework CTMP (Document Reference 7.7)) and therefore has not been included in the scope of the landside transport assessment presented in Chapter 18: Landside Transport (Volume 1)
Dartford Bo	rough Council		
N/A	N/A	"It is noted that this section (table 17-2 p460) refers to DBC's policies but does not include reference to the new emerging Local Plan. Given that this has recently completed its examination stage and therefore is well advanced in its progress, the Council consider that this should be referenced and considered."	The relevant documents have been considered and referenced within Chapter 18: Landside Transport (Volume 1) .
N/A	N/A	"DBC also note that with regard to the assessment of Land Based Transport, that National Highway are being consulted but Kent	Consultation has been undertaken with the relevant highways authorities, including KCC and DBC (as detailed in Table 18-2 of Chapter



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		County Council (KCC) Highways have not been included. Given that KCC are the local highway authority and are an adjoining upper tier authority and local roads will be impacted, they are an essential consultee on a proposal of this scale. This is despite the fact that as para 17.4.2, the A206 (within Kent) is included in the list of key link roads. The Council also note that Burnham Rd is listed as a key link road but would query this as this should not be considered as a link road given its partially residential nature and that it leads to/from Dartford Town Centre. At para 17.8.1, the report refers to the assessment methodology being agreed with LBB and the EA. The Council feel that assessments carried out should extend into Dartford and Kent and they consider that the methodology should also be agreed with DBC and KCC."	18: Landside Transport (Volume 1)) and will be continued throughout ongoing design development. The A2026 Burnham Road has been included within the Study Area for this assessment as a key A-Road link. It is not envisaged that this link will form part of any approved construction routing; however, it may form a key route to/from the Site for the local construction/ operation workforce.
London Bor	ough of Bexley		
N/A	N/A	"The proposed approach for obtaining baseline conditions is through a desktop review supplemented by a site visit to establish the existing pedestrian routes, cycle routes, bus	Consultation has been undertaken with the relevant highways authorities, including LBB regarding the approach to traffic surveys (as



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		services and local highway characteristics. In addition to this, to understand traffic volumes and queues on the highway network queue length surveys, Automatic Traffic Count (ATC), Manual Traffic Count (MCC) and potentially nonmotorised surveys will be undertaken. Before commencement, the applicant should provide the proposed methodology and details of the surveys to the Highway Authority for review and approval."	detailed in Table 18-3 of Chapter 18: Landside Transport (Volume 1)).
N/A	N/A	"The applicant has proposed three future baseline conditions that will be considered; a peak construction year, future year, and design year. The operation of Riverside 2 and committed developments are to be incorporated."	In developing Appendix 18-1: Transport Assessment (Volume 3) consultation with the relevant highways authorities has been undertaken for the assessment years and committed developments included within the traffic flows.
N/A	N/A	"The applicant has proposed the study area will include all transport and highway links from the Proposed Scheme to the surrounding local and strategic road network that would be subject to daily traffic flow changes. Key links are included within the study area, which is acceptable Further details of the proposed study area should be agreed with the Highway Authority."	The Study Area is consistent with the Study Area used for the Riverside 2 Transport Assessment. Consultation have been undertaken with the relevant highways authorities, (as detailed in Table 18-2 of Chapter 18: Landside Transport (Volume 1)).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
N/A	N/A	"The applicant should also be advised to assess the potential movements generated from workforce travel and any disruption to the highway and transport network resulting from a potential road or footway closure associated with construction works."	The construction phase assessment considers movements associated with the workforce. The Framework CTMP (Document Reference 7.7) has been developed that outlines measures relating to vehicle access routes and general traffic management arrangements and provides for a worker travel plan to be put in place for construction. No road closures are anticipated as a result of the Proposed Scheme.
N/A	N/A	"The applicant is also advised to consider vehicle volumes that could be generated when the main mode of transporting carbon via the river Thames is not possible due to meteorological effects, jetty outage or on-site capacity issues and the liquid carbon is transported by road."	In the event that the Proposed Jetty is out of order, or there is a problem with the export vessels/ provider, LCO ₂ will remain within or be added to the temporary onshore storage tanks described in Chapter 2: Site and Proposed Scheme Description (Volume 1) , up to the volume capacity for those tanks. It is not expected that LCO ₂ will be transported by road due to the limited availability and viability of suitable vehicles and so any other carbon emissions would not be captured once the storage is at capacity. Accounting for such eventualities would be considered by the Environment Agency in granting a permit for the Proposed Scheme in ensuring the overall minimum 95% capture rate is captured.



Table 16: Scoping Opinion Response – Marine Navigation

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning In:	spectorate		
3.15.1	N/A	"No matters have been proposed to be scoped out of the assessment."	No response required:
3.15.2	Legislation	"Paragraph 18.2.1 of the Scoping Report states that there is no legislation relevant to the assessment. However, Table 18-1 lists two pieces of legislation. The ES should be consistent in its approach to the relevant legislation and guidance and provide a summary of all legislation and guidance referred to".	Inconsistency acknowledged. The Pilotage Act 1987 and Merchant Shipping Act 1995 is included in Table 19-1 of Chapter 19: Marine Navigation (Volume 1) .
3.15.3	Baseline Information	"It is noted that there are discrepancies in baseline information presented within this chapter, specifically in relation to water/ riverbed depths and the number of vessel movements recorded for existing jetties. The ES should present the baseline information in a consistent manner with reference to all relevant available sources".	Regarding water and riverbed levels and the number of vessel movements recorded for existing jetties discrepancies have been addressed and corrected within Chapter 19: Marine Navigation (Volume 1) and Appendix 19-1 Preliminary Navigation Risk Assessment (Volume 1).
			References to relevant available sources are provided throughout Chapter 19: Marine Navigation (Volume 1) and Appendix 19-1 Preliminary Navigation Risk Assessment (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.15.4	Vessel Movements	"Paragraph 18.3.14 of the Scoping Report states that analysis is presented for a single month (September 2021). The ES should provide a justification for the use of a single month of surveys undertaken nearly two years ago, setting out any limitations to the data and confirming whether this data has been supplemented in the ES with additional or more recent surveys. The surveys are also noted to not include movements made between Middleton Jetty and Cory's barge moorings, or the majority of recreational craft as they are not required to carry Automatic Identification Systems (as detailed in paragraph 18.3.12). The ES should provide a justification for the omissions of these vessel movements, and in the event that the ES is to include an alternative way of counting these, a methodology for the surveys. This is of relevance to the scope of the assessment as both vessels associated with the operation of the Cory owned facilities and recreational vessels are scoped into the assessment, and as such the Inspectorate considers that there should be baseline information available in relation to these. Table 5-2 of the Scoping Report states that "Any vessels refuelling from the hydrogen project will	As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the Proposed Scheme. Survey month data has been updated to September 2022. This data was not available at the time of writing for the Scoping Report ¹² . Seasonal variations, such as those relating to tourism (e.g. sightseeing vessels), in monthly vessel data are not considered to be significant due to the nature of the cargo being transported within this area of the Thames. Therefore, one month is considered an appropriate timescale for the baseline information presented in Chapter 19: Marine Navigation (Volume 1). Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3) has been developed following widespread consultations to ascertain how non-Automatic Identification System (AIS) vessels and the Applicant's barges use the River Thames, including accounting for journeys between Middleton Jetty and the Applicant's barge moorings. This is explained further in Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		be existing vessels using the River Thames, and therefore ship refuelling will not result in any additional movements". The ES should provide further evidence to support the assertion that vessels collecting the hydrogen are existing vessels using the Thames. In addition, evidence is required to demonstrate that the additional vessel movements would not result in a likely significant effect on marine navigation, both in terms of the additional number of movements compared with existing and future baselines, and the routing of the additional vessel movements."	
Port of Lond	don Authority		
N/A	N/A	"It is important to note that currently there is no proposed new river structure shown on any of the maps included in the scoping report. The existing disused Belvedere Power Station Jetty which will need to be fully decommissioned and dismantled as part of the project is located significantly further inland than where the proposed jetty will likely be situated. Whilst this is considered acceptable at this time due to the further work required on the exact location of the new jetty it must be highlighted that there will likely be a significant difference in the location of the existing Belvedere	Details of the existing Belvedere Power Station Jetty (disused) and the Proposed Jetty are noted in Chapter 2: Site and Proposed Scheme Description (Volume 1) and Chapter 3: Consideration of Alternatives (Volume 1). A decision has not yet been made about whether the Belvedere Power Station Jetty (disused) will be retained (with modifications) or demolished but the PLA will retain controls over how this is done pursuant to the Protective Provisions in the Draft DCO (Document Reference 3.1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		Power Station Jetty and the new jetty for the decarbonisation project."	
N/A	N/A	"With regard to the previous Navigational Risk Assessment (NRA) prepared as part of the Riverside 2 redevelopment, to highlight, the Riverside 2 scheme had no additional marine infrastructure associated with it and was based only on the proposed additional barge movements, whereas the marine infrastructure and movements associated with the decarbonisation project will be much more significant and should be recognised by the applicant."	Marine infrastructure and movements associated with Riverside, 1 Riverside 2 and the Proposed Scheme are described in this report, within Chapter 2: Site and Proposed Scheme Description (Volume 1), Chapter 19: Marine Navigation (Volume 1) and Appendix 19-1: Navigation Risk Assessment (Volume 3).
Page 6	N/A	"Paragraph 18.3.5 includes a description of various key navigational features within the study area. Ford's jetty is referenced here, stating that on average there are eight arrivals and departures a month from this Jetty. This is incorrect and is actually more substantially used, with 127 arrivals at this jetty over the last three months and this must be reflected in the ES. Furthermore, although it partly outside of the study area, Thunderer Jetty should also be highlighted, as this also has capacity for larger vessels, with several	Arrival and departure values have been updated between within Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3), and these values mirror the values detailed in this comment and are included in Chapter 19: Marine Navigation (Volume 1). Ford's Jetty and Thunderer Jetty have been included and detailed as a navigational feature, with detail on movements associated with them, provided in Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		visiting the jetty in a month that are 119-133m LOA."	
Page 6	N/A	"With regard to Bathymetry and Charted Depths, there is some conflicting information in the report. Paragraph 18.3.8 states that the riverbed is between -7mCD and -9mCD in proximity to the location of the Proposed Jetty and paragraph 18.3.9 states that charted depths alongside currently range between +4mCD and -4.5mCD, depending on the location of the proposed jetty. This is not clear as within the report there is no definition of where the proposed jetty will be, and therefore no detailed information on the level of dredging that may be required as part of the project, although there is a reference in paragraph 2.2.57 that a water depth of approx. 9m will be required for all-tide access. Related to this it is considered that publicly available PLA chart information should be used to present the existing depths in this area in a more straightforward way than currently shown."	In regard to Bathymetry and Charted Depths, text within Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3) has been updated to accurately and correctly detail bed levels within the area of the Proposed Jetty.
Page 6	N/A	"Paragraph 18.3.10 states that in general, Halfway Reach sees lower vessel traffic than much of the rest of the tidal area of the River Thames. To confirm, the PLA consider that this area is a busy reach, with active berths along both banks	The PLA was presented with vessel frequency traffic data across the River Thames by NASH Maritime during statutory consultation and agreed Halfway Reach was comparatively



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		operating daily, as well as transiting traffic for further upriver as shown in figure 18-2 (Bathymetric Survey). Future projected growth includes more cruise ship and other larger craft transiting upriver to Greenwich and further through this area. To confirm there is also limited available deep water in this reach (circa 183m wide) and around Jenningtree Point which creates pinch points at some states of tide."	quiet, relative to other areas of the River Thames.
Page 7	N/A	"With regard to the potential hydrogen bunkering facilities as part of the proposed jetty for marine vessels, depending on how this will be used will need to be addressed in detail in the associated NRA, including on the potential on whether this facility will be used for other operators separate to the applicant."	As described in Chapter 1: Introduction (Volume 1) the Hydrogen Project is no longer included in the scope of the Proposed Scheme.
Page 7	N/A	"Paragraph 18.6.2 refers to the PLA pilotage directions with regard to the proposed design vessel for the Proposed Scheme. Whilst this is welcome consideration must also be given to the Code of Practice for Ship Towage Operations on the Thames for tug requirements."	Code of Practice for Ship Towage Operations on the Thames has been included and applied in Appendix 19-1: Preliminary Navigation Risk Assessment (Volume 3).
Page 7	N/A	"Welcome that it is recognised in paragraph 18.6.2 that appropriate riparian life-saving equipment will be considered in line with PLA requirements. For	A Safer Riverside has been added as relevant guidance to the ES assessment, see Table 19-1 of Chapter 19: Marine Navigation (Volume



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		information, the provision of appropriate riparian life-saving equipment should be provided in line with the PLA's 'a safer riverside' guidance for development on and alongside the tidal Thames."	1). In addition, the applicant has committed, as embedded mitigation (see Section 19.7 of Chapter 19: Marine Navigation (Volume 1)) to incorporate riparian lifesaving equipment in line with statutory requirements and the PLA's Guidance 'A Safer Riverside' ³³ .
Page 7	N/A	"Finally, under the references section of Chapter 18, to confirm that document reference 18.19 (PLA - Navigational Risk Assessment – Guidance to Operators and Owners) is not for river structures such as the proposed jetty but rather for the owners/operators of vessels carrying out NRAs for their boats."	Noted.



Table 17: Scoping Opinion Response - Major Accidents and Disasters

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Planning Ins	spectorate		
3.16.1	 Low likelihood and low consequence events; Highly likely and low consequence events; and High likelihood and high consequence events. 	"The Inspectorate is content that low likelihood and low consequence events can be scoped out. The Scoping Report does not provide a description of the likelihood and consequence of each event in Table 19-4, or a detailed justification for the proposed scoping out of 'highly likely and low consequence' and 'high likelihood and high consequence' events. In the absence of this information, the Inspectorate is not in a position to agree to a complete scope out of 'highly likely and low consequence' and 'high likelihood and high consequence' events, but has commented below on the proposals to scope out specific risks/ hazards".	Table 19-4 of the EIA Scoping Report ¹² was a screening exercise to determine which MA&D types are relevant to the Proposed Scheme and which have now had further assessment in this ES. The likelihood and consequence of the MA&D types scoped in is assessed in the ES. Section 20.4 of Chapter 20: Major Accidents and Disasters (Volume 1) provides the justification for not undertaking an assessment of 'high likelihood and low consequence' and 'high likelihood and high consequence' events.
3.16.2	Risk of major accidents and disasters (MAD) resulting from the following natural hazards – construction and operation: • Pluvial flooding;	"The Inspectorate is in agreement that an assessment of these matters in relation to MAD can be scoped out for the construction phase. However, based on the identified vulnerability of the operational Proposed Development to climate hazards identified in Scoping Report Chapter 11 (Climate Resilience) and Chapter 19 (MAD), the Inspectorate is not in agreement that an	An assessment of the potential impacts associated with flooding, extreme temperature events, gales/ winds, storms and sea level rise/storm surges during operation is provided in Chapter 12: Climate Resilience (Volume 1).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	 Groundwater flooding; Storms and gales; Wave surges; and Extreme temperatures. 	assessment of these matters in relation to MAD can be scoped out for the operation phase".	
3.16.3	Risk of major accidents and disasters resulting from the following technological or manmade hazards – construction and operation: • Major Accident Hazard Pipelines (MAHPs).	"Table 19-4 of the Scoping Report states that there are no MAHPs within 1km of the Proposed Development. However, the Inspectorate notes the scoping consultation response from Northern Gas (see Appendix 2 of this Opinion), which indicates that MAPHs may be affected by the Proposed Development. The Inspectorate does not consider sufficient evidence has been provided to scope this matter out of the assessment. The ES MAD Chapter should assess risks to or from the Proposed Development from MAHPs where significant effects are likely".	The design of the Proposed Scheme has been informed by the location of gas pipelines managed and operated by National Gas, Cadent Gas and Scotia Gas Networks Plc. The MA&D assessment considers the potential risks associated with these gas pipelines and this is presented within this ES. The Applicant has contacted Northern Gas Networks to understand the location of the pipelines referred to their EIA Scoping Opinion ¹² response with a view to ensuring that these align with those already known to the Applicant. Northern Gas Networks has confirmed it does not cover the area of or around the Site. Contact has also been made with Scotia Gas Networks to confirm pipeline locations.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			Any pipelines which are identified within the Study Area are considered in Appendix 20-2: ES Risk Record (Volume 3) .
3.16.4	Risk of major accidents and disasters resulting from the following industrial/ urban accident hazards – construction and operation: • Fires.	"The Scoping Report explains that during construction, standard control measures would be implemented by the appointed contractor to manage the risk of fire. The Inspectorate is content that the risk of fire during construction is not likely to result in significant effects in terms of MAD and can be scoped out. However, the Inspectorate considers that the ES should assess the risk of fire/ explosion from the release of flammable gases (including CO2 and hydrogen) and from the battery energy storage systems (if this option is pursued) during operation, including any measures designed to minimise impacts on the environment in the event of such an occurrence. Any mitigation measures relevant to safety risks associated with fire/ explosion, should be described in the ES (with reference to the proposed emergency preparedness and response plan, where relevant) and their delivery secured through the dDCO. Effort should be made to agree any necessary measures with relevant consultation bodies".	As described in Chapter 1: Introduction (Volume 1), the Hydrogen Project and the battery energy storage system are no longer included in the scope of the Proposed Scheme. The potential consequences of a release of LCO ₂ (and consequential health concerns) have been considered in the Hazard Identification (HAZID) and process safety studies undertaken to inform the design of the Proposed Scheme, and within Chapter 20: Major Accidents and Disasters (Volume 1). This includes consideration of the appropriate mitigation measures and reference is made to the Outline EPRP (Document Reference 7.11), where appropriate.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
3.16.5	Risk of major accidents and disasters resulting from the following technological or manmade hazards – construction and operation: Road traffic accidents.	"The Inspectorate is in agreement that an assessment of road traffic accidents in relation to MAD can be scoped out for the construction phase. However, while export of potentially hazardous materials such as liquified gases (CO ₂ and hydrogen) via road remains an option, the Inspectorate is not in a position to agree that risks of MAD resulting from road traffic accidents during operation can be scoped out".	As described in Chapter 1: Introduction (Volume 1), the Hydrogen Project is no longer included in the scope of the Proposed Scheme. CO ₂ will only be transported by boat and not via road. Therefore, road traffic accidents have not been considered in the assessment for the operational phase. This is discussed in greater detail in Chapter 20: Major Accidents and Disasters (Volume 1) .
3.16.6	Risk of major accidents and disasters resulting from the following natural hazards – construction and operation: • Poor air quality. Risk of major accidents and disasters resulting from the following technological or manmade hazards – construction and operation:	"The Inspectorate is in agreement that an assessment of poor air quality and air pollution accidents in relation to MAD can be scoped out for the construction phase. However, the Inspectorate is not in agreement that an assessment of poor air quality and air pollution accidents in relation to MAD can be scoped out of the assessment for the operational phase. It is considered that the Proposed Development could result in new emission sources and pollutants, and potentially pollution incidents related to the hazardous materials stored on site".	Any new emission sources and pollutants will be managed via an Environmental Permit for Riverside 1 and Riverside 2 (at the time of submitting this ES, Riverside 2 is under construction). The Environmental Permit will limit the discharge of pollutants (addressing both normal and abnormal operating conditions) ensuring appropriate pollution control measures are in place. The Environmental Permit will also address potential fugitive emissions. Therefore, further assessment of air quality and air pollution accidents in relation to MA&D during operation is not considered necessary.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	 Air pollution accidents. 		
3.16.7	Risk of major accidents and disasters resulting from the following technological or manmade hazards - construction: • Land pollution accidents and water pollution accidents.	"Based on the reasoning and evidence presented in the Scoping Report and the implementation of standard pollution control measures, the Inspectorate is in agreement that the risk of land pollution accidents and water pollution accidents during construction are not likely to result in significant effects in terms of MAD. These matters can be scoped out".	No response required.
3.16.8	Risk of major accidents and disasters resulting from the following technological or manmade hazards – construction and operation: • UXO.	"In line with comments in Table 2.1 above, the Inspectorate considers that the ES should include a high-level assessment of risks of major accidents and disasters from UXO during construction and operation".	A high-level assessment of the potential impacts associated with the risk of encountering UXO in both the marine and terrestrial area of the Site is provided in Table 17-14 of Chapter 17: Ground Conditions and Soils (Volume 1) . As the Site is within a 'High' risk area from UXO, a detailed UXO assessment will be undertaken in accordance with CIRIA guidelines, prior to the ground investigation.
			An assessment of the risk of a major accident and/or disaster as a result of encountering UXO during construction has been presented in



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			Appendix 20-2: PEIR Risk Record (Volume 3).
3.16.9	Risk of major accidents and disasters resulting from the following natural hazards – construction and operation: • Geophysical – earthquakes, volcanic activity, landslides, sinkholes, tsunamis; • Hydrological – avalanches; • Climatological – cyclones, hurricanes, typhoons, thunderstorms, droughts, severe space weather (solar flares, solar energetic particles, coronal mass	"Based on the reasoning and evidence presented in the Scoping Report, the Inspectorate is content that risks to or from the Proposed Development from these matters are not likely to result in significant effects. These matters can be scoped out of the assessment".	No response required.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	ejections), fog, wildfires; and Biological - disease epidemics, animal diseases, plants (non native species).		
3.16.10	Risk of major accidents and disasters resulting from the following technological or manmade hazards – construction and operation:	"Based on the reasoning and evidence presented in the Scoping Report, the Inspectorate is content that risks to or from the Proposed Development from these matters are not likely to result in significant effects. These matters can be scoped out of the assessment".	No response required.
	Societal - demonstrations, societal or economic damage, humanitarian disasters (assistance, political and military constraints, security risks), famine,		



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	displaced population; Industrial or urban accidents - nuclear sites, fuel storage, dam breaches, mines and storage caverns;		
	 Transport accidents - rail and aviation; Utilities failures - electricity failure, gas failure, water failure, sewage failure; 		
	 Malicious attacks - terrorist and malicious attacks (chemical, biological, radiological, nuclear, transport, crowds, cyber, infrastructure); and 		



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	 Engineering failure and accidents - bridge failure, mast collapse, demolition accidents and tunnel failure/ fire. 		
3.16.11	Flood Defence Failure	"It is noted that an assessment of the failure of flood defences is scoped in for both the construction and operational phases. The Scoping Report notes that Environment Agency maintained flood defences are within the site boundary. The ES should detail how works which may interfere with the flood defences have been avoided, and where they are unavoidable, any permissions needed to alter the flood defences and the consequences of doing so, for example in relation to flood risk on and off site".	Baseline and post development breach modelling has been undertaken to understand the implications on residual flood risk to existing homes, businesses, and infrastructure. The Environment Agency's Thames Estuary Breach Assessment (2018) reports and outputs were used in the breach assessment undertaken to support Appendix 11-2: Flood Risk Assessment (Volume 3). The Environment Agency's Marsh Dykes model has been updated to incorporate the Proposed Scheme and assess the residual risk of breach. Additionally, a 2D hydrodynamic model has also been developed using the MIKE by DHI Flexible Mesh modelling software and provides further information on the flood depth, extent, and hazard under current baseline conditions and after the Proposed Scheme is constructed



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			in the event of a flood defence breach assuming failure of the local pumping stations.
			Appendix 11-2: Flood Risk Assessment (Volume 3) details the assessment of fluvial and pluvial flood risk associated with the Proposed Scheme using the Environment Agency's Marsh Dykes model (updated to reflect the Proposed Scheme). The modelled flood depths are significantly below the flood level for a breach of the River Thames defences, thus as a result of the embedded mitigation in place to prevent the Proposed Scheme from flooding during a breach of the River Thames Flood Defences, the Proposed Scheme will not be at risk of flooding from the Marsh Dykes.
			Appendix 11-2: Flood Risk Assessment (Volume 3) details the embedded and additional mitigation as part of the Proposed Scheme and discusses the results of the modelling undertaken to demonstrate that the Proposed Scheme does not increase flood risk. The Outline EPRP (Document Reference 7.11), which is secured in the Draft DCO (Document Reference 3.1), includes the



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
			emergency procedures to be implemented during a flood event
3.16.12	Consultees	"The Scoping Report details that the London Borough of Bexley would be the main consultee regarding the assessment scope and methodology. The Inspectorate also considers that other statutory consultees would be of relevance, in particular the Environment Agency, the UKHSA and the Health and Safety Executive".	The London Borough of Bexley, Environment Agency, the UKHSA and the Health and Safety Executive were contacted as part of the Statutory Consultation for the Proposed Scheme. No comments were provided as part of the statutory consultation process in relation to MA&D events.
3.16.13	MAD to and from the Proposed Scheme	"The Scoping Report does not differentiate between where a hazard is assessed in terms the vulnerability of the Proposed Development to MAD or the potential for the Proposed Development to lead to MAD. The Inspectorate considers that this should be clearly defined within the ES."	Chapter 20: Major Accidents and Disasters (Volume 1) defines which MA&D events could affect the Proposed Scheme. Appendix 20-2: ES Risk Record (Volume 3) sets out the MA&D events that have been considered and identifies whether the MA&D event is from an external or internal factor.
3.16.14	Cross-referencing	"To avoid unnecessary duplication the Inspectorate is content that assessments relevant to MAD may, where relevant, be presented in other ES aspect Chapters. The Applicant should provide clear cross-referencing in the Major Accidents and Disasters ES aspect chapter to where the assessments are located."	Where necessary, cross-references to other technical chapters have been made.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
Northern Ga	as Networks		
N/A	Major Accident Hazard Pipelines	"NGN may have 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	The design of the Proposed Scheme has been informed by the location of utilities within the Site and it's surrounding. During consultation with Northern Gas Networks on the 24 th August 2023, they confirmed that they do not cover the area of or around the Site. Consultation has also been undertaken with Scotia Gas Networks (SGN) (the parent company of Southern Gas Networks). SGN provided a Plant Protection working advice document and directed the Applicant to the 'Linesearch before u dig' website ³⁴ to access maps illustrating the location of gas infrastructure. These maps have been considered in the design of the Proposed Scheme. Pipelines which are identified within the Study Area for Chapter 20: Major Accidents and Disasters (Volume 1) are considered in Appendix: 20-2: ES Risk Record (Volume 3).



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		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)"	
Environmer	nt Agency		
N/A	-	 "Table 19-4 The Applicant will scope in coastal flooding which is welcomed. However, the Applicant states that the Environment Agency maintain the flood defences when this is in fact the Flood Defence Owner. 	Clarification noted, no response required.
		 We welcome the Flood defence failure scoped in." 	
London Bor	rough of Bexley		
N/A	-	"The Council is generally satisfied at the details submitted in this chapter and that the applicant hqas adequately addressed this issue at this stage. The Council would however encourage the	The Applicant has engaged with the relevant groups prior to construction commencing and prior to operation of the Proposed Scheme (including as part of the Statutory Consultation



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		applicant to engage with groups such as the London Fire Brigade, Met Police and the GLA's Fire, Resilience and Emergency Planning Committee."	period). The Outline EPRP (Document Reference 7.11) provides the outline contingency plans in the event that an emergency event occurs onsite. The full EPRP(s) will be an integral component of the Applicant's wider management system for the Proposed Scheme.



Table 18: Scoping Opinion Response – Cumulative Effects

Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response			
The Planning	The Planning Inspectorate					
3.17.1	Inter-project cumulative effects –developments under at least an equivalent size of 30 residential units.	"The Inspectorate considers that small scale developments are unlikely to give rise to significant cumulative effects over and above the Proposed Development in isolation and agrees that this matter can be scoped out".	No response required.			
3.17.2	Inter-project cumulative effects – • Projects on the Inspectorate's Programme of Projects where a Scoping Report, PEIR or an equivalent has been submitted (Tier 2 projects as set out in the Inspectorate's Advice Note 17: 'Cumulative effects assessment relevant to NSIP projects'); and	"It appears from paragraph 20.3.14 of the Scoping Report that projects on the Inspectorate's Programme of Projects where a Scoping Report, PEIR or an equivalent has (or has not) been submitted, would not be included in the list of other developments. The Inspectorate does not agree that any relevant other development at these stages can be scoped out of the cumulative effects assessment. Relevant other developments on the Inspectorate's Programme of Projects where a Scoping Report, PEIR or an equivalent has (or has not) been submitted, which falls within the Proposed Development's ZoI, should be identified. As set out in Advice Note 17, an	Clarity has been added to the list of criteria for inclusion within the assessment and Table 21-4 in Chapter 21: Cumulative Effects (Volume 1) to make it clear that the Planning Inspectorate's Programme of Projects ³⁵ (including projects at Scoping or PEIR stage) are considered.			



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
	 Projects on the Inspectorate's Programme of Projects where a Scoping Report or PEIR has not been submitted (Tier 3 projects as set out in the Inspectorate's Advice Note 17). 	assessment should be provided for all Tier 1 and Tier 2 other development, where possible. For other development falling into Tier 3, the Applicant should aim to undertake an assessment where possible, although this may be qualitative and at a very high level. The assessment should be carried out with reasonable effort and should be clearly documented in the ES for example using the format presented in Matrix 2 of Advice Note 17."	
3.17.3	List of other developments	"The list of specific other developments for inclusion in the cumulative effects assessment has not been determined at this stage. The Scoping Report confirms that the relevant local planning authorities would be consulted regarding other developments for inclusion. The Inspectorate recommends that other relevant bodies (including Natural England, the Environment Agency and for plans/ projects in the marine area, the MMO) should also be consulted to ensure that the list of other development identified for inclusion in the cumulative effects assessment is comprehensive and accurate."	All statutory parties, including Natural England, the Environment Agency and the Marine Management Organisation were provided with the opportunity to comment on Appendix 21-1: Long List of Other Developments (Volume 3) of the PEIR ³¹ as part of the Statutory Consultation process. Further to the PEIR, the Short-List as described in Section 21.5 of Chapter 21: Cumulative Effects (Volume 1) was issued to the London Borough of Bexley for its review and comment. No response had been received at the time of writing.



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response		
Environment Agency					
10.8.12		"We disagree with the proposed approach to assessing the impact of the in-channel works on sediment movement in the River Thames. Detailed quantitative sediment transport modelling should be carried out. That should include assessing the cumulative effects with the existing jetty and also with other nearby inchannel structures. The former sediment study that was undertaken for Middleton Jetty should be provided and compared to the changes that have taken place since that jetty was constructed. That comparison should be used to learn from the former method of assessment and to determine the sensitivity to change of the dynamic sediment transport regime in this section of the River Thames. That should then inform the sediment transport modelling for the proposed in-channel works."	A detailed hydrodynamic site-specific modelling study has been undertaken in the 'MIKE by DHI' software package to assess the sensitivity and magnitude of any changes to the hydrodynamics of the River Thames during the construction and operation phases of the Proposed Scheme. This forms Appendix 11-4: Coastal Modelling Studies (Volume 3). Based upon the findings of Appendix 11-4: Coastal Modelling Studies (Volume 3) the potential effects associated with the Proposed Scheme on sediment transport processes are presented within Chapter 11: Water Environment and Flood Risk (Volume 1).		
London Borough of Bexley					
Page 9 of 9		"The Council is generally satisfied at the details submitted in this chapter and that the applicant has adequately addressed this issue at this	No response required.		



Section ID	Applicant's Proposed Matters to Scope Out	Scoping Opinion Comments	Response
		stage. It is understood that there may be some cumulative effects as a result of this development however, it would be down to the applicant to demonstrate that any cumulative effect is acceptable".	



1.2. REFERENCES

- ¹ Planning Inspectorate. (2023). 'Environmental Impact Assessment Scoping Opinion: Cory Decarbonisation Project.' Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010128/EN010128-000026-EN010128%20-%20Scoping%20Opinion.pdf
- ² Department of Energy and Climate Change. (2024). 'Overarching National Policy Statement for Energy (EN-1)'. Available at: https://www.gov.uk/government/collections/national-policy-statements-for-energy-infrastructure
- ³ London Borough of Bexley. (2023). 'The Bexley Local Plan 2023'. Available at: https://www.bexley.gov.uk/sites/default/files/2023-07/bexley-local-plan-adopted-26-april-2023.pdf
- ⁴ Energy Networks Association. (2012). 'Electric and Management Feilds: The Facts'. Available at: https://www.nationalgrid.com/sites/default/files/documents/13791-Electric%20and%20Magnetic%20Fields%20-%20The%20facts.pdf
- ⁵ Energy Networks Association. (2012). 'Electric and Management Feilds: The Facts'. Available at: https://www.nationalgrid.com/sites/default/files/documents/13791-Electric%20and%20Magnetic%20Fields%20-%20The%20facts.pdf
- ⁶ Institute of Environmental Management and Assessment (IEMA). (2022). 'Determining Significance for Human Health In Environmental Impact Assessment'. Available at:
- ⁷ Environmental Protection UK and Institute of Air Quality Management. (2017). 'Land Use Planning & Development Control: Planning for Air Quality'. Available at:
- ⁸ Institute of Air Quality Management. (2023). 'Guidance on the Assessment of Dust from Demolition and Construction'. Available at:
- ⁹ Environment Agency. (2021). 'Air emissions risk assessment for your environmental permit'. Available at: https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit
- ¹⁰ UK Centre for Ecology & Hydrology. (2021). 'Air Pollution Information System'. Available at:
- ¹¹ Highways England, Transport Scotland, Welsh Government and the Department for Infrastructure Northern Ireland. (2020). 'Design Manual for Roads and Bridges, LA 111 revision 2. Noise and Vibration'.
- ¹² Cory Environmental Holdings Limited. (2023). 'Environment Impact Assessment Scoping Report: Cory Decarbonisation Project'. Available at: https://infrastructure.planninginspectorate.gov.uk/wp-



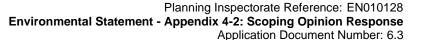
content/ipc/uploads/projects/EN010128/EN010128-000021-EN010128%20-%20Scoping%20Report.pdf

- ¹³ Greater London Authority. (2018). 'London Environment Strategy'. Available at: https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf
- ¹⁴ Froglife. (1999). 'Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation'. Froglife Advice Sheet 10. Froglife, Halesworth.
- ¹⁵ Zoological Society for London (2022). European eel conservation. Available at:
- ¹⁶ Greater London Authority. (2021). 'The London Plan'. Available at: https://www.london.gov.uk/sites/default/files/the london plan 2021.pdf
- ¹⁷ DEFRA. (2023). 'The Biodiversity Metric 4.0 (JP039)'. https://publications.naturalengland.org.uk/publication/6049804846366720
- ¹⁸ Port of London Authority. (2023). 'Sediment Sources and Transport'. Available at:
- ¹⁹ Zoological Society for London (2022). 'European eel conservation'. Available at:
- ²⁰ HMSO. (2009). 'The Eels (England and Wales) Regulations'. HMSO, Norwich. Available at: The Eels (England and Wales) Regulations 2009 (legislation.gov.uk)
- ²¹ Department for Levelling Up, Housing and Communities. (2023). 'National Planning Policy Framework'. Available at:

https://www.gov.uk/government/publications/national-planning-policy-framework—2

- ²² London Borough of Bexley. (2009). 'Crossness Conservation Area Area Appraisal and Management Plan'. Available at: https://www.bexley.gov.uk/sites/default/files/2020-05/Crossness-Conservation-Area-
- Appraisal-and-Management-Plan.pdf

 ²³ Cory Environmental Holdings Limited. (2023). 'Preliminary Environmental Information Report: Cory Decarbonisation Project'. Available at:
- ²⁴ Environment Agency. (2018). 'Thames Estuary Breach Assessment'.
- ²⁵ Environment Agency. (2023). 'Long Term Risk of Flooding'. Available at: https://flood-warning-information.service.gov.uk/long-term-flood-risk/map
- ²⁶ Environment Agency and Department for Environment, Food and Rural Affairs. (2023). 'Thames Estuary 2100'. Available at: https://www.gov.uk/government/collections/thames-estuary-2100-te2100
- ²⁷ London Borough of Bexley. (2017). 'Local Flood Risk Management Strategy: London Borough of Bexley'. Available at: https://www.bexley.gov.uk/sites/default/files/2021-01/Local-Flood-Risk-Management-Strategy.pdf





- ²⁸ Department for Environment, Food and Rural Affairs and the Environment Agency. (2023). 'Thames Estuary 2100 (TE2100)'. Available at: https://www.gov.uk/government/collections/thames-estuary-2100-te2100
- ²⁹ IEMA. (2020). 'Environmental Impact Assessment Guide to: Climate Change Resilience and Adaptation'. Available at: https://www.iema.net/download-document/237186
- ³⁰ Standards for Highways. (2021). 'DMRB LA 114 Climate'. Available at: https://www.standardsforhighways.co.uk/dmrb/search/d1ec82f3-834b-4d5f-89c6-d7d7d299dce0
- ³¹ Cory Environmental Holdings Limited. (2023). 'Preliminary Environmental Information Report: Cory Decarbonisation Project'. Available at:
- ³² Department for Environment, Food and Rural Affairs. (2021). 'South East Inshore Marine Plan 2021'. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachm ent data/file/1004493/FINAL South East Marine Plan 1 .pdf
- ³³ Port of London Authority. (2020). 'A Safer Riverside: Guidance for development alongside and on the tidal River Thames.' Available at:
- ³⁴ Linesearch. (2023). 'Before u dig'. Available at:
- ³⁵ National Infrastructure Planning. (2023). 'Planning Inspectorate's Programme of Projects'. Available at: https://infrastructure.planninginspectorate.gov.uk/projects/



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