

# Lower Thames Crossing

## 9.224 Applicant's response to Procedural Decision 45 The Wilderness

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Procedure) Rules 2010

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# 1 Introduction

## 1.1 Introduction

- 1.1.1 On 8 December 2023, the Examining Authority issued Procedural Decision 45 [\[PD-051\]](#) to seek further information about the designation of “The Wilderness” under the Infrastructure Planning (Examination Procedure) Rules 2010 – Rule 17. Within this Procedural Decision there were several questions directed to the Applicant to be submitted at Deadline 9A.
- 1.1.2 The Applicant has responded to these questions, within this document, using the same notation as that given in Procedural Decision 45.
- 1.1.3 The Applicant notes that it may respond to the material provided by Natural England at Deadline 9A, at Deadline 10.

## 1.2 Applicant’s response to the Questions

**E. What policy response does the Applicant propose to take to designated NPSNN paragraph 5.3.2 which states that: ‘[t]he Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss...’?**

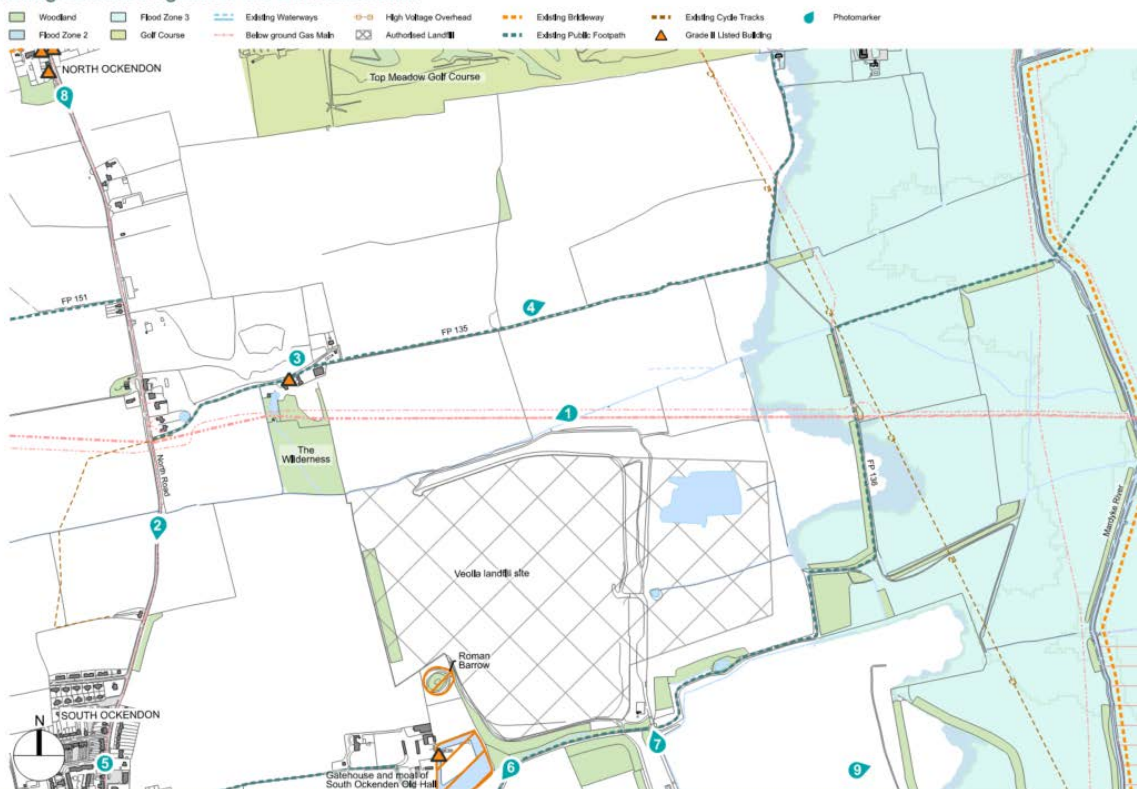
- 1.2.1 The Applicant’s response to the National Policy Statement for National Networks (NPSNN) (Department for Transport, 2014) policy around ancient woodland, set out in paragraph 5.32, is reported in the Environmental Statement Appendix 8.23: Terrestrial Biodiversity Legislation and Policy [\[APP-419\]](#), in Table 1.2. This states “*The design of the Project has been iterative in an effort to avoid loss or deterioration, as far as reasonably practicable, of ancient woodland. Where residual significant effects occur, the Need for the Project [\[APP-494\]](#), Section 3 sets out the needs case for the Project. The Planning Statement [\[APP-495\]](#) sets out the planning balance between the economic, social and environmental benefits the Project would generate against any adverse effects resulting from its construction and operation. This concludes that the national need for and benefits of the Project would outweigh the unavoidable loss of irreplaceable habitats, including ancient woodland, aged (or ancient) trees and veteran trees. A detailed assessment of the likely effects of the Project on aged and veteran trees is provided in Appendix 7.12: Arboricultural Impact Assessment [\[APP-387\]](#), which includes the reasons for the loss of such trees.*”
- 1.2.2 Having reviewed this response in light of the change in designation of part of The Wilderness, the Applicant’s position on this remains the same, that the national need for and benefits of the Project outweigh the unavoidable loss of irreplaceable habitats, including ancient woodland at the Wilderness.

**F. Are there any additional siting or design measures that the Applicant can take to eliminate or further reduce the effects of the Proposed Development on 'The Wilderness' land shown hatched blue in Annex A, beyond or in more detailed and clearly justified terms than those identified in the response to ExQ3 11.1.8 [REP8- 115]? If so, what are those measures? If it is concluded that no such measures can reasonably feasibly be taken, what are the reasons for this conclusion and is any additional reasoning beyond that provided in response to ExQ3 11.1.8 needed in order to respond to NPSNN paragraph 5.3.2?**

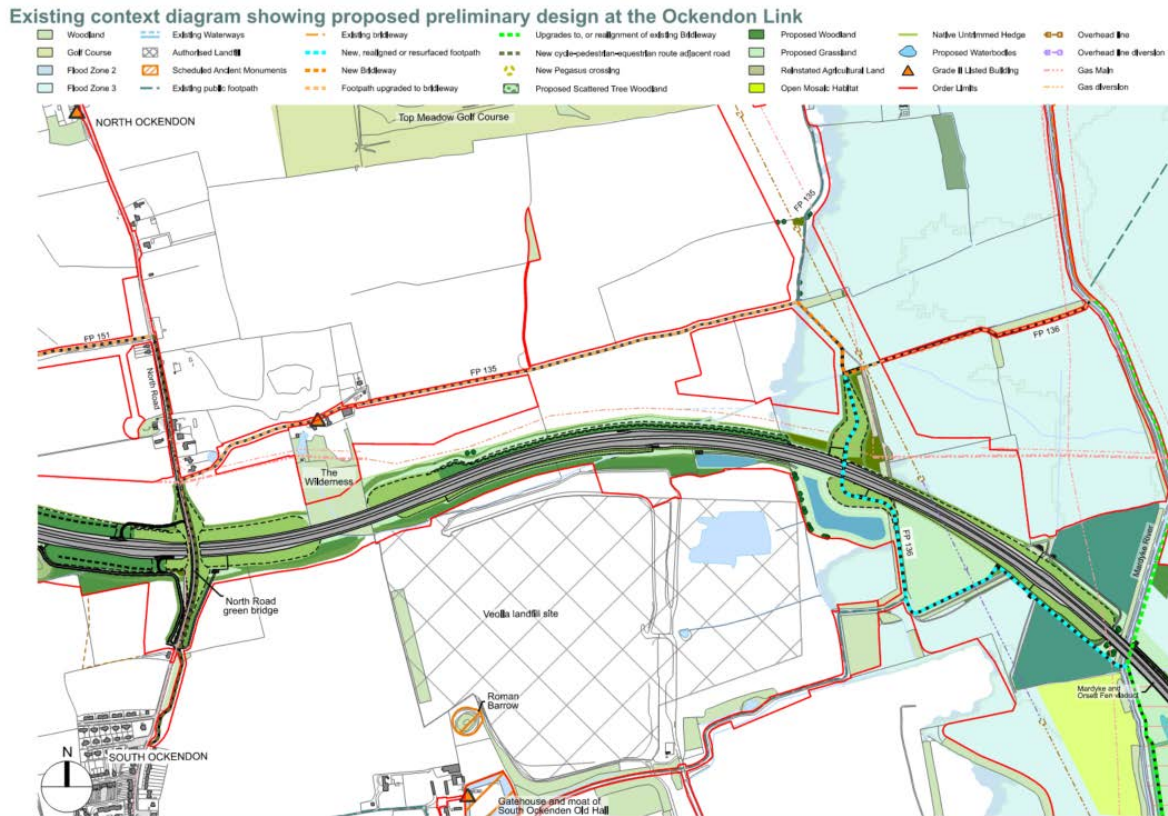
1.2.3 As outlined in Issue Specific Hearings 1, 3 and 9, the alignment of the Project in the Ockendon area is dictated by a number of constraints including in particular The Wilderness and the existing working landfill site, operated by Veolia. These constraints, together with the Preliminary Design are shown in Plates 1.1 and 1.2 below, which are extracts from the Project Design Report: Part D: General Design North of the River – North of the A13 Junction to the M25 [APP-510] pages 22 and 23. As can be seen, the southern tip of The Wilderness is coincident with the northern boundary of the working landfill site.

**Plate 1.1 Existing land use in proximity to The Wilderness**

Existing context diagram of the Ockendon Link



## Plate 1.2 Preliminary Design of the Project in proximity to The Wilderness



Lower Thames Crossing – Project Design Report: Part D North to M25 Junctions

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- 1.2.4 At the options stage the Applicant investigated alternative routes to avoid The Wilderness and the landfill site, however these were not considered feasible for the reasons set out below.
- 1.2.5 Had the Project been realigned to the south, to avoid both the Wilderness and the existing working landfill site, it would have been in conflict with an historic landfill site (now promoted by others as a Solar Farm) and would have an increased impact on the community of South Ockendon, including likely property demolition. A route to the north of The Wilderness would have pushed the Project too far north to be able to tie-in to the M25 south of junction 29, would have put the Project in conflict with the Site of Importance for Nature Conservation (SINC) to the west of North Road and would have increased impacts to the community of North Ockendon.
- 1.2.6 Aligning the Project to cross the active or historic landfill sites would mean crossing an area of 'made ground' estimated to be approximately 18m deep as assessed from LiDAR and parallax bar measurement (Lee *et al*, 2018), noting that the quarry depth was reported, in the original landfill licence application for the site, as between 19m and 33m deep (Cleanaway Ltd, 1996).
- 1.2.7 Without remediation, constructing a highway on such ground would result in significant differential settlement (movement) which would cause the carriageway to breakup, creating major operational safety concerns.

- 1.2.8 To overcome this differential settlement, ground stabilisation works would need to be undertaken and would require either:
- a. The excavation and removal of landfill material to an appropriate off-site location and replacement with suitable engineering fill, noting that the landfill is reported to include toxic liquid waste and asbestos
  - b. The construction of a piled engineering solution through landfill material
- 1.2.9 The impacts of either of the above options on the landfill site could include:
- a. Interference with the ongoing operation of the landfill, including gas and leachate management systems
  - b. Clash with leachate and gas monitoring installations on the boundary of the active and historic landfill sites
  - c. The risk of exposing construction workers and local residents to potentially hazardous waste including toxic liquid and asbestos
  - d. Perforation of the landfill liner, creation of new pollution pathways and likely mobilisation of contaminants into groundwater and surface water sources
  - e. Impacting the wider municipal waste capacity in the area.
- 1.2.10 For these reasons, the Applicant has sought to avoid the landfill site, and has already proposed various mitigation measures to minimise the impact of the Project on The Wilderness, including retaining walls to minimise land take.
- 1.2.11 The Applicant therefore confirms that, following further review at the request of the Examining Authority, no additional measures are proposed beyond those described above and already identified in the Applicant's response to ExQ3 11.1.8 [\[REP8-115\]](#)
- 1.2.12 Notwithstanding this, the Applicant has made a number of commitments, secured by the DCO, to further reduce impacts where feasible on vegetated habitats, including woodland such as The Wilderness, during detailed design and construction. These commitments include in particular Design Principle LSP.01 [\[REP8-082\]](#) and REAC item LV001 [\[REP8-044\]](#).
- 1.2.13 The Applicant considers that, for the reasons given, the proposed solution with some loss of habitat at The Wilderness is unavoidable and complies with the requirements of NPSNN paragraph 5.32.

**G. What (if any) implications would an ancient woodland designation have for the Applicant's Biodiversity Net Gain (BNG) assessment and for biodiversity mitigation and compensation measures included in the application?**

- 1.2.14 The implications from an ancient woodland designation on the biodiversity net gain figures reported by the Applicant in Environmental Statement Appendix 8.21: Biodiversity Metric Calculations [\[APP-417\]](#) are negligible. The area of designated ancient woodland, which is currently captured in the biodiversity unit

value of the Project baseline, would be removed from the baseline metric calculation in line with the methodology reported in Section 3.4 of [APP-417]. This would reduce the Project's baseline biodiversity unit score. The Project's post-development biodiversity unit value would remain as currently reported as the design does not change and so there would be a small increase in the percentage net gain on the baseline value. The reason for this is because the Biodiversity Metric 3.1 user guide (Panks *et al*, 2022) requires that ancient woodland, as an irreplaceable habitat, is omitted from the baseline value and that compensation for irreplaceable habitats is also omitted from the post-development value. However, this change would be so small (the influence of removing 0.44ha within the c.2,100ha included in the Metric assessment) that it would not be seen within the resolution of the metric reporting.

- 1.2.15 In terms of mitigation and compensation measures included in the application, the potential for measures to mitigate impacts from the Project on the area of woodland within The Wilderness designated as ancient is set out in response to ExQ\_F above. With respect to compensation, the proposals for ancient woodland compensation planting, as secured across the Environmental Masterplan [Document Reference 6.2 ES Figure 2.4], the Design Principles [Document Reference 7.5 (7)] and the outline Landscape and Ecology Management Plan [Document Reference 6.7 (7)], have been developed to address the adverse effect of ancient woodland loss at a landscape scale across the Project. The extent of ancient woodland loss north of the river would increase from 1.57ha to 2.01ha with the inclusion of The Wilderness, and this would be offset by the provision of 32.0ha of ancient woodland compensation planting. As reported in the Applicant's comments on Interested Parties' submissions at D7 [REP8-119], given the extent of this compensation planting and its design focus on a landscape-scale provision of habitat creation that develops strong coherent ecological networks, these proposals are considered to be appropriate and proportionate to the likely significant effects on ancient woodland, with the inclusion of the area now designated as ancient woodland within The Wilderness.

#### **H. What (if any) changes to the application would be needed to provide land required for any of the purposes identified in (G)?**

- 1.2.16 It is the Applicant's position that no changes to the ancient woodland compensation planting proposals are required as a result of the designation of part of The Wilderness as ancient woodland.

#### **I. What (if any) changes to the application would be needed to underpin management measures proposed to deliver mitigation and compensation measures on land required for any of the purposes identified in (G)?**

- 1.2.17 Given the Applicant's position that no changes to the ancient woodland compensation planting proposals are required, there would be no changes to any underpinning management measures with respect to this.

**J. What (if any) changes would be required to the Applicant's currently submitted control documents to secure anything arising from (H) or (I)? If amendments to the control documents are deemed necessary and can be submitted by Deadline 9A on 15 December 2023 then please submit them. If they are deemed necessary but cannot be submitted by that Deadline, please indicate how a process to deliver the necessary changes could be secured?**

- 1.2.18 As set out in earlier responses, the Applicant's position is that no further changes are required to the ancient woodland compensation planting proposed to address adverse effects to ancient woodland. There would therefore be no requirement to change any control documents as a result of this.



## References

Cleanaway Ltd. (1996). Area III, South Ockendon, Essex, Application for Waste Management Site Licence for "Area III", Site Assessment Report.

Department for Transport (2014). National Policy Statement for National Networks. <https://assets.publishing.service.gov.uk/media/5a7e0a40ed915d74e6223b71/npsnn-web.pdf>

Lee, M., Mills, A. and Brunsdon, D. (2018). Lower Thames Crossing, Historical Aerial Photograph Interpretation, Document Number: HE540039-CJV-GEN-GEN-TNT-GEO00064, Rev. 01 04 September 2018. Westcliff-on-sea: Ebor Geoscience Ltd

Panks, D., White, N., Newsome, A., Nash, M., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell, T., Cashon, C., Goddard, F., Scott, S. J., Heaver, M., Scott, S. H., Treweek, J., Butcher, B., and Stone, D. (2022). The Biodiversity Metric 3.1: Auditing and accounting for biodiversity. User Guide. York: Natural England. Accessed May 2022.

## Glossary

Term	Abbreviation	Explanation
<b>A122</b>		The new A122 trunk road to be constructed as part of the Lower Thames Crossing project, including links, as defined in Part 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1)
<b>A122 Lower Thames Crossing</b>	<b>Project</b>	A proposed new crossing of the Thames Estuary linking the county of Kent with the county of Essex, at or east of the existing Dartford Crossing.
<b>A122 Lower Thames Crossing/M25 junction</b>		New junction with north-facing slip roads on the M25 between M25 junctions 29 and 30, near North Ockendon.
<b>A13/A1089/A122 Lower Thames Crossing junction</b>		Alteration of the existing junction between the A13 and the A1089, and construction of a new junction between the A122 Lower Thames Crossing and the A13 and A1089, comprising the following link roads: <ul style="list-style-type: none"> <li>• Improved A13 westbound to A122 Lower Thames Crossing southbound</li> <li>• Improved A13 westbound to A122 Lower Thames Crossing northbound</li> <li>• Improved A13 westbound to A1089 southbound</li> <li>• A122 Lower Thames Crossing southbound to improved A13 eastbound and Orsett Cock roundabout</li> <li>• A122 Lower Thames Crossing northbound to improved A13 eastbound and Orsett Cock roundabout</li> <li>• Orsett Cock roundabout to the improved A13 westbound</li> <li>• Improved A13 eastbound to Orsett Cock roundabout</li> <li>• Improved A1089 northbound to A122 Lower Thames Crossing northbound</li> <li>• Improved A1089 northbound to A122 Lower Thames Crossing southbound</li> </ul>
<b>A2</b>		A major road in south-east England, connecting London with the English Channel port of Dover in Kent.
<b>Application Document</b>		In the context of the Project, a document submitted to the Planning Inspectorate as part of the application for development consent.
<b>Construction</b>		Activity on and/or offsite required to implement the Project. The construction phase is considered to commence with the first activity on site (e.g. creation of site access), and ends with demobilisation.
<b>Design Manual for Roads and Bridges</b>	<b>DMRB</b>	A comprehensive manual containing requirements, advice and other published documents relating to works on motorway and all-purpose trunk roads for which one of the Overseeing Organisations (National Highways, Transport Scotland, the Welsh Government or the Department for Regional Development (Northern Ireland)) is highway authority. For the A122 Lower Thames Crossing the Overseeing Organisation is National Highways.
<b>Development Consent Order</b>	<b>DCO</b>	Means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008.

Term	Abbreviation	Explanation
<b>Development Consent Order application</b>	<b>DCO application</b>	The Project Application Documents, collectively known as the 'DCO application'.
<b>Environmental Statement</b>	<b>ES</b>	A document produced to support an application for development consent that is subject to Environmental Impact Assessment (EIA), which sets out the likely impacts on the environment arising from the proposed development.
<b>Highways England</b>		Former name of National Highways.
<b>M2 junction 1</b>		The M2 will be widened from three lanes to four in both directions through M2 junction 1.
<b>M2/A2/Lower Thames Crossing junction</b>		New junction proposed as part of the Project to the east of Gravesend between the A2 and the new A122 Lower Thames Crossing with connections to the M2.
<b>M25 junction 29</b>		Improvement works to M25 junction 29 and to the M25 north of junction 29. The M25 through junction 29 will be widened from three lanes to four in both directions with hard shoulders.
<b>National Highways</b>		A UK government-owned company with responsibility for managing the motorways and major roads in England. Formerly known as Highways England.
<b>National Planning Policy Framework</b>	<b>NPPF</b>	A framework published in March 2012 by the UK's Department of Communities and Local Government, consolidating previously issued documents called Planning Policy Statements (PPS) and Planning Practice Guidance Notes (PPG) for use in England. The NPPF was updated in February 2019 and again in July 2021 by the Ministry of Housing, Communities and Local Government.
<b>National Policy Statement</b>	<b>NPS</b>	Set out UK government policy on different types of national infrastructure development, including energy, transport, water and waste. There are 12 NPS, providing the framework within which Examining Authorities make their recommendations to the Secretary of State.
<b>National Policy Statement for National Networks</b>	<b>NPSNN</b>	Sets out the need for, and Government's policies to deliver, development of Nationally Significant Infrastructure Projects (NSIPs) on the national road and rail networks in England. It provides planning guidance for promoters of NSIPs on the road and rail networks, and the basis for the examination by the Examining Authority and decisions by the Secretary of State.
<b>Nationally Significant Infrastructure Project</b>	<b>NSIP</b>	Major infrastructure developments in England and Wales, such as proposals for power plants, large renewable energy projects, new airports and airport extensions, major road projects etc that require a development consent under the Planning Act 2008.
<b>North Portal</b>		The North Portal (northern tunnel entrance) would be located to the west of East Tilbury. Emergency access and vehicle turn-around facilities would be provided at the tunnel portal. The tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations.
<b>Operation</b>		Describes the operational phase of a completed development and is considered to commence at the end of the construction phase, after demobilisation.

Term	Abbreviation	Explanation
<b>Order Limits</b>		The outermost extent of the Project, indicated on the Plans by a red line. This is the Limit of Land to be Acquired or Used (LLAU) by the Project. This is the area in which the DCO would apply.
<b>Planning Act 2008</b>		The primary legislation that establishes the legal framework for applying for, examining and determining Development Consent Order applications for Nationally Significant Infrastructure Projects.
<b>Project road</b>		The new A122 trunk road, the improved A2 trunk road, and the improved M25 and M2 special roads, as defined in Parts 1 and 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1).
<b>Project route</b>		The horizontal and vertical alignment taken by the Project road.
<b>South Portal</b>		The South Portal of the Project (southern tunnel entrance) would be located to the south-east of the village of Chalk. Emergency access and vehicle turn-around facilities would be provided at the tunnel portal. The tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations.
<b>The tunnel</b>		Proposed 4.25km (2.5 miles) road tunnel beneath the River Thames, comprising two bores, one for northbound traffic and one for southbound traffic. Cross-passages connecting each bore would be provided for emergency incident response and tunnel user evacuation. Tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations. Emergency access and vehicle turn-around facilities would also be provided at the tunnel portals.

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