

Lower Thames Crossing
6.3 Environmental Statement
Appendices
Appendix 1.1 Competent
Expert Evidence

APFP Regulation 5(2)(a)

Infrastructure Planning (Applications:
Prescribed Forms and Procedure)
Regulations 2009

Volume 6

DATE: October 2022

Planning Inspectorate Scheme Ref: TR010032
Application Document Ref: TR010032/APP/6.3

VERSION: 1.0

Lower Thames Crossing

6.3 Environmental Statement Appendices

Appendix 1.1 Competent Expert Evidence

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1 Appendix 1.1 Competent Expert Evidence

1.1.1 This Environmental Statement (ES) has been produced by competent experts with the relevant experience in their respective specialist topics. A summary of the experience of the team is provided in Table 1.1 These individuals are part of a wider team of engineering and environmental professionals involved in the EIA process and the production of the ES.

Table 1.1 Environment team qualifications and experience

Topic/role	Name	Relevant academic and professional qualifications	Relevant experience in the environmental assessment of infrastructure projects
Environment Strategic Director	Deryl Roberts	<ul style="list-style-type: none"> Alumnus of the Senior Executive's Seminar on Sustainable Development, CPI-BEP, Cambridge University BSc (Hons) Marine Biology Chartered Environmentalist Member of the Institute of Environmental Management and Assessment 	Deryl has over 30 years of relevant experience and has led consenting and Environmental Impact Assessment (EIA) for many major projects including Anglian Water's Strategic Pipeline Alliance, High Speed 2, Wylfa Newydd and Moorside new nuclear power plants, Nimba iron ore railway, Bardonia quarry extension, Cardiff Bay Barrage plus a number of other power and transportation projects.
Environment Lead	Barney Forrest	<ul style="list-style-type: none"> MSc Environmental Science BSc (Hons) Genetics Chartered Environmentalist Member of the Institute of Environmental Management and Assessment 	Barney has 17 years experience as an environmental practitioner. Barney has led and coordinated Environmental Statements on many key projects, including Thames Tideway Tunnels, Heathrow Terminal East, and a number of gas pipelines.
Air Quality	Paul Manktelow	<ul style="list-style-type: none"> PhD Atmospheric Chemistry BSc (Hons) Environmental Science Chartered Scientist Member of The Institute of Air Quality Management 	Paul has 16 years of relevant experience and has led air quality assessments for multiple highway projects, including A63 Castle Street (Development Consent Order (DCO)), M20 Lorry Park and A2 Bean and Ebbsfleet Junction Improvements.

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		<ul style="list-style-type: none"> Member of The Institution of Environmental Sciences 	
	Stephen Pyatt	<ul style="list-style-type: none"> MSc Environmental Management BSc (Hons) Environmental Science Chartered Environmentalist Member of The Institute of Air Quality Management Member of The Institution of Environmental Sciences 	Stephen has over 18 years experience as an air quality specialist. Stephen has led on the completion of EIAs for large infrastructure road schemes such as Silvertown Tunnel, Manchester Smart Motorways. He has also acted as an expert witness for road schemes in the UK and Ireland.
Cultural Heritage	Lara Bishop	<ul style="list-style-type: none"> PhD Archaeology MPhil Archaeological Practice BA (Hons) Ancient History and Archaeology 	Lara is a Senior Archaeologist with 9 years relevant experience and has led the cultural heritage assessment on the DCO for an electricity transmission project and contributed to the heritage assessment on a high-pressure gas pipeline replacement DCO. She has most recently worked on the heritage assessment for a highway improvement scheme in Wales, the M4 Junction 34 – A48.
	Ed Dickinson	<ul style="list-style-type: none"> BA Archaeology Member of the Chartered Institute for Archaeology Member of the Institution of Environmental Sciences 	Ed has over thirty years relevant experience in consultancy and local government and has acted as the cultural heritage lead on several DCO projects including the Southampton to London pipeline, the A12 Chelmsford to Marks Tey Road improvement scheme and the A120 Braintree to Marks Tey road improvement scheme.
Landscape and Visual	Stephen Knott	<ul style="list-style-type: none"> BA Landscape Architecture 	Stephen has over 30 years of relevant experience as a Landscape Architect and

Topic/role	Name	Relevant academic and professional qualifications	Relevant experience in the environmental assessment of infrastructure projects
		<ul style="list-style-type: none"> • Diploma Landscape Architecture • Chartered Member of the Landscape Institute 	has led landscape and visual impacts assessments for many major projects. Stephen has acted as expert witness for two previous DCO projects, (the Southampton to London Pipeline project and the Wylfa Newydd new nuclear build project).
	Helen Pope	<ul style="list-style-type: none"> • BSc (Hons) Landscape Design and Ecology • Diploma in Landscape Architecture • Chartered Member of the Landscape Institute 	Helen has over 14 years of relevant experience as a Landscape Architect and has undertaken landscape and visual impact assessments for multiple highway and infrastructure projects, including highway improvements associated with the Wylfa Newydd DCO and the A19 Downhill Lane Junction Improvement DCO.
Arboriculture	Neil Davies	<ul style="list-style-type: none"> • Technician grade of the Arboriculture Association 	Neil has 26 years of relevant experience and has led on 12 DCO projects and two Hybrid Bills for arboriculture. This includes numerous highway and infrastructure projects such as the A30 Chiverton to Carland Cross Scheme and HS2 Phase one Area North.
Arboriculture	John Mitchener	<ul style="list-style-type: none"> • BSc (Hons) Countryside Management • Professional Member of the Arboricultural Association 	John has 17 years relevant experience and has acted as arboricultural lead on numerous highway and infrastructure projects including the A1 Birtley to Coalhouse DCO and Aquind Interconnector DCO.
Terrestrial Biodiversity	Sally Fraser	<ul style="list-style-type: none"> • PhD in Ecological Sciences • BSC (Hons) Ecological Science (Wildlife Management) 	Sally is an Associate Director of Ecology with 15 years consultancy experience. Sally has worked on projects across the UK which have covered

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		<ul style="list-style-type: none"> • Chartered Environmentalist • Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) 	nuclear power stations, wind farm and energy from waste developments, road schemes, pipelines, residential and commercial developments. Sally's core skills sit within ecological assessment including Biodiversity Net Gain (BNG), Ecological Impact Assessment (EclA) and Habitat Regulations Assessment (HRA). Sally has a technical career focus and has led on various technical ecological aspects of Nationally Significant Infrastructure Projects.
	Nick Clark	<ul style="list-style-type: none"> • MSc Oceanography • BSc (Hons) Zoology • Chartered Environmentalist • Full Member Chartered Institute of Ecology and Environmental Management 	Nick has over 18 years relevant experience as an ecologist, having led the ecological input on a range of infrastructure projects including Wylfa Newydd power station DCO, and the Oxford to Cambridge Expressway. He has acted as Expert Witness at DCO Examination, public inquiries and planning hearings.
	Liz Allchin	<ul style="list-style-type: none"> • PhD Plant Ecology • MSc Ecology • BSc (Hons) Environmental Biology • Chartered Environmentalist • Full Member Chartered Institute of Ecology and Environmental Management 	Liz has worked as an ecological consultant for more than 20 years. Prior to that, she undertook post-doctoral research on the impacts of nitrogen deposition on heathlands. Liz leads on various technical ecological aspects of large infrastructure projects, particularly Habitats Regulations Assessments and assessment of ecological effects of nitrogen deposition. She has acted

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			as expert witness at DCO examinations.
Marine Biodiversity	Rachel Wilson	<ul style="list-style-type: none"> • BSc (Hons) Marine and Freshwater Biology • MSc Oceanography • Chartered Biologist with the Royal Society of Biology 	Rachel has 18 years relevant experience in marine ecology. She has been marine lead author on numerous marine EIAs and was the marine lead for the Wylfa Newydd DCO, supporting the project through examination.
	Matt Robson	<ul style="list-style-type: none"> • BSc (Hons) Marine and Environmental Biology • MSc Aquatic Resource Management • Chartered Water and Environmental Manager • Chartered Environmentalist Chartered Institution of Water and Environmental Management 	Matt has 20 years relevant experience and has been the marine ecology specialist on numerous projects, including National Grid's North Wales Connection DCO and the marine modelling lead on the Wylfa New Nuclear DCO.
Geology and Soils	Alison Pugh	<ul style="list-style-type: none"> • BSc (Hons) Chemical Physics • MSc (DIC) Environmental Technology • Chartered Water and Environmental Manager • Chartered Environmentalist • Chartered Scientist 	Alison has 20 years experience in geo-environmental assessment. Alison has led the Geology and Soils assessments as part of the EIA on highways projects such as the A585 (Skeppholme to Windy Harbour DCO application) and Feeder 9 Gas Pipeline Replacement (National Grid). She has prepared equivalent chapters for several large, proposed housing development schemes.
	Bruce Lascelles	<ul style="list-style-type: none"> • BSc (Hons) Forestry and Soil Science • PhD Soil Science • Fellow, British Society of Soil Science • Member, Chartered Institute of Ecology and 	Bruce has nearly 30 years experience as a soil and environmental scientist. Bruce has led numerous soil and Agricultural Land Classification assessments as part of EIAs on highways projects such as the A585

Topic/role	Name	Relevant academic and professional qualifications	Relevant experience in the environmental assessment of infrastructure projects
	Mark Rowney	<ul style="list-style-type: none"> Environmental Management • Chartered Environmentalist • MSc Soil and Water Engineering • Chartered Engineer (CEng) • Chartered Water and Environment Manager (CWEM) • Qualified Person (QP169) • Specialist in Land Condition (SILC) • Suitably Qualified Person (SQP) 	<p>and A66, linear gas pipeline schemes and major development such as the Sizewell C nuclear new build.</p> <p>Mark has over 20 years' experience delivering environmental and contaminated land services on projects across a wide range of sectors. Mark has extensive experience in the assessment and management of ground hazards and land contamination issues including providing technical advice on numerous transport linear infrastructure projects including HS2, SW Rugby, A30, and the A391.</p>
Material Assets and Waste	Sara Craze	<ul style="list-style-type: none"> • BSc (Hons) Geography and Environmental Science, • MSc Environmental Management and Technology • Full Member Chartered Institution of Wastes Management and 	<p>Sara has over 18 years experience working in waste management. Sara has contributed and reviewed a number of material and waste chapters for Environmental Statement's, considering the waste and material issues that need to be examined on DCO projects including Thames Tideway Tunnels, High Speed 2 and Wylfa Newydd DCO,</p>
Noise and Vibration	Kevin Doyle	<ul style="list-style-type: none"> • MSc Applied Acoustics • IOA Diploma Acoustics and Vibration • Diploma Audio Engineering • Corporate Member of Institute of Acoustics 	<p>Kevin has 14 years of relevant experience in the field of noise and vibration and has acted as technical lead on DCO projects such as A585 (Highways England), Silvertown Tunnel (TfL) and Feeder 9 Gas Pipeline Replacement (National Grid).</p>

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	Peter Tallantyre	<ul style="list-style-type: none"> • BSc (Hons) Geology • Corporate Member of the Institute of Acoustics 	Peter has 26 years' experience in environmental acoustics and has acted as the noise and vibration lead on numerous projects including Silvertown Tunnel, High Speed 2 and London Power Tunnels
	Dr Debbie Marsden	<ul style="list-style-type: none"> • BSc (Hons in Physiology and Genetics) • PhD in Animal Behaviour, Husbandry and Welfare 	Over 20 years experience of Equestrian Expert Witness work, currently listed in the 'vetted' and checked UK register of Expert Witnesses.
	Rupert Thornley Taylor	<ul style="list-style-type: none"> • Fellow of the Institute of Acoustics • Past Director of International Institute of Acoustics and Vibration • Past President of Association of Noise Consultants • Member of the Institute of Noise Control Engineering of the USA • Member of the Acoustical Society of America 	Rupert Taylor is a world leader in the field of vibro-acoustics of railway structures and tunnels, with extensive experience in the measurement of railway vibration and noise, and the modelling, by numerical methods, the time-domain vibro-acoustic-dynamic behaviour of a moving train on a bridge or in a tunnel including all the effects of wheel and rail roughness and dynamic forces.
Population and Human Health	Alison Powell	<ul style="list-style-type: none"> • BA (Hons) Geography • MSc City and Regional Planning • Chartered Member of the Royal Town Planning Institute 	Alison has 20 years' experience in socioeconomics, health and equality assessments. She has acted as discipline lead for People and Communities, Community and Private Assets and Health Impact Assessments on DCO projects including Silvertown Tunnel (TfL), the M4 Smart Motorway (Highways England) and the A585 (Highways England).

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	Andy Fell	<ul style="list-style-type: none"> BA (Hons) Applied Geography Practitioner member of IEMA 	Andy has managed and coordinated the production of EIA chapters including Population & Health so has a working understanding of the assessment and relevant guidance.
Road Drainage and Water Environment	Lisa Driscoll	<ul style="list-style-type: none"> BSc (Hons) Environmental Biology MSc Water Management Member of the Chartered Institution of Water and Environmental Management 	Lisa has been working in road drainage and the water environment assessment for 19 years and has acted as the water environment lead on numerous projects including the Silvertown Tunnel, the M4 J3 to J12 Smart Motorway and A585 Skippool to Windy Harbour DCO applications and currently is fulfilling this role on the Humber Low Carbon Pipelines and Bramford to Twinstead Reinforcement DCO projects.
	Federico Fragalà	<ul style="list-style-type: none"> BSc in Geological Sciences PhD School of Civil Engineering & Geosciences (Hydrogeology) Fellow of the Geological Society of London Chartered Geologist (CGeol) of the Geological Society of London 	Federico has over 20 years of experience in hydrogeology. He has worked on the impact assessment of numerous road infrastructure projects including major schemes as the Aberdeen Western Peripheral Route, Forth Replacement Crossing, Dunkettle Interchange and N69 Lystowel Bypass. He has acted as Hydrogeology technical lead on the A303 Amesbury to Berwick Down (Stonehenge) Tender Design and is an Associate Director on the High Speed 2 (HS2) C2-C3 sections providing senior technical advice on hydrogeology matters.
	Carol Davies	<ul style="list-style-type: none"> BSc (Hons) Geology MSc Hydrogeology 	Carol has been working as a hydrogeologist for 32

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		<ul style="list-style-type: none"> • Chartered Geologist (specialising in Hydrogeology), Geological Society of London 	<p>years and has acted as the groundwater environment lead for numerous projects including the A585 Skippool to Windy Harbour DCO application and the A2 Bean to Ebbsfleet scheme.</p>
Climate	Erik Keupink	<ul style="list-style-type: none"> • MSc Environmental Sciences 	<p>Erik has more than 30 years' of experience as environmental / sustainability lead and specialist in large infrastructure projects and multidisciplinary studies.</p>
Cumulative Effects Assessment	Lorna Napier	<ul style="list-style-type: none"> • MSc Environmental Science Policy and Planning • BSc (Hons) Biology and Geography • Practitioner of the Institute of Environmental Management and Assessment 	<p>Lorna has nearly 20 years' experience in Environmental Impact Assessment. She has coordinated and authored environmental assessments, including cumulative effects assessments for road schemes including M6 Junction 2-4 Smart Motorway.</p>
Major Accidents and Disasters	Leslie Walker	<ul style="list-style-type: none"> • BSc (Hons) Combined Studies • MSc Rural Resources and Environmental Policy • Fellow of the Chartered Institution of Water and Environmental Management, Chartered Member • Chartered Environmentalist • Chartered Scientist • Member of the Institute of Environmental Management and Assessment • Principal EIA Practitioner 	<p>Leslie is a Technical Director with over 25 years' experience in Environmental Impact Assessment. Leslie has led and coordinated Environmental Statements, and co-ordinated specialist studies on many key projects, including Scottish Power's Dyfnant Forest Wind Farm DCO.</p>

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Environment Senior Advisor (REAC)	Adrian Dawes	<ul style="list-style-type: none"> • MSc Pollution and Environmental Control • BSc Chemistry • Chartered Environmentalist (CEnv) • Member of Institute of Environmental Assessment and Management. 	<p>Adrian has over 30 years' experience as an EIA practitioner. Adrian has led environmental assessment work on a wide variety of development projects including numerous major highway schemes for National Highways. Examples of his project work include option identification and evaluation for a proposed Oxford to Cambridge expressway scheme, the Wylfa Newydd Nuclear Power Station DCO and the A14 Cambridge to Huntingdon Improvement Scheme DCO.</p>
Environmental Procurement Lead and Senior Environmental Manager (CoCP)	Julian Whittle	<ul style="list-style-type: none"> • MSc Wastewater and Environmental Management • BSc (Hons) Environmental Science • Chartered Environmentalist • Member of the Institute of Environmental Management and Assessment 	<p>Julian has been an environmental professional for over 20 years with core experience in all aspects of environmental management. Julian's environmental management experience extends across many infrastructure and construction projects including both capital project and frameworks such as Crossrail, Heathrow Terminal 2A, Thames Water and a number of gas pipelines.</p>
Alternatives Chapter Author / Environment Technical Reviewer	Sharon Woodruff	<ul style="list-style-type: none"> • Chartered Environmentalist • Full Member of the Institute of Environmental Management and Assessment • MSc Environmental Impact Assessment and Management • Foundation course in Environmental Auditing 	<p>Sharon has 23 years' experience as an environmental professional. Her early career focussed on Environmental Management roles, and she has worked in Environmental Impact Assessment for the last 15 years. Sharon has taken a lead role on the Environmental Impact Assessments for a number</p>

Topic/role	Name	Relevant academic and professional qualifications	Relevant experience in the environmental assessment of infrastructure projects
		<ul style="list-style-type: none"> • Postgraduate Diploma in Water, Energy and the Environment • Diploma from the Chartered Institution of Water and Environmental Management • BSc (Hons) Geography 	<p>Nationally Significant Infrastructure Projects, and she also has extensive experience of leading the EIA process for planning consent under the Town and Country Planning regime, and of delivering environmental compliance for projects carried out under Permitted Development rights. Sharon has particular experience in rail, highways and energy projects.</p>

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Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ

National Highways Company Limited registered in England and Wales number 09346363