

## Project Overview

Lower Thames Crossing (LTC) is issuing this Market Sounding Questionnaire (MSQ) in conjunction with the External Affairs team. We are looking for feedback from businesses in the region in relation to their appetite, capacity and capability associated with the construction of the LTC. We are looking to engage with businesses<sup>1</sup> and Social Enterprises of all shapes and sizes up and down the UK.

The proposed LTC is part of the biggest investment in the country's road network for a generation and is an essential component in the UK's future transport infrastructure. LTC will boost local, regional, and national economies whilst offering new connections, better journeys, and fewer delays.

The LTC is a proposed new trunk road connecting Kent, Thurrock, and Essex through a tunnel beneath the River Thames. The Project will almost double the road capacity across the River Thames, east of London.

On the south side of the River Thames, the new road would link to the A2 and M2 in Kent. On the north side, it would link to the A13 in Thurrock and the M25 in Havering. The tunnel crossing would be located to the east of Gravesend on the south side of the river, and to the west of East Tilbury on the north side.

It is the UK's largest single road investment project since the M25 was completed more than 30 years ago. The crossing under the River Thames will be the longest road tunnel in the country. At 16 metres in diameter, it will be one of the largest bored tunnels in the world.

The Lower Thames Crossing will comprise of:

- Approximately 14.5 miles (23km) of new motorway connecting the tunnel to the existing road network from the A2/M2 to the M25.
- Three lanes in both directions for most of the route with a maximum speed limit of 70mph.
- Improvements to the M25, A2 and A13, where the Lower Thames Crossing connects to the roads network.
- New structures and changes to existing roads (including bridges, buildings, tunnel entrances, viaducts, and utilities such as electricity pylons) along the length of the new road.
- Two 2.5mile (4km) tunnels, one for southbound traffic, one for northbound traffic crossing beneath the river, and a free flow charging system, using remote pay, similar to that at the Dartford Crossing.
- The Project's estimated cost is between £6.4bn and £8.4bn, and it has an estimated construction period of 6 to 7 years.

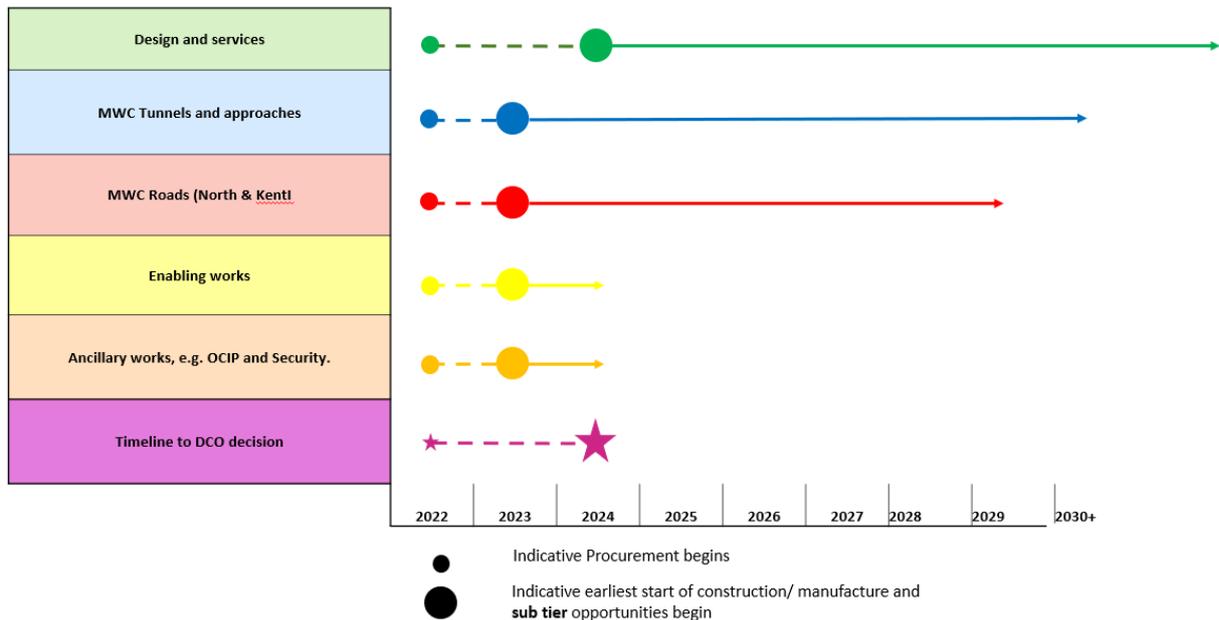
It will be delivered through three tier 1 main works contracts (MWCs): the Kent Roads Contract, the Tunnels and Approaches Contract and the Roads North of the Thames Contract, by the Integrated Client Team (ICT) which includes National Highways, the Integration Partner, the Technical Partner and the Commercial Partner.

LTC's MWC suppliers will use sub-contractors and sub-consultants to delivery elements of this work. This model will open a range of supply chain opportunities to work for National Highways indirectly

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<sup>1</sup> Local is defined as businesses registered in the SELEP area (including East Sussex, Essex, Kent, Medway, Southend, and Thurrock) plus any business located in a district that falls within 30km of the LTC development boundary.

from late 2023 through to project completion. An indicative project timeline incorporating expected procurement and delivery phases of key work packages and expected DCO decision can be found below.



## LTC Critical Success Factors

### Project Strategic Objectives:

We understand that building a major piece of infrastructure will have an impact on those living nearby but we are committed to leaving a positive legacy.

- Better access to existing jobs for Gravesham, Thurrock and Havering as improved journey times would bring over 400,000 more jobs within a 60-minute commute, when the new crossing is open for traffic.
- 80% of the new road would now be in a cutting, false cutting, or tunnel to reduce its visual impact.
- Two new public parks would be created:
  - Chalk Park, a 38-hectare park near Gravesend
  - Tilbury Fields, a 48-hectare park overlooking the Thames in Thurrock.
- We would remove the need for over 470,000 HGV movements on local roads by beneficially reusing excavated material in the parks.
- We are replanting over 260 hectares of new woodland – six times more trees than the number lost. In addition, we’re creating a new 100-hectare community woodland in partnership with Forestry England, near Great Warley in Brentwood.
- There would be 46km of new, realigned, or improved footpaths, cycleways, and bridleways.
- Seven new green bridges would connect footpaths, bridleways, and ecological habitats.
- New and improved habitats for wildlife would include 120% more hedgerows, 40% more ponds and 10% more ditches.
- Reduced congestion at the Dartford Crossing and approach roads would improve local air quality.

The Lower Thames Crossing would provide a number of other benefits to local communities, including:

- Supporting jobs for 22,000 people, including hundreds of apprentices and graduates during construction
- Bringing businesses closer to their customers and suppliers
- Upskilling local businesses with free training to give them the skills needed to work on this and other projects
- Working with local schools and colleges to inspire a new generation of engineers

## 1. Skills & Employment

To build the proposed Lower Thames Crossing, we'll need a diverse workforce ranging from highly skilled engineers, architects, and designers to other essential staff such as caterers, sign makers and IT support. Over the six-year building phase, we anticipate that the Project will support more than 22,000 jobs, including 10,000 alone during the peak year of construction, and work for hundreds of businesses, both locally and nationally

Our commitment is to create opportunities, for new jobs, new skills, new training, new education, and new work. Our overarching objectives are to:

- **Bring new jobs and training** - our attention will be on providing residents with new job, training, and placement opportunities, this will include an inclusive recruitment programme that supports local priority groups.
- **Create a lasting skills legacy** - through understanding and addressing the skills gap and prioritising greener ways of working we will upskill communities, including with apprenticeships, graduate and traineeships and leave a lasting skills legacy for the region and construction industry.
- **Inspire future careers** – by creating a greater awareness and exposure into our industry and STEM subjects with young people, teachers, and parents, we'll encourage the next generation of talent.
- **Support business growth** – with a Supply Chain Support Programme designed to improve capability and capacity, we'll provide local businesses with the tools to adapt into a greener economy, win new work and maximise economic benefits during and after construction.

The SEE strategy's aims, objectives and targets will be written into all delivery partner contracts, including the three main works contracts, the specialist contracts (i.e., utilities, archaeology) and their supply chain. Each will be required to submit an annual Employment and Skills Plan which aligns with their key performance indicators (KPI) and the SEE strategy.

The LTC will ensure that the Project is setting the standard for supporting skills, employment, training, and career development. We will work with bidders for the delivery contracts through the tendering phase and after the contract award to ensure they are committed to delivering the SEE strategy's focus areas.

## 2. Carbon Management

Carbon management is now a driving mantra for National Highways. The UK Government has set out a challenging pathway to net zero emissions for the nation by 2050. Emissions from the transport sector are substantial and must be reduced significantly over the next ten years. For this reason, National Highways have published their own strategy called Net Zero Highways

Our 2030 / 2040 / 2050 Plan. This sets out the means by which corporate, construction & maintenance and road user emissions will be reduced.

For the building of the Lower Thames Crossing, the targets, and objectives for the construction & maintenance section of the Net Zero Highways document sets out a challenging set of objectives. These include a commitment to follow a trajectory of reducing construction and maintenance emissions 0-10% by 2025, 40-50% by 2030, 70-80% by 2035 and net zero by 2040 against a 2020 baseline. These are challenging targets that the Lower Thames Crossing intends to achieve through good carbon management throughout the supply chain during detailed design, construction and then during future maintenance and replacements.

To achieve this, we will require the supply chain to adopt good carbon management practices. Our Tier 1 & 2 contractors are required to become verified to PAS 2080 Carbon Management in Infrastructure and to promote those good practices throughout the supply chain.

Main Works Contractors and suppliers will be able to use this system and carbon reduction solutions to:

- Demonstrate their commitment to carbon reduction for Lower Thames Crossing
- Identify low carbon solutions, innovations and efficient working practices that help reach the reduction targets
- Work with National Highways to measure and monitor carbon reduction
- Collaborate with National Highways on this and projects across the supply chain
- Learning to do this will give you a competitive edge when bidding for other tenders in future

### 3. Equality, Diversity and Inclusion

More than 22,000 people will work on LTC. For the programme to be delivered safely, on time and on budget, every one of these individuals must feel psychologically safe and included. They must feel safe and comfortable to be themselves, and to speak up to share their ideas and their concerns.

To ensure the infrastructure we build is inclusive and the work we do takes into account the diverse needs of local people, we will need to embed the principles of inclusion into everything we do. This means LTC needs to go far beyond merely complying with legislative requirements set out in the Equality Act. It will require open collaboration across the programme's supply chain, industry partners and other major projects.

Our EDI ambition is to create a psychologically safe and inclusive environment that allows people to bring their whole selves to work. Key to this will be:

- **Leadership.** Those with greater influence or authority because of their position will be expected to lead by example – they won't be expected to get everything right all the time, but they will be expected to adopt a growth mindset, consistently consider different

people's needs and perspectives, and proactively strive to create a more inclusive environment.

- **Open collaboration.** All organisations at all tiers of LTC's delivery, including the Integrated Client Team, the main works contractors and their supply chains, will be expected to take an active part in open collaboration to contribute to a psychologically safe and inclusive culture.
- **Innovation.** LTC will build on the lessons of previous and current major projects as well as other sectors, applying these lessons to continuously improve our EDI performance. We will seek out and apply innovative new approaches backed by research and avoid doing things just because 'it's the way things have always been done'.

For the small and medium enterprises within our supply chain, this means at a minimum we'll expect to see a well-thought-out EDI policy and a strategy or action plan to deliver this policy. If potential suppliers don't already have this in place, that's not a problem – we and our main works contractors can offer advice and support.

#### 4. Health, Safety & Wellbeing

Our aim is for the LTC Programme to be leading the industry when it comes to Health, Safety and Wellbeing (HSW). To do this, we will listen to the experiences from other high-performing projects and seek to build on their standards. We have set out our Programme's ambitions and objectives within our LTC HSW Strategy.

Our intention is to deliver a step change in HSW performance that can be carried forwards into future projects and programmes, both for National Highways and the construction industry as a whole. This means we need our culture to be open, responsive, and forward-looking; and our leaders need to demonstrate their continued support and ongoing commitment by:

- **Instilling a culture that is open:** Our aim is to create a culture where everyone feels comfortable to raise safety, mental and occupational health, and wellbeing concerns. This includes creating a working environment where everyone feels respected and able to bring their whole self to work, everyday
- **Acting on what we are told:** Our aim is to create the right environment for active listening, where we respond to what we are told (rather than what we hear), so that people are willing and able to share their experiences, observations, and ideas on how we can improve.
- **Applying the lessons of the past to the future:** Our ambition and our vision relies on us capturing the lessons from our own programme and other major programmes, and then applying those learnings to continuously improve our own HSW record and so that others can build on this in the future.

Our goal is to make sure every single individual who is part of the programme – whether they work on, use, or are part of the communities affected by the Lower Thames Crossing – can return Home, Safe and Well every day.

## 5. Digital & Technology

Our vision for Digital Roads will harness data, technology and connectivity to improve the way the Strategic Road Network (SRN) is designed, build and used. It will enable state of art delivery of the Lower Thames Crossing through secure, trusted data and use of technology to drive and promote engineering innovation, reducing our carbon footprint and improving productivity and safety.

We will set a new benchmark for using LTC Digital to provide improved wellbeing, drive transparency and increase sustainability, to make better informed decision, aligning our digital programme with the National Highways “Digital by Default” and “Digital Roads Programme”.

The creation of a fully attributed federated Project Information Model will be at the centre of our designs including :-

- Consent management and discharge
- Requirements management and progressive assurance
- Carbon and Environmental Management
- Programme Controls (Time Cost, Risk)
- Hazard identification, mitigation and visualisation
- Collaborative spatial coordination
- Digital Rehearsals
- Safety and Security

Lower Thames Crossing needs digital delivery expertise and partners to support Main Works Contractors in delivering Digital Roads technology at the fore front of design and innovation.