

Southampton to London Pipeline Project

Deadline 4

Responses to ExA's Further Written Questions -
Alternatives (ALT)

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**Southampton to London Pipeline Project
Response to the Examining Authority's Further Written Questions –
Alternatives (ALT)**



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1 Response to the Examining Authority's Further Written Questions – Alternatives (ALT)

Table 1.1: Applicant response to Question

ExQ2	Question:	Applicant response to Question:
ALT.2.1	In the Examining Authority's Written Question (ExA WQ) ALT.1.4 [PD-008], the ExA requested the Applicant consider trenchless crossing for the whole of Fordbridge Park. The ExA notes the Applicant's response [REP2-038]. However, at the Issue Specific Hearing (ISH) held on Tuesday 3 December 2019 [EV-009a and EV-009b] the ExA expressed its concerns that the route of the proposed pipeline along the only tree-covered part of the park would have a considerable effect on its character.	<p>1.1 The Applicant does not agree that <i>the route of the proposed pipeline is along the only tree covered part of the park</i>. Approximately 50% of Fordbridge Park is tree covered with the most dense areas of tree cover being to the north of the proposed Order Limits. In selecting the route, the Applicant has considered a wide number of constraints. In the more open southern part of the park there are the high voltage overhead power lines, two buried high voltage lines and a gas main. In addition, this open area is popular for recreational use. The Applicant has therefore selected a route alignment which largely passes north of these constraints and along the southern boundary of the trees.</p> <p>1.2 The Applicant does not agree that the work in Fordbridge Park will have a 'considerable effect on its character' – this is supported by the answers to points i), ii) and iii) below.</p> <p>1.3 In response to i), Fordbridge Park has been identified as a potential 'hotspot' and the Applicant is submitting a Site Specific Plan (Document Reference 8.59) at deadline 4. This provides detail of the Applicant's intended pipeline alignment, working area and the trees that it expects will require removal; and is informed by a tree survey.</p> <p>1.4 In response to ii), the Site Specific Plan (Document Reference 8.59) for Fordbridge Park contains the information on which trees will require removal. The Applicant believes that with the current intended alignment the open trench section would require the removal of four trees and the trenchless working area would require the removal of two trees. Detailed design of the trenchless crossing will further consider the options to retain these two trees. None of these trees are mature and none are identified as memorial trees.</p> <p>1.5 In response to iii), the Site Specific Plan (Document Reference 8.59) takes account of the commitments applied across the project which will be used to protect the trees in Fordbridge Park.</p>



ExQ2	Question:	Applicant response to Question:
	<p>i) Explain whether additional surveys have been carried out and whether the narrow working width could be specifically defined.</p> <p>ii) Confirm the number of trees that would be removed in the trenched section of Fordbridge Park.</p> <p>iii) Explain the preventative measures that would be undertaken to protected trees and how they would be secured in the draft Development Consent Order (dDCO) [REP3- 006].</p>	<p>(For clarity with regards to the question, there are no protected trees in Fordbridge Park), which include the following:</p> <ul style="list-style-type: none"> • Article 41(2) obliges the Applicant not to cause any unnecessary damage to any tree, shrub or hedgerow. • NW30: <i>'Narrow working width reduced to 10m where possible to avoid or wherever possible limit the impacts on memorial trees at Fordbridge Park. The approximate distance would be 409m. (Grid ref: TQ0620670826 to TQ0588971060)'</i>. This is secured in the CoCP. • G65: <i>'Working widths would be reduced in specific locations where trees or hedges are present. Where notable, TPO, Ancient Woodland and veteran trees would be retained within or immediately adjacent to the Order Limits, the trees and their root protection areas would be protected where they extend within the Order Limits and are at risk. This would be by means of fencing or other measures.'</i> This is secured through Requirement 12 (Landscape and Ecological Management Plan). • G95: <i>'The contractor(s) would consider and apply the relevant protective principles set out in the National Joint Utilities Group Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees ('NJUG Volume 4' (2007)). This would be applied to trees within the Order Limits which would be preserved through the construction phase, and to trees outside of the Order Limits where such measures do not hinder or prevent the use of the relevant working width for construction.'</i> This is secured through Requirement 12 (Landscape and Ecological Management Plan).



ExQ2	Question:	Applicant response to Question:
<p>ALT.2.2</p>	<p>In the Applicant's response to ExA WQ LV.1.24 [REP2-045], the Applicant confirms that a narrow working width (NWW) at Fordbridge Park would be used, referenced as NW30 in the updated Code of Construction Practice (CoCP) [REP2-010]. However, the CoCP gives no commitment nor is it annotated in the General Arrangement Plans (GAPs) [REP3-005].</p> <p>Update the CoCP and GAPs to indicate the narrow working width at Fordbridge Park.</p>	<p>1.1 The Applicant included information in the documents noted, within Annex A of the CoCP (REP2-010) and on Sheets 52 and 120 of the General Arrangement Plans (REP3-005) submitted at Deadline 3.</p> <p>1.2 An updated CoCP is submitted at this deadline (Document Reference 6.4 Appendix 16.1 (3)), which clarifies in Annex A the commitment for narrow working (NW30) in Fordbridge Park.</p> <p>1.3 A Site Specific Plan (Document Reference 8.59) is also submitted at this deadline to provide details on the intended method of installation in this area.</p> <p>1.4 The narrow working at Fordbridge Park is also indicated on General Arrangement Plans sheets 52 and 120 (Document Reference 2.6 (4)).</p>



ExQ2	Question:	Applicant response to Question:
<p>ALT.2.3</p>	<p>Concerns were raised at the ISH on Wednesday 4 December 2019 [EV-010a] and [EV-010b] and in the South Downs National Park Authority's (SDNPA) D3 submission [REP3-061, para 2.2.5] that insufficient information has been provided regarding the cost of, and scope for, developing outside the National Park for the northern most section of the proposed development within the SDNP. Consequently, in the opinion of SDNPA, the policy test set by paragraph 5.9.10 of NPS EN-1 has not been satisfied. Submit this information in relation to the alternative and</p>	<p>1.1 The ExA's question ALT.2.3 requests that information be provided on the "cost of and scope for, developing outside the National Park", asking the Applicant to "submit this information in relation to the alternative and proposed routes for this section of the scheme".</p> <p>1.2 At the outset, the Applicant wishes to clarify that there are no alternative "routes" to the proposed route set out in the application documentation. The Applicant's consideration of alternatives was based on corridors initially, and then once the preferred corridor was selected, a preferred route was defined.</p> <p>1.3 In relation to the consideration of cost as part of the corridor selection process, as the Applicant explained at the ISH2 on 3 December 2019, a financial costing of each corridor option was not developed at the time of making the corridor selection decision. The basis for the Applicant's assessment of corridors was that the longer the pipeline and the greater the engineering complexity in terms of crossings, or environmental or other factors, the higher the anticipated costs for those corridors. In respect of the relatively high-level nature of the corridor assessment, this was considered to be the most appropriate approach and a robust basis for corridor decision making.</p> <p>1.4 The consideration of the corridors is set out in Chapter 3 Scheme Development of the Planning Statement (Application Document APP-132), and in ES Chapter 4 Scheme Evolution (Application Document APP-044). The Applicant's assessment of the project against the policy requirements in NPS EN-1, and specifically paragraph 5.9.10, is set out in the Planning Statement at paragraphs 7.4.170 to 7.4.190. This information is not repeated here verbatim.</p> <p>1.5 The above information explains that the anticipated cost and scope for routing the pipeline through or around the National Park was part of the consideration of pipeline corridors, with seven potential corridors identified for the route south of the Alton Pumping Station. This included a potential corridor that avoided the entire National Park (Corridor A) and six corridors that passed through different parts of the National Park (Corridors B to G), including on different routes and for different</p>



ExQ2	Question:	Applicant response to Question:
	<p>proposed routes for this section of the scheme.</p>	<p>distances. The methodology adopted for sifting the corridors is set out in the Planning Statement and Environmental Statement, as above. At this stage the planning assessment was necessarily at a reasonably high level, taking account of the environmental and engineering assessments to provide planning comments on the potential constraints to securing consent for the corridors.</p> <p>1.6 Corridor A (avoiding the South Downs National Park (SDNP) in its entirety), and Corridors B, C and E were discounted as part of the assessment. Three corridors south of Alton were taken forward to the shortlist: corridors D, F and G. Corridors D and F avoided re-entering the National Park. The shortlisted corridors were taken to Pipeline Corridor consultation carried out by the Applicant between 19 March 2018 and 30 April 2018, at which point Corridor G was chosen as the Applicant's Preferred Corridor. The Pipeline Corridor consultation is described in Chapter 3 of the Consultation Report (Additional Submission AS-013), and as explained in that report, following consideration of the consultation outcomes the Applicant selected Corridor G as the Proposed Corridor for the project, and as the basis for identification of the Preferred Route. The reasons for the selection of Corridor G and rejection of Corridor D and F are set out in the report and explained below.</p> <p>1.7 In relation to the specific question from the ExA, the Applicant's decision-making included engineering factors such as additional length or additional crossings, and environmental factors such as topography and Source Protection Zones, which led to complexities and risks that were judged to add considerably to the cost of the project.</p> <p>1.8 It should be noted that the Applicant's decision-making on the corridors was based on an assessment of the corridors as a whole, and as such for Corridors D, F and G this was for their entirety from Boorley Green to the Alton Pumping Station. For approximately the first 20km (to West Tisted) the corridors followed the same routeing.</p> <p>1.9 The information presented below has been extracted from the submitted application documents, to highlight the differences between the two corridors avoiding the second part of the National Park (Corridors D and F), and the Applicant's Preferred Corridor G, which was the basis for the</p>



ExQ2	Question:	Applicant response to Question:
		<p>route submitted for approval as part of the application for development consent. This includes information on the cost and scope for developing outside the National Park.</p> <p>Corridor D</p> <p>1.10 Corridor D had a significantly longer length – 22.5km from the point the corridors diverge, compared to 17.8km for Corridor G (and 19.9km for Corridor F). Compared to Corridor G, Corridor D also had greater engineering and installation challenges which were considered to lead to additional costs and risks. These included the hilly landscape to the north of Alton near Lasham, through which the corridor would need to pass (see Illustration 1).</p> <p>1.11 Public water supply sources were located in the same area, with Source Protection Zones associated with them. The Project Team had committed to avoid Source Protection Zone 1s, and this was forcing the corridor further north, increasing its length and moving it further into the hills (see Illustration 2).</p> <p>1.12 In terms of major crossings likely to require trenchless construction, and thus increasing engineering complexity, risk and costs, Corridor D required the crossing of the A31 (at a point it is a dual carriageway), the Watercress Line Railway, the A339, and the A31 (dual carriageway) again to enter the Alton Pumping Station from the north (see Illustration 3). The Corridor also involved a number of watercourse crossings, a B-road and a significant number of minor road crossings. The combination of these factors led to the conclusion that Corridor D would represent additional engineering risks and complexities, and that these, together with additional pipeline length and crossings, would lead to increased costs.</p> <p>1.13 In terms of other factors, respondents to the Pipeline Corridor Consultation highlighted these issues, as well as impacts on wildlife and the potential issues of installing in an area where many roads are narrow country lanes. When compared to Corridor G, there was less potential to benefit from existing infrastructure and landowner relationships, as once it diverged from the other two</p>



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		<p>corridors it did not follow any existing pipelines. Corridor D also included part of the Cuckoo's Corner Roman site, a Scheduled Monument.</p> <p>1.14 For a combination of all of the above reasons, Corridor D was not taken forward.</p> <p>Corridor F</p> <p>1.15 Corridor F performed less strongly than Corridor G due to its longer length – 19.9km compared to Corridor G at 17.8km. Compared to Corridor G, Corridor F also had greater engineering and installation challenges which were considered to lead to additional costs and risks.</p> <p>1.16 In terms of major crossings likely to require trenchless construction, and thus increasing engineering complexity, risk and costs, Corridor F required the crossing of the A31 (at a point it is a dual carriageway), the Watercress Line Railway, the Watercress Railway Line a second time, the A339, the A31 (dual carriageway) a second time, the River Wey and the Alton Main Line Railway to enter the Alton Pumping Station from the south (see Illustration 3). The corridor also involved a number of watercourse crossings, minor road crossings, and areas of wet and anticipated poor ground conditions to the south of Alton.</p> <p>1.17 Public water supply sources were located in the area south of Alton, with Source Protection Zones associated with them. The Project Team had committed to avoid Source Protection Zone 1s, and whilst this significantly constrained the corridor at this location, and led to additional engineering challenges, it was considered likely to be possible to achieve this (see Illustration 2).</p> <p>1.18 However, the combination of these factors led to the conclusion that Corridor F would represent additional engineering risks and complexities, and that these, together with additional pipeline length and crossings, would lead to increased costs.</p> <p>1.19 In terms of other factors, Whilst Corridor F avoided the hilly landscape and SPZs to the north of Alton that affected Corridor D, Corridor F performed less strongly than Corridors D and G due to the possibility of greater disruption to communities such as Four Marks, Medstead and Alton, including known and potential development sites. It should be noted that subsequent to the</p>

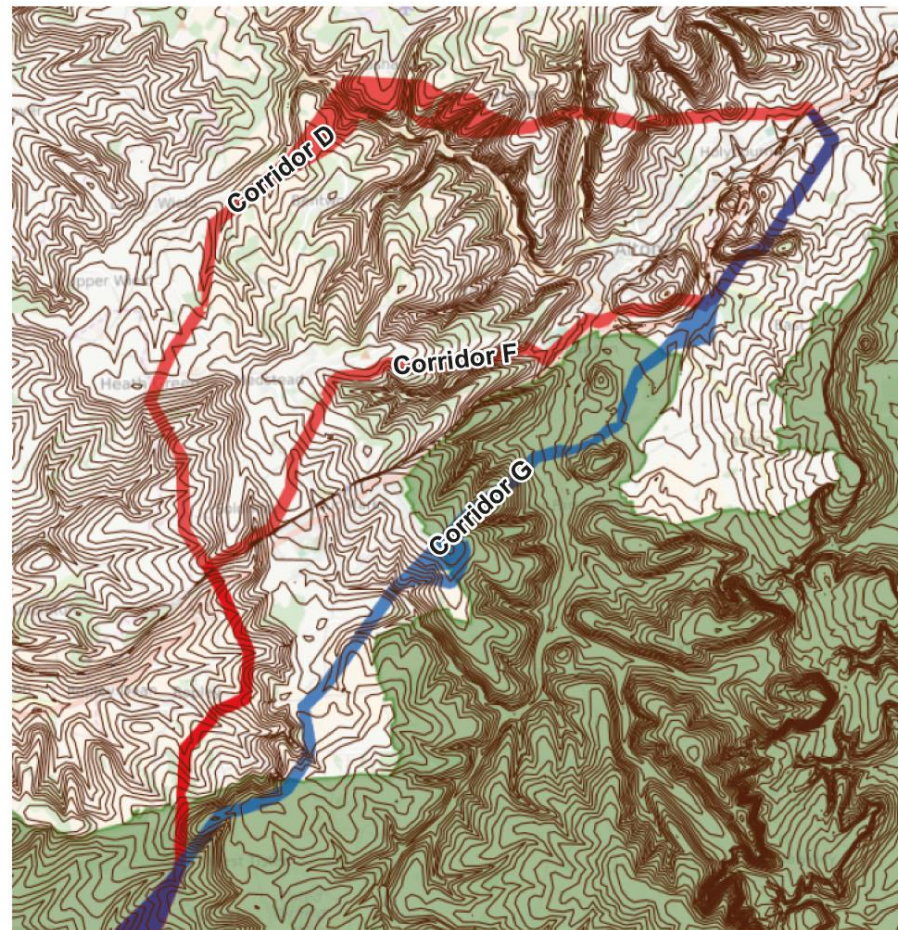


ExQ2	Question:	Applicant response to Question:
		<p>selection of the Preferred Corridor, construction of new residential development has taken place across parts of the corridor (to the south of the railway in Alton), and the Council is consulting on a potential large-scale development to the west of Alton which would cross the corridor.</p> <p>1.20 In addition, during the consultation, the project also received new information that identified a priority habitat for hydrology in this area. Concerns were also raised by respondents about maintaining easy access to Alton Community Hospital and the impact on growing local communities during installation of the pipeline. The longer length of Corridor F, along with the identified engineering and installation challenges, was judged as likely to significantly add to the anticipated cost of the project over Corridor G.</p> <p>1.21 For all of the above reasons, Corridor F was not taken forward.</p> <p>Corridor G</p> <p>1.22 Corridor G (the Applicant's Preferred Corridor) was considered to perform more strongly overall than Corridors D and F. Corridor G had the shortest length of the three corridors at 17.8km and there were considered to be fewer engineering challenges for this corridor.</p> <p>1.23 In terms of major crossings likely to require trenchless construction, and thus increasing engineering complexity, risk and costs, Corridor G required the crossing of the A32, the River Wey and the Alton Main Line Railway to enter the Alton Pumping Station from the south (see Illustration 3). The corridor also involved a number of watercourse crossings, a B-road and a number of minor road crossings. This was considered to present significantly less engineering risk and cost than the other corridors.</p> <p>1.24 In terms of other factors, Corridor G was assessed as having a lower risk of disruption to residential areas such as Alton and Ropley and less potential to affect cultural heritage assets and groundwater systems. There was a strong representation from the consultation responses that the replacement pipeline should be located near to the existing pipeline, which Corridor G would</p>



ExQ2	Question:	Applicant response to Question:
		<p>achieve. Key reasons given were the positive existing relationships with landowners and the opportunity to use land and land access routes along the existing pipeline.</p> <p>1.25 Unlike Corridors D and F, Corridor G does re-enter approximately 5km of the SDNP to the south of Alton, and this weighed against the corridor as part of the corridor selection process. However, it was considered that when installation is complete, and the land has been reinstated there would be no permanent effect on the special qualities of the SDNP, such as the natural beauty of the landscape and countryside. With regard to the cost and scope of avoiding the National Park, it was considered that the engineering complexities associated with Corridors D and F would add significantly to the cost of the project if either of these options were progressed. For the reasons set out above, Option G was selected for the preferred corridor.</p> <p>Summary</p> <p>1.26 The Applicant considers that it has demonstrated the exceptional circumstances and policy compliance to justify the proposed major development within the South Downs National Park (both at the initial entry and the second entry), as explained by the Applicant in ISH2 on 3 December 2019.</p> <p>1.27 Having regard to paragraph 5.9.10 of NPS EN-1 the cost and scope for avoiding re-entering the National Park formed part of the consideration of pipeline corridors. Corridors D and F, which avoided re-entry into the National Park, had additional engineering complexities which would significantly add to the cost of the project over Corridor G. This, in addition to the other considerations identified by the project team and raised by stakeholders during the Pipeline Corridor Consultation, meant that there was limited scope to progress either of the alternative corridors over Corridor G and meet the project objectives and guiding principles whilst also according with NPS EN-1 and EN-4, without needing to produce detailed cost information. As such, Corridor G was selected as the preferred corridor to the south of Alton and was taken forward for the next stage of design development.</p>

Illustration 1 – Topography

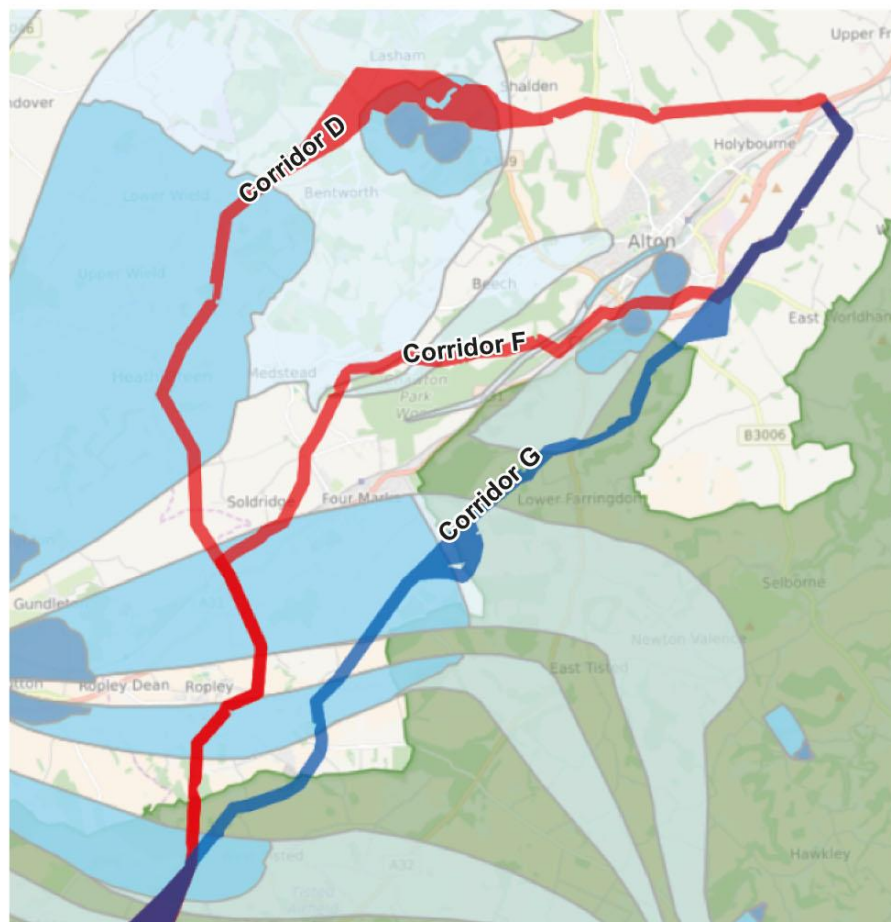


Key

-  South Downs National Park
-  Contours (5m)



Illustration 2 – Source Protection Zones



Key

-  Source Protection Zone 1
Inner Protection Zone
-  Source Protection Zone 2
Outer Protection Zone
-  Source Protection Zone 3
Total Catchment
-  South Downs National Park



ExQ2	Question:	Applicant response to Question:
		<p>Illustration 3 – Transport</p> <p>The map displays three proposed transport corridors: Corridor D (red), Corridor F (black), and Corridor G (blue). Corridor D is a red line starting near Lasham and Bentworth, heading south towards Ropley. Corridor F is a black line following the railway route through the center. Corridor G is a blue line starting near Ropley and heading north towards the city. The map includes a road network (yellow lines), railway lines (black lines with cross-ticks), and South Downs National Park (green shaded areas). Key roads labeled include B3349, A339, B3004, B3006, A31, and A32. Locations such as Lasham, Bentworth, Heath Green, Meustead, Chawton Park Wood, Ropley, and the city of Southampton are also marked.</p> <p>Key</p> <ul style="list-style-type: none"> Road Network Railway South Downs National Park