Southampton to London Pipeline Project

Deadline 2

Response to the Examining Authority's First Written Questions People and Communities (PC)

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1 Response to the Examining Authority's Written Questions – People and Communities (PC)

Table 1.1: Applicant response to Question

ExQ1	Question:	Applicant response to Question:
PC.1.2	Respond to the concerns raised by the National Trust [RR-091] about the lack of recognition of the impact that the proposal would have on tourism, or signpost where in the Application documentation this information could be found.	Estate as being a major tourist attraction in the South Downs National Park and thinks that this
		1.3. The house and gardens at Hinton Ampner were excluded from the tourism assessment as these lie outside the 500m study area for the assessment. The Applicant acknowledges that Hinton Ampner Circular Walk, which is part of the attraction, is within the 500m study area but lies outside of the Order Limits. Part of this walk is a Public Right of Way (PRoW) and was therefore considered in the communities assessment under the PRoW assessment within Section 13.5 of ES Chapter 13 (Application Document APP-053). PRoWs located outside the Order Limits were not expected to experience adverse effects from the project due to the good practice measures in place and the transient nature of the works. As none of the circular walk crosses the Order Limits, it was not be expected to be adversely affected by the project.



ExQ1	Question:	Applicant response to Question:
PC.1.3	Explain what or if any agreement has been reached with relevant planning authorities regarding the baseline assessment of noise and vibration effects, particularly given that background noise surveys do not appear to have been undertaken at key receptor locations.	 1.1. Section A8.3.3.2 of the Scoping Report (Additional Submission AS-019) stated that 'Baseline noise or vibration surveys at receptors along the pipeline route or relevant public highway routes are not proposed'. 1.2. Existing ambient noise levels are not required to inform the assessment of noise during construction as the assessment method is based on Annex E.2 of BS 5228-1:2009+A1:2014 (British Standards Institution, 2014). This approach is based on absolute thresholds, set independently of ambient noise levels. 1.3. Further details in relation to the approach to baseline noise are provided in the Scoping Report (Additional Submission AS-019) and Environment Statement Appendix 13.3 (Application Document APP-121). 1.4. The relevant planning authorities did not request any baseline noise monitoring during their scoping responses. In addition, baseline noise has not been raised as an issue during the development of the Statements of Common Ground with local authorities.
PC.1.4	Explain the assumption that disruption to people and communities as identified in Chapter 13 of the ES (APP-053) is unlikely to occur as a result of significant effects from noise and vibration, landscape and visual impacts or traffic and transport impacts alone.	 1.1. As reported in paragraph 13.1.3 of Environmental Statement (ES) Chapter 13 (Application Document APP-053), 'disruption to receptors under this assessment is considered to occur only when significant impacts are anticipated for the following environmental effects and they occur in combination with one another: noise and vibration effects, landscape and visual effects, and traffic and transport effects. The combination of some, or all, of such effects contribute to the overall level of community disruption'. 1.2. In addition, as reported in paragraph 13.5.2 of ES Chapter 13 (Application Document APP-053), 'the consideration of the potential effects of disruption in largely rural sections (Sections A to C) will comprise the cumulative effects of noise, vibration and visual effects on receptors, while the consideration of such potential effects in largely urban sections (Sections D to H) considers the combination of noise, vibration, visual and traffic effects on receptors'.



ExQ1	Question:	Applicant response to Question:
		1.3. The impact of any disruption to people and communities as a result of significant effects from noise and vibration, landscape and visual impacts or traffic and transport impacts have been assessed within the individual topic chapters and ES appendices:
		ES Chapter 10 (Application Document APP-050);
		ES Chapter 13 (Application Document <u>APP-053</u>);
		ES Appendix 13.1 Traffic and Transport Technical Note (Application Document APP-119);
		 ES Appendix 13.2 Air Quality Technical Note (Application Document APP-120); and
		ES Appendix 13.3 Noise and Vibration Technical Note (Application Document APP-121).
		1.4. These effects are not considered in isolation in ES Chapter 13, since this is considered to double count the effects that have been assessed in individual chapters and appendices. This approach represents best practice and professional experience of assessments of this nature and is considered a proportionate approach for the Environmental Impact Assessment.
PC.1.5	i) Provide an update on the progress of the Construction Traffic Management Plan (CTMP), noise and vibration management plan, and dust management plan relied upon in the assessment as part of the embedded mitigation measures for the Proposed Development.	 1.1. In answer to i) the Applicant has not yet developed a CTMP. Given the subject matter, a CTMP is location specific and not capable of universal adoption along the pipeline route. In addition, at this stage in the project there is no meaningful detail that can be included in an outline CTMP beyond what is set out in commitment G111, given that further detail will depend upon the methodology resulting from the detailed design and construction schedule. It is accepted that a CTMP would need to be approved by both the relevant highway authorities, but the Applicant does not consider that provision of an outline document for examination would reduce that requirement or assist at the discharge stage. This is consistent with the approach adopted by many other Development Consent Orders (DCOs). For further explanation on the CTMP please also see the Applicant's response to TT.1.1. 1.2. The Applicant has not yet prepared a Noise and Vibration Management Plan. However, commitment G100 sets out the following:



ExQ1	Question:	Applicant response to Question:
ExQ1	ii) To what extent have these been discussed with the relevant planning authorities or other parties responsible for their discharge. iii) Provide further detail on the form of any monitoring proposed in relation to the measures in the REAC [APP-056], including frequency, responsibilities, and details of any remedial actions in the event that	 'the Noise and Vibration Management Plan would include the following details in relation to the project within the relevant local authority area: description of works pursuant to DCO; programme; plant noise and vibration data; receptors at risk of >1.0mm/s peak particle velocity and a protocol for providing prior warning and explanation; BPM measures (as defined in Section 72 of CoPA 1974 for the control of noise and
		 1.3. Please also refer to response PC.1.6 for further detail on additional commitments that are being made by the Applicant to reduce the impacts of the project. 1.4. The Applicant has not yet prepared a dust management plan. However, commitment G30 sets out the following: 'a dust management plan would be produced, including the following measures to be implemented where relevant: control runoff of water or mud to reduce the spread of particulates that could subsequently be disturbed and become airborne; return subsoil and topsoil at the earliest suitable time of year after construction has been completed; manage earthworks and exposed areas or soil stockpiles to prevent wind borne dust. Use methods such as covering, seeding or using water suppression;



Question:	Applicant response to Question:
	 limit de-compaction of the sub-soil in windy conditions during reinstatement; construct compound access points to the public highway with temporary hard surfacing; enforce an appropriate speed limit for vehicles travelling on site to limit dust generation; make an adequate water supply available for effective dust/particulate matter suppression/mitigation; protect sand and other aggregates from drying out. limit drop heights when loading and unloading materials from vehicles including pipes and
	 excavated materials; control the number of handling operations to ensure that dusty material is not moved or handled unnecessarily; where there is a risk of dust nuisance when using cutting, grinding or sawing equipment, use in conjunction with suitable dust suppression techniques;
	 keep equipment readily available to clean any dry spillages; clean up spillages as soon as reasonably practicable after the event using wet cleaning methods;
	 limit dry sweeping of large areas; no bonfires or the burning of waste materials; provide adequate wheel washing facilities at access points on to the public highway;
	 deploy water assisted road cleaners on public roads when necessary to prevent excessive dust or mud deposits; sheet vehicle loads during the transportation of loose or potentially dusty material or spoil; and
	Question:



ExQ1	Question:	Applicant response to Question:
		 undertake inspections to monitor dust and record results in the inspection log. The frequency of inspections to be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.'
		1.5. The Applicant believes that, at this stage in the project, there is no meaningful detail that can be included in a dust management plan or Noise and Vibration Management Plan beyond what is set out in commitments G100 and G30, given the further detail will depend upon the detailed construction methodology which will be developed at a later stage. It is accepted that the dust management plan would need to be approved by the relevant local authority, but the Applicant does not consider that provision of an outline document for examination would reduce that requirement or assist at the discharge stage.
		1.6. In answer to ii), the principles and potential subject matter of a CTMP have and are being discussed with the two relevant highways authorities. The Noise and Vibration Management Plan and the dust management plan have not been discussed with the relevant planning authorities yet because the relevant details are not known at this stage.
		1.7. In answer to iii), if monitoring measures are to be identified these will be detailed in the relevant management plans and agreed with the discharging authority.
PC.1.6	DCO [AS-059] requires the submission of a CEMP to be submitted and approved by the relevant planning authority. Documents to form part of the CEMP are set out in Requirement 6(2)(d) of the draft DCO.	1.1. The Applicant believes the level of detail within the outline CEMP is appropriate for this stage of development of the project. It is accepted that a final CEMP would need to be approved by the relevant planning authority. This is consistent with the approach adopted by other Development Consent Orders (DCOs).
		1.2. In relation to the Noise and Vibration Management Plan, since the publication of the ES, the project has continued to develop its construction methodologies and the assumptions that underpin the assessment have been refined, and a more detailed understanding of the proposed works is now available. This is presented within the Addendum to the Noise and Vibration Technical Note (Document Reference 8.14).
	Requirement 6(2)(d)(viii) requires the submission of	1.3. The Addendum provides the following:



ExQ1	Question:	Applic	ant response to Question:	
	a Noise and Vibration Management Plan.	•	an updated assessment of noise during installation based on this evolved and more detailed understanding of the proposed works,	
	However, details contained within the Outline CEMP [APP-129] are scant at	•	detailed information on the location of noise sensitive premises and areas that may experience noise effects during installation; and	
	best. Substantiate the Outline	•	an updated commitment to provide noise screening at the key locations that are likely to experience significant noise effects.	
	information on the Noise		ommitment G107 has been amended and has been added to the Code of Construction Practice reduce the potential for significant effects at the residential receptor groups:	
	and Vibration Management Plan, including details of the measures expected to result in the "moderate"	Plan, including details of the measures expected to	fr s	emporary noise screening would be put in place to screen receptors at the following locations om installation activity, unless a detailed assessment is undertaken which demonstrates that no ignificant noise impacts would occur without screening. The screening would comprise acoustic arrier material (such as Echo Barrier TM or similar) fitted to site fencing at:
	described in Section 6.1.5	•	Nash Close and Cove Road, Farnborough, Hampshire;	
	of Appendix 13.3 of the ES [APP- 121].	•	Burdock Close and Blackthorn Drive, Lightwater, Surrey;	
		•	Canford Drive, Roakes Avenue, Chertsey Road and Addlestone Moor, Addlestone, Surrey; and	
		•	Station Road and Station Approach, Ashford, Surrey.	
		s to	he Addendum concludes that, with the adoption of the newly proposed commitment, all gnificant noise effects during installation can be avoided at all residential receptors. Mitigation address potential effects at 11 community receptors would be confirmed in the relevant Noise and Vibration Management Plan prepared by the Contractor prior to installation.	
		Λ	s set out in G100 in the REAC (in Application Document <u>APP-056</u>) 'The Noise and Vibration lanagement Plan would include the following details in relation to the project within the relevant local authority area:	



ExQ1	Question:	Applicant response to Question:
		 description of works pursuant to DCO;
		• programme;
		plant noise and vibration data;
		 receptors at risk of >1.0mm/s peak particle velocity and a protocol for providing prior warning and explanation;
		 BPM measures (as defined in Section 72 of CoPA 1974 for the control of noise and vibration);
		predicted noise and vibration levels; and
		BPM justification for short term higher noise/vibration levels or out of hours working and community communication details.'
PC.1.7	screen and filter noise. The Proposed Development would result in the loss of a significant number of trees. i) Explain whether the noise assessments,	pipeline are presented in the Environmental Statement (ES) Appendix 13.3 (Application
	Fordingbridge Park, Queen Elizabeth Country Park, Stake Lane and Brewers Close, allow for the loss of these trees.	Appendix 13.3 is not affected by loss of trees.



ExQ1	Question:	Applicant response to Question:
	ii) If they did not, explain why not and whether the results of those assessments differ if the tree loss was included in the assessment.	
	N.B – There is an overlap between this question and questions PC.1.11 and PC.1.13 you may therefore wish to provide a combined response to these questions.	
PC.1.8	work are 4 hours longer than a standard working day and would operate 6	1.1. In response to (i), the Applicant considers that the extended hours applied for are normal for significant scale construction related activities to increase the working opportunity and allow for flexibility in vehicle movements. Reduction in hours would lead to longer periods of work in any one location and has the potential to significantly increase the construction period.
	days a week [APP-128]. To the Applicant:	1.2. In response to (ii), there would be no planned working on public or bank holidays. Working on these days will only result from exceptional circumstances as documented in section 1.6 of the
	i) Advise why the extended working hours would be required.ii) Confirm that there	Code of Construction Practice (Document Reference 6.4 Appendix 16.1 (2)) and the following commitment (G5): 'Construction would take place during the normal working hours of 07:00 to 19:00 Monday to Saturday. Sunday or Bank Holiday working is not anticipated as being typical. Exceptions may be required for Bank Holiday and Sunday working (restricted to 08:00 to 18:00) or night-time working for activities such as: the continuous pulling phase for a major crossing
	would be no working on public as well as bank holidays.	using HDD; where daytime working would be excessively disruptive to normal traffic operation; cleaning/testing of the pipeline; or overnight traffic management measures.'



ExQ1	Question:	Applicant response to Question:
	proposed to minimise the effect of deliveries and construction on the living conditions of residential properties particularly between the hours of 07:00 and 09:00. iv) Paragraphs 1.1.30 and 1.1.31 of the CoCP [APP-128] list a number of circumstances where working outside of these hours/days would be required. Explain the frequency that this may occur and what measures are proposed to inform residents when this does occur and what measures are proposed to minimise any harm to living conditions that may occur as a result of these alternative working hours.	 Commitment G111 in the Code of Construction Practice (Document Reference 6.4 Appendix 16.1 (2)): 'where practicable, abnormal loads would be transported outside normal working hours'. Draft DCO (Document Reference 3.1 (3)) Requirement 7 secures the submission and approval of a Construction Traffic Management Plan (CTMP). Commitments G110 and G111 in the Code of Construction Practice (Document Reference 6.4 Appendix 16.1 (2)) relate to the CTMP. 1.4. In response to (iv), it is not practicable at this stage to define the frequency with which this may occur. Advanced notice of the works would be provided through the communication plan (Code of Construction Practice (Document Reference 6.4 Appendix 16.1 (2)) commitment (G31) directly to all those that are potentially impacted, additional to the measures identified in paragraph 1.3 above.
	To All Relevant Planning Authorities:	



ExQ1	Question:	Applicant response to Question:
	v) Comment on the working hours proposed.	
PC.1.9	justification for the assumption that air quality effects can be ruled out of the assessment of community disruption, and why this approach differs from that taken for other environmental effects e.g. noise and vibration where residual effects (following the application of embedded mitigation measures in the REAC) are used to inform the assessment. ii) Explain to what degree has consultation informed the approach to	1.1. In answer to i), paragraph 13.2.3 in Environmental Statement (ES) Chapter 13 (Application Document APP-053) states that 'the People and Communities assessment takes a different approach from the other ES chapters in that it considers the residual impacts (post mitigation) from the other topic disciplines (visual, noise and traffic), and then considers whether further commitments or mitigation related to people and communities are required in order to reduce any significant impacts identified'.
		1.2. The scope of the communities assessment was set out within Table 13.6 in Chapter 13 of the Scoping Report (Additional Submission AS-019). This identified that visual, noise and traffic should be scoped into the assessment. The Scoping Report scoped out air quality as there were unlikely to be significant effects on topics within the people and communities. However, following the comments from the Planning Inspectorate in the Scoping Opinion (Additional Submission AS-018), it was suggested that air quality should be considered within the assessment. On this basis, the people and communities Chapter 13 (Application Document APP-053) assessed air quality impacts and reviewed the conclusions of the air quality assessment outlined in Appendix 13.2 (Application Document APP-120). However, once good practice measures were applied, the air quality effects were sufficiently reduced to avoid significant impacts on human receptors, and therefore air quality effects continued to be scoped out of the assessment on community disruption within ES Chapter 13 (Application Document APP-053).
		1.3. In answer to ii), the assessment methodology for air quality was set out within Appendix 8.1 of the Scoping Report (Additional Submission <u>AS-019</u>). Consultation comments received on the Scoping Report informed the development of the ES (see ES Appendices 5.1 and 5.2 – Application Documents <u>APP-078</u> and <u>APP-079</u>). No specific consultation has been undertaken in relation to air quality. No specific comments have been raised by the relevant planning authorities through the development of the Statement of Common Ground on this.



ExQ1	Question:	Applicant response to Question:
PC.1.10	Explain the implications to the air quality assessment of unexpected reduction in the effectiveness of the good practice measures proposed, taking into account probability and severity of any reduction. As part of this, set out the specific good practices measures that apply to each impact assessed.	negligible. Therefore, it is assumed that this question is in relation to dust during construction only. 1.2. As stated in paragraph 1.6.16 of ES Appendix 13.2 (Application Document APP-120), 'standard good practice measures would be applied to reduce the risk of dust. These have been derived from those specified in the Institute of Air Quality Management (IAQM) guidance (IAQM, 2016). The measures would normally be sufficient to reduce dust nuisance, risk to human health or effects on ecological sites to a 'not significant' effect'.



ExQ1	Question:	Applicant response to Question:
		 G10: 'Regular site inspections would be carried out across the site. These would be to check for environmental good practice across the site. Where nuisance is predicted or already occurring, appropriate remediation measures would be put in place to mitigate in accordance with measures outlined within the CoCP and CEMP. The frequency of inspections would be increased when activities with a high potential to cause nuisance are being carried out, or conditions increase the risk of nuisance e.g. windy conditions increase dust risk'.
		 G9: 'A central Environmental Log would be set up. The Log would be available to view by the local authority if requested. It would be a living document and be kept up-to-date and referred to on a regular basis. The Log would record all comments and complaints made to the site, together with resulting actions and outcomes'.
PC.1.11	 i) Explain whether the air quality assessments undertaken for this scheme allow for the loss of these trees. ii) If they did not, explain why not and would the results of those assessments differ if the tree loss was included in the assessment. N.B – There is an overlap between this question and questions PC.1.7 and PC.1.13 you may therefore wish to provide a combined 	 1.1. In answer to i), the air quality assessment set out in Environmental Statement (ES) Appendix 13.2 (Application Document APP-120) follows the standard assessment methodology set out within the Institute of Air Quality Management (IAQM) construction dust guidance (IAQM, 2016). The assessment has assumed a worst case, that all trees within the Order Limits are removed. 1.2. In answer to ii), IAQM (2016) acknowledges that trees can provide natural shelters to reduce the risk of wind-blown dust (see Section 7.3). However, air quality assessments do not normally take the potential benefit of trees into account in the assessments. As, such the assessment contained with ES Appendix 13.2 (Application Document APP-120) assumes a worst case that all of the trees are removed and does not take into account any potential benefit of any existing barriers such as trees and the residual effect would remain not significant. The standard good practice measures proposed to control dust emissions do not rely on any potential mitigatory effect provided by vegetation or trees, so the assessment is sufficiently conservative in this regard.



ExQ1	Question:	Applicant response to Question:
	response to these questions.	
PC.1.12		 1.1. As reported in paragraph 1.2.25 and 1.2.26 of Environmental Statement (ES) Appendix 13.4 (Application Document APP-122), the assessment of potential impacts on human health draws on the mitigated position (residual effects) of the assessment reported in other technical chapters and appendices including ES Appendix 13.3 (Application Document APP-121). Where the contributing technical assessments report no significant effects, it is assumed that there would be no additional effect on human health. 1.2. A review of literature cited by the World Health Organization (WHO) and European Commission (EC) in relation to the link between duration of noise exposure and health effects has concluded that no significant effects on human health from noise during construction would occur. 1.3. For annoyance, well defined exposure–response relationships exist for transportation noise sources. However, these are 'only to be used for aircraft, road traffic and railway noise and for assessing long-term, stable situations [] They are not applicable to local, complaint-type situations or to the assessment of the short-term effects of a change of noise climate' (EC, 2002). 1.4. There are no established exposure-response relationships between short-term noise exposure, of the type that could occur during construction of the project, and health effects. 1.5. The WHO states that 'The health effects of noise in general refer to long-term chronic noise stress' (WHO, 2011). In this context, although 'long-term' is not clearly defined by the WHO, the metrics adopted for the assessment of all health-related noise effects, such as Lden and Lnight are annual averages.
		1.6. In relation to the environmental burden of disease for noise, the WHO states that 'One year is proposed as the duration for exposure causing severe annoyance, as annoyance is an effect that disappears when the noise stops.' (WHO, 2011).



ExQ1	Question:	Applicant response to Question:
		1.7. It can be inferred from the WHO's adoption of annual thresholds and averages in their consideration of health effects that exposures to environmental noise sources of significantly less than one year are unlikely to result in any noise-induced burden of disease in local populations.
		1.8. Paragraph 13.5.41 in ES Chapter 13 (Application Document APP-053) states 'the installation of the pipeline in urban areas would be undertaken using a phased approach, only affecting a small area at a time. Therefore, while a 1km stretch of pipeline would be installed and covered within 11 weeks within an urban section, it is not anticipated that the whole 1km would be subject to construction activity at any one time. Instead, smaller areas would be affected for shorter durations [] It should be noted however that the project requires specific portions of its route to be constructed via trenchless construction, therefore construction, in specific isolated locations, would have a longer duration.'
		1.9. Paragraph 3.4.8 of ES Chapter 3 (Application Document APP-043) states that 'the duration of such [trenchless] techniques varies according to the length of the pipe being installed and the technique used. For example, with horizontal directional drilling (HDD), the construction of a 100m long crossing would take around four to five weeks, with a further two weeks required per 100m increase in the length of the crossing. This also assumes that the works to install trenchless crossings would not be unduly restricted with regards to working hours and weather conditions'.
		1.10. However, in all cases, the total number of days that any receptor would experience noise exposure during installation would be significantly less than 365. Therefore, the noise effects do not meet the adopted temporal significance criteria for noise related health effects, and no significant effects on human health from noise during construction would occur. Appendix 13.3 (Application Document APP-121) duly states that 'there is no evidence that occupants of buildings near short term construction works experience significant health effects'.
PC.1.13	The assessment of effects on Human Health (Appendix 13.4, (APP-122)) considers the short-term	1.1. In answer to i) and ii), as reported in paragraphs 1.2.25 and 1.2.26 of ES Appendix 13.4 Human Health Technical Note (Application Document APP-122), the assessment of potential impacts on health draws on the mitigated position (residual effects) of the assessment reported in other technical chapters and appendices. Tree loss has been considered within the individual



ExQ1	Question:	Applicant response to Question:
	effects of noise from construction on human health. However, the Proposed Development would result in the removal of a significant number of	assessments, where appropriate as set out below, and therefore is indirectly included within the assessment within the Human Health Technical Note (Application Document APP-122). 1.2. Visual effects were presented within ES Chapter 10 (Application Document APP-050) and assumed loss of all trees within the Order Limits unless otherwise stated. This was considered within the residual visual effects during construction and year 1, which was used to inform the human health assessment.
	trees which in some locations (such as Queen Elizabeth Country Park, Fordingbridge Park and alongside the railway embankment in Stake Lane) provide an important	1.3. Noise effects were presented in the ES Appendix 13.3 (Application Document APP-121). This assessment adopted a conservative calculation approach that did not rely on any potential noise attenuation due to trees and vegetation. The assessment presented in ES Appendix 13.3 (Application Document APP-121) is not affected by any changes in noise screening associated with the removal of trees or vegetation and this was carried through to inform the human health assessment.
	filter for noise and air quality as well as a visual screen. i) Explain whether the	1.4. The potential for increased noise from the road network at properties due to the removal of screening provided by trees and vegetation has also been considered, with reference to the following documents:
	long-term effects of the loss of these trees on human health has been considered.	• Design Manual for Roads and Bridges (Highways Agency, 2011). This states that 'the use of shrubs or trees as a noise barrier has been shown to be effective only if the foliage is at least 10m deep, dense and consistent for the full height of the vegetation'.
	ii) if they were, signpost to where in the documentation this information can be found.	 International Standard ISO9613-2. This states that 'foliage of trees and shrubs provides a small amount of attenuation, but only if it is sufficiently dense to completely block the view along the propagation path, i.e. when it is impossible to see a short distance through the foliage'.
	iii) If these effects were not assessed, explain why not and what would be the outcome on the long-term	 Engineering Noise Control: Theory and Practice (Bies & Hansen, 2009). This states that 'a single row of trees along the highway or near houses results in negligible attenuation'.



ExQ1	Question:	Applicant response to Question:
	effects on human health if they were. N.B – There is an overlap	 TRL Research Report 238 (Huddart L, 1990). This document identifies a perceptible degree of traffic noise through 30m of dense spruce plantation at a site with 'completely interlocking' vegetation, 'with no gaps that could act as windows allowing the noise through'.
	between this question and questions PC.1.7 and PC.1.11 you may therefore wish to provide a combined response to these questions.	1.5. At Fordbridge Park, Ashford, trees within the Order Limits do not provide a screen of completely interlocking vegetation and their density is not high enough to provide a perceptible degree of noise attenuation. There is a greater density of trees along the section of the A308 Staines Bypass adjacent to Fordbridge Park, but due to the narrow width of this corridor, it is considered likely to result in only negligible attenuation. Therefore, perceptible increases in road noise due to tree removal at Fordbridge Park are not expected to occur at local receptors.
		1.6. At Queen Elizabeth Park, Farnborough the Order Limits do not traverse any area of vegetation between receptors and local road traffic sources that could provide a perceptible degree of noise attenuation. Tree removal therefore does not have the potential to cause increases in road noise at local receptors.
		1.7. At Stake Lane and Brewers Close, a single row of trees is included in the Order Limits. This is likely to provide only a negligible degree of noise attenuation, and in the event of its removal, perceptible increases at local receptors are not expected to occur.
		1.8. The air quality assessment is presented in ES Appendix 13.2 (Application Document APP-120). This follows the standard assessment methodology set out within the Institute of Air Quality Management (IAQM) construction dust guidance (IAQM, 2016). The assessment has assumed a worst case, that all trees within the Order Limits are removed.
		1.9. IAQM (2016) acknowledges that trees can provide natural shelters to reduce the risk of wind-blown dust (see Section 7.3). However, air quality assessments do not normally take the potential benefit of trees into account in the assessments. As, such the assessment contained with ES Appendix 13.2 (Application Document APP-120) assumes a worst case that all of the trees are removed and does not take into account any potential benefit of any existing barriers such as trees and the residual effect would remain not significant. The standard good practice measures proposed to control dust emissions do not rely on any potential mitigatory effect provided by



ExQ1	Question:	Applicant response to Question:
		vegetation or trees, so the assessment is sufficiently conservative in this regard. The conclusion of the air quality assessment was carried through to inform the human health assessment.
		1.10. In answer to iii), this has been explained in the answer to i) and ii).
PC.1.14	increase in decibel levels have been determined from	1.1. The increase in noise associated with traffic during construction has been calculated in accordance with the methodology set out in the 'Calculation of Road Traffic Noise' (CRTN) (Department for Transport and the Welsh Office, 1988).
	the traffic data with reference to any guidance used and an explanation of the baseline applied.	1.2. The increase at receptors has been calculated using the 'basic noise level' (BNL), a term defined in CRTN. The BNL can be calculated using the speed, traffic composition and total vehicle flow of a road segment and is reported in terms of dB LA10,18h.
	ино вассино арриса.	1.3. The BNL for routes considered in the Transport Assessment (Application Document APP-135) has been calculated both with and without construction related traffic. The baseline in this case is represented by the BNL calculated without the construction related traffic.
		1.4. The increase in traffic noise levels along each link has been determined by a comparison of the BNL with and without construction related traffic. The route with the greatest noise increase is reported in the noise assessment.
		1.5. As reported in Environmental Statement Appendix 13.3 (Application Document APP-121), the greatest increase associated with traffic during construction is expected to be 0.2 dB L _{A10,18h} , which is not considered significant.
PC.1.15	has Human Health been	In response to i), the Human Health methodology considers the outcome of other chapters and technical appendices, including:
	considered as part of the methodology of the other technical assessments	 ES Chapter 8 (Application Document <u>APP-048</u>);
		 ES Chapter 10 (Application Document <u>APP-050</u>);
	listed in Paragraph 1.2.14 of Appendix 13.4 of the ES	ES Chapter 11 (Application Document APP-051);



ExQ1	Question:	Applicant response to Question:
	(APP-122) when reaching a	 ES Chapter 13 (Application Document APP-053);
	conclusion of no significant effects.	 ES Appendix 13.1 Traffic and Transport Technical Note (Application Document APP-119);
	ii) Explain how robust	 ES Appendix 13.2 Air Quality Technical Note (Application Document APP-120);
	the assumption in Paragraph 1.2.26 of	 ES Appendix 13.3 Noise and Vibration Technical Note (Application Document APP-121); and
	Appendix 13.4 (APP-122) is which states that no	 ES Chapter 14 (Application Document APP-054).
	significant effects on human health can arise if significant effects are	1.2. Health is not assessed in these individual chapters and technical appendices as this would result in double counting when effects are reported in ES Appendix 13.4 Human Health Technical Note (Application Document APP-122).
	assessments.	1.3. In response to ii), paragraph 1.2.26 of ES Appendix 13.4 (Application Document <u>APP-122</u>) outlines the assumption that when the technical assessment reports no significant effects, it is assumed that there would be no additional effect on human health. In other words, if the impact reported in other technical assessments is minor or negligible, it is assumed that the effect would be insufficient to trigger a further significant effect on health.
		1.4. Construction activities are expected to be largely short term in any given location and within a defined area (i.e. the Order Limits), thereby limiting the period of time and extent that human health receptors could be exposed to possible effects. The assumption is therefore representative of a proportionate approach to the assessment.
		1.5. In the absence of definitive guidance, this approach is also representative of best practice and professional experience.



ExQ1	Question:	Applicant response to Question:
PC.1.16	Indicate which measures in the REAC [APP-056] have been taken into account in the Human Health assessment. In particular indicate which measures in the REAC have been considered in the assessment of community disruption, including those related to air quality, traffic and transport, and noise and vibration.	 appendices, including: ES Chapter 8 (Application Document APP-048); ES Chapter 10 (Application Document APP-050); ES Chapter 11 (Application Document APP-051); ES Chapter 13 (Application Document APP-053); ES Appendix 13.1 Traffic and Transport Technical Note (Application Document APP-119);



ExQ1	Question:	Applicant response to Question:
ExQ1 PC.1.17		 1.1. In answer to i), Table 1.2 of Environmental Statement (ES) Appendix 13.4 (Application Document APP-122) states that access to open space and nature would be given due consideration in the Human Health Technical Note, in the case that ES Chapter 12 (Application Document APP-052) and ES Chapter 13 (Application Document APP-053) report significant effects. Neither Chapter 12 nor Chapter 13 reported any significant effects, so due consideration was not required in the Human Health Technical Note. 1.2. Paragraphs 12.5.15 to 12.5.19 in ES Chapter 12 (Application Document APP-052) report the effects on community land and facilities. This concludes in paragraph 12.5.19 that 'due to the proportion of land-take and temporary disruption on community land and facilities, overall a small magnitude is assigned. The assessment has concluded that there would be no significant potential effects on residential community land and facilities during construction'. 1.3. In ES Chapter 13 (Application Document APP-053), those recreation/amenity receptors that comprise greenspaces are matched with those provided in ES Chapter 10 (Application Document APP-050). ES Chapter 13 (Application Document APP-053) reports that at Chobham Common and Brentmoor Health Local Nature Reserve (LNR) there would be significant visual effects from construction. For both of these sites, alternative greenspace is available locally. 1.4. Chobham Common extends across a large area and parts of Chobham Common would still be available during construction including the greenspace north of the M3, 1km from the Order Limits. Alternative greenspace for local users of Brentmoor Heath LNR include Lightwater Country Park, 2km north west of Brentmoor LNR and Bisley and West End Commons, 850m south of Brentmoor Health LNR. These alternative greenspaces would not be impacted by construction of the project. 1.5. Due to the availability of alternative greenspaces, the users of Chobham Common and Brentmoor
	detail as to what impacts	 Health LNR are not expected to experience significant human health impacts 1.6. In answer to ii), ES Appendix 13.4 (Application Document APP-122) subsequently reports that, given the scale and nature of construction as well as the resultant potential effects (before replacement planting takes effect) being largely localised, the landscape and visual effects (i.e.



ExQ1	Question:	Applicant response to Question:
	ii) Provide an assessment of residual effects and a determination of their significance. Explain how human health impacts have been considered in the assessment. iii) Set out how consultation with stakeholders has informed the assessment.	disruption to green space and nature) of the construction phase of the project are not expected to have a significant effect on human health. 1.7. In answer to iii), there have been no issues or concerns raised by the Local Authorities relating to health impacts in their Statements of Common Ground. Comments (including those on health) received on the Scoping Report (Application Document APP-079) were considered when undertaking the assessment and writing the ES. In the request for relevant representations, Public Health England stated 'We replied to earlier consultations as listed below and this response should be read in conjunction with that earlier correspondence. Request for Scoping Opinion 22nd August 2018 Public Consultation (Section 42) 17th October 2018 We can confirm that with regard to the above application we do not intend to register an interest with the Planning Inspectorate' (RR-171).
PC.1.19	The NHS Hounslow Clinical Commissioning Group in its written submission [AS-031] raises concerns about the health impact of the proposal particularly arising from construction activity and from the risk of major accidents and natural disasters. In particular, it is stated that the proposal has not been properly assessed with respect to the use of Greater London Authority	(Application Document APP-122), the project would be situated within the counties of Hampshire and Surrey, with the exception of a short section (up to 60m) where it would be situated



ExQ1	Question:	Applicant response to Question:
	(GLA) data to assess the baseline conditions.	
	Respond.	
PC.1.20	Concerns have been raised by the Independent Educational Association Limited in its RR [RR-095] that the Proposed Development would prevent the future use of sports grounds.	pipeline, there have been no occasions where these facilities have not been able to be used for sport.
	Confirm if the existing pipeline runs under any sports ground/playing fields and if there have been any incidents in relation to the pipeline that have prevented these facilities from being used for sport.	



ExQ1	Question:	Applicant response to Question:
PC.1.21	Development would run	1.1. In answer to i), the Applicant can confirm that the proposed development would not result in the permanent loss of any playing fields or sports pitches.
	through a number of playing fields and sports pitches. i) Confirm if the Proposed Development	1.2. In answer to ii), at this stage it is not practicable to state how long the playing fields or sports pitches would be unavailable for use as this is dependent on the detail of the construction programme both in terms of duration and timing. The Applicant is in discussions with a number of the playing fields and sports pitch landowners and will develop a programme which would reduce the disruptive impact including reinstatement periods.
	would result in the permanent loss of any playing fields or sports pitches.	1.3. The Applicant is in discussions, through the acquisition of land rights process, to implement a methodology to reduce impact and duration of works on the sports pitches and clarify that they can be used for recreation as soon as reasonably practicable following construction. See commitment G2 in the Code of Construction Practice (Document Reference 6.4 Appendix 16.1
	ii) Where the route of the Proposed Development would run through a playing field or sports pitch, explain how long it would be unavailable for use	(2)): 'The contractor(s) would provide a series of reviewed methodologies. The number of construction activities subjected to this process would be decided on a risk-based approach and could include site preparation, pipe-laying, trenchless crossings and reinstatement. Each methodology would include the measures that need to be undertaken to meet the requirements outlined in the CEMP. All methodologies would be reviewed and accepted by the Employer's Representative'.
	including the time needed for construction and reinstatement/reseeding.	1.4. For example, the method could reduce the impact on the existing pitches by using boards, matting or tracks to evenly distribute the load from vehicles and machinery and thereby negate the need to strip topsoil. In this case, the only area that would require topsoil removal would be above the
	iii) Where a playing field or sports pitch would be	(typically less than) 1m wide trench. It is also possible to remove turf and store it for relaying to aid a quicker restoration of the existing surface.
	unavailable, what alternative provision would be made for the duration of the closure.	1.5. Another method that could be adopted to reduce impact to the pitch is for the demarcation and safety fencing to be surface mounted, utilising water-filled or similar barriers. This would reduce remedial works required to the sports pitches.
		1.6. These construction methodologies will continue to be discussed with the interested parties and the Applicant is happy to discuss any items, including a separate agreement regarding specific



ExQ1	Question:	Applicant response to Question:
		construction methodologies, that would give the interested parties reassurance that they would not be worse off as a result of the installation.
		1.7. The measures outlined above could reduce the duration of construction works and reinstatement.
		1.8. In answer to iii), Section 16.4 of the Planning Statement provides a summary of the assessment on each playing field with alternative provision considered in Appendix 16.1 (Application Document APP-128). This concludes that there is no need to provide alternative facilities. However, discussions with interested parties have been undertaken and will continue; and agreements have been and would be made for appropriate compensation which may include funding for temporary relocation if required.
PC.1.23	Respond to the comments made by Abbey Rangers in its written submission [AS-065] regarding the potential effect of the proposal on their facilities and the sports opportunities that they provide.	the Open Space report (Appendix 16.1 of the Planning Statement (Application Document APP-128)). The Applicant has been engaging with Abbey Rangers Football Club and is in active
PC.1.24	Respond to Runnymede Council's RR [RR-212] regarding the effects of construction on access to and use of Chertsey Meads.	1.1. In developing the project through an iterative process of consultation and engagement with consultees and by undertaking an Environmental Impact Assessment (EIA), the project sought to identify and incorporate suitable measures and mitigation for any potentially significant adverse effects. These commitments are set out in the REAC in section 16.3 of the Environmental Statement (ES) Chapter 16 Environmental Management and Mitigation (Application Document APP-056). The REAC also includes reference to how the commitments would_be implemented (or secured) through the Development Consent Order (DCO) process.



ExQ1	Question:	Applicant response to Question:
		1.2. Tables 16.1 through to 16.3 from ES Chapter 16 (Application Document APP-056) presents the embedded environmental measures identified and included during the design development to reduce impacts to the environment and communities.
		1.3. Runnymede Borough Council (RBC) raise specific issues in their relevant representation relating to:
		1.4. The impact of the pipeline on local tourism and the Chertsey Show. The Applicant is aware of the importance of the Chertsey Show to the local community and has met with the Chertsey Show organisers to fully understand the event. To manage the impact of the project on the show, the Applicant would continue to engage with them as the project progresses. Commitments relating to the Chertsey Agricultural Show, include the following:
		PC1: 'The project would work with the Chertsey Agricultural Show to limit impacts to the Show at Chertsey Meads and along Mead Lane'. This will be secured through the Code of Construction Practice (CoCP) of Requirement 5 of the draft DCO.
		1.5. The impact of construction activity on a public car park. The project does not intend to close either car park on Chertsey Meads. The Order Limits include the access to the car parks in order to ensure access for construction traffic along Mead Lane which is a private road.
		1.6. Management of the open space for recreation during construction. Commitments relating to the access to community land uses include the following:
		G114: 'All designated PRoW would be identified, and any potential temporary closures applied for/detailed in the DCO. All designated PRoW crossing the working area would be managed, including National Trails, with access only closed for short periods while construction activities occur'. This will be secured through the Code of Construction Practice (CoCP) of Requirement 5 of the draft DCO, and Design of the draft DCO.
		1.7. The Applicant is aware of the need to reduce the impact of construction activity on open spaces and their users. Therefore, the Applicant has chosen the open cut trenching as the preferred construction technique, which is the quickest method and would reduce the time spent within the



ExQ1	Question:	Applicant response to Question:
		open space. The working area would be fenced during construction, topsoil stripped and stored alongside the working area, the trench would be excavated, and the material stored within the working area, the pipe would be laid out and welded alongside the trench and tested, before being lifted into place and the ground reinstated. Access to the unaffected open space would be maintained at all times. (See paragraph 11.8.136 of Planning Statement Application Document APP-132). 1.8. Concerns raised in this representation would be addressed through continued discussion with the Runnymede Borough Council and the status of these discussions would be recorded through the draft SoCG.
PC.1.25	Table 16.3 of the Planning Statement [APP-132] identifies 7 golf courses within the Order Limits which would be affected by the Proposed Development. Table 12.5 in the ES indicates that there are 5 golf courses in the study area. Clarify.	courses and two golf courses that have now closed and are in the process of being converted to Suitable Alternative Natural Greenspaces (SANGs). Southwood Golf Course (in Section E of the pipeline) closed in October 2018. Windlemere Golf Course (in Section F of the pipeline) closed in December 2016. The comments column in Table 16.3 in the Planning Statement note that they are closed. 1.2. Table 12.5 in Environmental Statement Chapter 12 (Application Document APP-052) included reference to the five open golf courses.



ExQ1	Question:	Applicant response to Question:
PC.1.27	i) Provide a plan overlaying the location of the proposed logistics hub/construction compound with the indicative masterplan for Hartland Village. ii) Respond to St Edward Homes comments [RR-225 and AS-040] as to why the proposed logistics hub would prevent the development of Hartland Village.	 1.1. In answer to i), the location and size of the proposed logistics hub at Hartland Park was identified in liaison with St Edward Homes, and located to take account of the ongoing phased development of the wider site for residential development. Paragraph 4.5.4 of the Planning Statement (Application Document APP-132) noted in relation to the logistics hubs that 'The construction logistics hubs will vary in size and shape depending on the location. They will range from approximately two to five hectares. However, the hubs at Hartland Park Village and Windlesham may be enlarged to nine hectares (approximately 300m x 300m).' The Order Limits for the proposed logistics hub at Hartland Park allowed space for this larger size. 1.2. Subsequent to the submission of the application for development consent, further technical work undertaken by the Applicant has identified that the installation of the proposed replacement pipeline could be facilitated with fewer, and smaller, temporary logistics hubs. 1.3. A consultation is therefore being undertaken by the Applicant on proposed changes to the size and locations of logistics hubs, comprising proposals to remove three logistics hubs entirely, reduce the size of two temporary logistics hubs, and convert one logistics hub into a construction compound. The consultation runs from 5 November to 13 December 2019 and responses will help to inform a future submission to the Examining Authority to request a change to the application.
		1.4. As part of these proposals, following discussions with St Edward Homes, the Applicant is proposing to relocate and reduce the size of the temporary logistics hub (Work No 6C within the draft DCO (Document Reference 3.1 (3)) at Hartland Park from 25 acres (10.1ha) to five acres (2ha). The relocated and reduced-size logistics hub remains within the Order Limits as originally applied for. At the same time, the Applicant is including the private access road from the site to the A327 within the Order Limits, for temporary access to the proposed logistics hub. The inclusion of the private road is a correction to the previous Order Limits and not a change to the access strategy for the project.



ExQ1	Question:	Applicant response to Question:
		1.5. The proposed Order Limits for the reduced temporary logistics hub site area is shown in red in Illustration 1, whilst the Order Limits in the submitted application for development consent are shown in grey.
		Illustration 1: Hartland Park logistics hub – proposed reduced site area
		Cooling Tower ESS Bramshot (FBs
		1.6. Illustration 2 shows the location of the proposed reduced temporary logistics hub site area (shown in red) and the Order Limits in the submitted application for development consent (shown in grey) overlaid on the indicative masterplan for Hartland Village (based on St Edward Homes plan reference: 2511-SK-1005-S), as requested by the Examining Authority:
		Illustration 2: Hartland Park logistics hub and Hartland Village indicative masterplan



ExQ1	Question:	Applicant response to Question:
		1.7. In answer to ii), the Applicant has engaged in detailed discussions with St Edwards Homes over the proposed size and location of the temporary logistics hub within the Order Limits in the submitted application for development consent at Hartland Park.
		1.8. The Applicant has reached an agreement with St Edward Homes to utilise the reduced area for a temporary logistics hub. Both Parties agree that the reduced site can be appropriately accommodated alongside the phased construction and occupation of the Hartland Village development, without impacting on the phased residential and other development.



ExQ1	Question:	Applicant response to Question:
		1.9. Hartland Village development is being undertaken in phases. The boundary of the proposed reduced temporary logistics hub site has been specifically identified in discussions with St Edward Homes to avoid impacts on the initial phases of the residential development. The proposed reduced logistics hub site is located within a phase of development not planned for commencement before January 2027. This proposed location, together with agreement on timing and access routeing within the Hartland Village development in the voluntary land agreement, ensure that impacts on the residential development will be avoided.
		1.10. As proposed to be changed, the proposed logistics hub would therefore not affect the delivery of new homes or the housing land supply of Hart District Council.



2 References

British Standards Institution (2014). BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise, London: British Standards Institution.

Department for Transport and the Welsh Office (1988). Calculation of Road Traffic Noise. London: Her Majesty's Stationary Office.

European Commission (2002). Position Paper on dose response relationships between transportation noise and annoyance. Luxembourg: Office for Official Publications of the European Communities.

Institute of Air Quality Management (IAQM) (2016). Guidance on the Assessment of Dust from Demolition and Construction. Version 1.1. London: Institute of Air Quality Management.

World Health Organization (2011). Burden of disease from environmental noise: Quantification of healthy life years lost in Europe. WHO Regional Office for Europe.