Design

Ensuring that the permanent elements of the Thames Tunnel project are well designed is an essential part of the project.

We want our designs to be of high quality and provide value to the local community, while also having regard to cost. We aim to ensure they respect each site’s individual location and setting, while recognising the common function all sites have in providing a cleaner, healthier River Thames.

Our engineering designs for the below ground infrastructure will meet safety, functional, environmental, maintenance and access requirements. Structures and finished surfaces will be of an appropriate quality and robust. Where we create new public open spaces, they will be designed to positively enhance the environment and provide a lasting legacy.

We are preparing a design strategy, which will set out our approach to architectural and landscape design.

In developing our designs for phase two consultation, we have taken into account:

- local context of each site, including specific opportunities and constraints
- feedback received at phase one consultation
- planning policy set out at national, London and local levels
- comments received as part of our ongoing engagement with technical consultees, including local authorities
- ongoing technical work, including assessment of possible environmental effects.
Key stages of design

Ongoing design development including engagement with stakeholders

Developing designs for a major project involves a series of stages, from concept designs to more detailed designs. Consultation with technical consultees and the public informs the development of the designs.

At phase one consultation we presented illustrative visualisations. Since then design development has continued and we are now presenting more detailed proposals and visualisations as part of phase two. Feedback from phase two consultation, ongoing engagement and technical work will continue to influence the design until the submission of our planning consent application in late 2012.

Independent design review

We have completed two design reviews, hosted and chaired by the Design Council CABE (Commission for Architecture and the Built Environment). Design Council CABE has considerable experience of reviewing city-wide and Thames-side projects.

The design review process seeks to challenge and improve proposed designs.

The review panel comprised independent architects, landscape architects, engineers, an urban planner and an access specialist. The panel was also observed by technical consultees including local authorities and other bodies, such as English Heritage, the Greater London Authority and the Environment Agency.

The first round of reviews was held in early 2011. The second round, where more detailed proposals were presented, was held in mid 2011.

After the reviews, Design Council CABE provided us with a clear appraisal of the proposals and an idea of how they thought the design should proceed.

These ideas have been incorporated into the design, wherever practical.

Design Council CABE will be publishing its comments on the proposals presented at our phase two consultation.

Members of Design Council CABE at the Sir Joseph Bazalgette memorial.
Factors influencing the permanent design

The permanent works required depend on the functional requirements for each site, such as capacity of the system and how the tunnel is ventilated.

Each site is different and the design must respond to local circumstances. We have tried to introduce common design elements across the sites, while ensuring the design respects the local environment.

Potential environmental effects of the design are important. As part of the Environmental Impact Assessment (EIA), we have identified likely significant environmental effects of our proposals and considered how these can be addressed. Some of the environmental effects have been addressed through the design of our permanent works.
### Common design principles

This table sets out common principles that we have applied to all sites. We have reviewed the application of these principles in light of the local context of each site.

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<th>Aim</th>
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| Responsible          | • Respect each site’s individual context and surroundings.  
                        • Engage with stakeholders, being open to new ideas and identifying synergies with others.  
                        • Challenge operational functional needs to create sites that fit within the day-to-day life of the city.  
                        • Reduce the impact of structures in the river, taking into account effects on river flow, the needs of river users and the ecology of the river.  
                        • Ensure the principles of sustainability are integral to our designs by incorporating environmental solutions.  
                        • Develop a theme across the sites that recognises the common role of the project and the sites to creating a cleaner, healthier river. |
| Flexible and creative| • Where opportunities arise, create new, high quality, public spaces.  
                        • Where there are existing site developments, work with developers of sites to find mutually acceptable solutions. Where development plans are less certain, provide flexible solutions that are able to respond to future aspirations.  
                        • Where our sites are on Thames Water operational sites, maintain designs that meet functional requirements but still respect their context and enhance their wider surroundings. |
| Functional           | • Develop high quality, well designed and durable solutions.  
                        • Provide safe and accessible sites for both the public and operational staff.  
                        • Develop low maintenance solutions that meet engineering operational requirements, using Thames Water sites, wherever possible.  
                        • Ensure that spaces intended to be handed over to others can be maintained to a good standard in the long term.  
                        • Have due regard to planning policy and best practice.  
                        • Extend and reinstate the Thames Path, where possible. |

For further information see our website: [www.thamestunnelconsultation.co.uk](http://www.thamestunnelconsultation.co.uk) or call us on 0800 0721 086.

Phase two consultation (Autumn 2011)