



- e. A Risk, Issue and Opportunity record is to be maintained and be accessible to The Employer. This register will be discussed weekly (or as specified by the Employer) at a date set by the Project Manager
- f. Value Engineering and Value Management proposals are to be notified to The Employer upon identification
- g. Delivery of a Value Engineering Report. The Consultant shall be proactive in ensuring that the design represents value for money to The Employer and this will include, inter alia, on-going Value Engineering and whole life asset costing. The Consultant needs to demonstrate where Value Engineering opportunities have been acted upon and realised, and their value

Meetings

2.2.18 The following meetings (and associated preparations) are envisaged for this commission:

- Presentations/ Meetings with The Employer
- Stakeholder briefings/ workshops
- Value Engineering workshops
- Project Risk Workshops
- Engineering Safety Management (ESM)/ CDM Workshops
- Presentations to the Canary Wharf Group (CWG)
- Design Reviews - full and part scheme
- Ad-hoc meetings as part of the design development
- Presentations to the Design Review Group (and responses to issues raised)
- Technical meetings with the Engineering Lead
- Design Progress Meetings with the Employer Delivery Group and its supporting consultants
- Other meetings required in carrying out the duties of Principal Designer

Cost Control

- 2.2.19 The Consultant shall provide periodic fee forecast based on accepted programme and detailed as per sub-categories in Section 2.1.4 showing the level of staff utilisation against these categories and the associated fee forecast.
- 2.2.20 The Consultant shall provide a periodic cost report to the Employer (in an agreed format) which will assist the Employer in tracking the total Price for Services Provided to Date, agreed and unconfirmed compensation events, the estimated forecast for the Total Price for Services at the Completion of the whole of the services. The cost report also shall detail an explanation of the changes made between the reporting periods.
- 2.2.21 The Consultant shall submit time sheet records (in an agreed format) at an agreed interval with the Employer. These time sheet records should clearly record against each named person or people and their specific tasks in the Consultants programme against the deliverables in the Master Information Delivery Plan (MIDP)



2.2.22 The Consultants key people are defined as a minimum (the Consultant may add to this list):

- Project Manager
- Design Manager
- Stakeholder Manager
- Principal Structural Bridge Engineer
- Principal Bridge Architect
- Principal Landscape Architect
- Principal Mechanical and Electrical Lead
- Principal Geotechnical Engineer
- Principal Urban Designer
- Estimator
- Design Expert Witness

2.3 EA2 –Planning requirements

2.3.1 It should be assumed for the purposes of this scope that the consents route to obtain the principal powers and consents required to construct and operate the crossing would be through a Transport and Works Act Order (TWAo).

2.3.2 The TWAo is likely to encompass the following (not exhaustive):

- a. Deemed Planning Consent
- b. Protective Provisions for the following statutory bodies: The Local Planning Authorities, Marine Management Organisation, Port of London Authority and the Environment Agency.
- c. Compulsory Purchase Powers
- d. Public Rights of Way (Thames Path)
- e. Highways Consents- LB Southwark and LB Tower Hamlets
- f. Byelaws
- g. Heritage Consents (if applicable)

2.3.3 The following consents and licences fall outside of the TWAo:

- a. Protected species licences - Natural England
- b. Advertisement consent

The Employer will manage the TWAo application submission. However, the Consultant will have a fundamental role in the preparation of the TWAo application and providing technical advice and potentially amending the design post-submission to address objections. The Consultant will be required to provide technical support and information from appointment to the closure of TWAo examination and possibly beyond for the discharge of planning conditions.



- 2.3.4 The Consultant will be required to produce plans, drawings and documents for the TWAO application, including but not limited to:
- a. Location plan(s)
 - b. Works Plans and Cross Sections. These will show Limits of Deviation (LoD) etc.
 - c. Land Plan(s). Different plans may be needed for different levels and will show limits of land (and/or subsoil) to be acquired permanently or used temporarily i.e. Limits of Land to be Acquired or Used (LLAU) and land required for protective works.
 - d. Planning drawings, including details of location/alignment & function for all different levels, sections and elevations details (incl. materials) for all above ground works if applicable
 - e. Landscaping Strategy
 - f. Operational Management Plan
 - g. Architectural images and plans requested by key stakeholders
- 2.3.5 The Consultant will also be required to provide input into a number of documents, including but not limited to:
- a. The Code of Construction Practice (a code of practice to monitor, control and manage construction impacts of or on construction sites)
 - b. The Design and Access Statement (presents the design and accessibility proposals for the scheme, sets out how the design has evolved and what has informed the design)
 - c. Equalities Impact Assessment (report detailing likely equalities impact of the project)
 - d. Energy statement (outlines the energy strategy proposed for the scheme and shows achievable energy and carbon dioxide emissions savings associated with the scheme)
- 2.3.6 Following submission of the TWAO application, the Consultant would be required to provide resources and any additional documents required by stakeholders or the Planning Inspector to address issues throughout the TWAO process.
- 2.3.7 It is currently assumed that a public inquiry would be required as part of the TWAO process. The Consultant is required to provide expert witnesses on issues related to this commission for the TWAO inquiry. This would include producing statements of case, proofs of evidence and providing evidence at the inquiry.
- 2.3.8 On instruction by the Employer, and within 28 days, the Consultant shall provide a TWAO Manager responsible for supporting the Employer's Consents Manager in the day to day management of the TWAO. On instruction, the Consultant shall be asked to provide a CV and day rate for the proposed TWAO Manager. The CV(s) will be reviewed by the Employer. The Employer reserves the right to reject any individuals proposed and the Consultant may be asked to submit further CVs.



The TWAO Manager shall be embedded and will play a significant role within the Employer's project team and in the delivery of the TWAO. The TWAO Manager shall work collaboratively with the Employer's project team to ensure that the TWAO submission and requirements drive the engineering, design and environmental programme. The TWAO Manager will co-locate at the project office in Southwark, London, to ensure integration actively with the Employer's project team and attend weekly project meetings.

The TWAO Manager shall work with the Employer to co-ordinate the TWAO submission. There will be different authors for each submission document and the TWAO Manager shall efficiently identify and support the management of the complex interdependency between these documents, ensuring a compliant application comes together on programme.

The TWAO Manager shall work closely with the Employer to manage objections made by stakeholders that may develop to statutory or non-statutory objections at the TWAO Inquiry.

The Consultant ensures that all engagement with statutory bodies is robustly planned and properly recorded with actions fed back to the project team.

2.4 EA3- Design Requirements

Engineering – including Construction and Operations

- 2.4.1 The Consultant will take the single preferred option through the Concept Design into Developed Design with the ambition to improve upon and refine the existing design from the feasibility study (to be produced by the Employer early in 2018). In order to create certainty around the Concept Design and /or engage with stakeholders the Consultant shall develop Technical Designs where appropriate (as referred to in 2.1.5 above). The Deliverables (Section 2.8) gives an indicative level of design maturity for each deliverable. The Consultant shall be guided by the Employer during the course of the contract.
- 2.4.2 The Consultant is to validate the information provided by the Employer for the single option at the commencement of this commission; the Consultant should allow adequate time and resource in their programme to achieve the project programme milestones.
- 2.4.3 The Consultant is to carry out further optioneering work on the single option as agreed with the Employer to ensure the design achieves the project objectives.
- 2.4.4 The Consultant shall work with the Employer's separately appointed constructability contractor to ensure that the design solution is buildable, maintainable and operable.
- 2.4.5 The Consultant will be expected to carry out a constructability review of the preferred single option confirming the design is capable of construction and outlining the most efficient and cost effective construction methodology. Future maintenance is an essential consideration in designing the construction methodology;
- 2.4.6 As part of the Consultant's constructability review, the Consultant (and any of it's respective sub-consultant) shall liaise and cooperate with the Employer and the Employer's own appointed constructability contractor. The constructability contractor will be responsible for producing the Constructability Review Report with input from the Consultant.



- 2.4.7 The Consultant is to develop the design in sufficient detail to support the Transport and Works Act Order (TWAO) application
- 2.4.8 The Consultant is to ensure the single preferred option design is sufficiently developed with renderings in the open and closed position and in different light and weather conditions to consult with the public.
- 2.4.9 The Consultant will be responsible for ensuring that the utilities & drainage surveys up to level C4 have been completed, a BIM compliant 3D combined services model has been produced and any necessary diversions have been identified or planned out and included in the design.
- 2.4.10 The Consultant shall provide a BIM Execution Plan in response to the Employer's Information Requirements document (Volume 1 Call-off Contract Documentation) within 4 weeks of the starting date.
- 2.4.11 The Consultant is to assist the Employer in any subsequent negotiations with the utilities organisations.
- 2.4.12 The Consultant is to establish the technical requirements for the crossing.
- 2.4.13 The Consultant will be required to schedule topographical surveys including levels to be carried out in order to execute the design. The Employer's own survey department will commission the surveys.
- 2.4.14 The Consultant is to provide other engineering and architectural services as required to support the project.
- 2.4.15 Where items for the works are to be specified by the Consultant these shall qualify for the Enhanced Capital Allowance Scheme for Energy-Saving Technologies (<https://www.gov.uk/government/publications/enhanced-capital-allowance-scheme-for-energy-saving-technologies>), where practicable.
- 2.4.16 The Consultant is expected to produce a value engineered, cost effective (whole of life), that maximises benefits and minimises impacts on staff and customers scheme, affordable to The Employer
- 2.4.17 The Consultant is to ensure the requirements of all key stakeholders are taken into account in the design (e.g. Port of London Authority, Environment Agency, London Underground Limited) Sponsor, Operator and Maintainer et al)
- 2.4.18 The Consultant is to ensure sufficient information on Limits of Deviation (LoD) are created in preparation for the TWAO/Consents process – it is essential that this includes all land that will be needed for the works (including land required temporarily) but excludes land that will not be required.



- 2.4.19 The Consultant is to demonstrate an integrated process of technical design (structural, civil, architectural, mechanical, electrical, power, urban realm) including for structural and environmental considerations.
- 2.4.20 The Consultant is responsible for delivering a Services / Systems design, which can be integrated into a single Control Room.
- 2.4.21 The Consultant will design an integrated power solution and include opportunities for power regeneration within the operating mechanism.

Architecture and Urban Design

- 2.4.22 The Employer requires specialist urban design, landscape and architecture services to support the further development of the plans for the Scheme and associated cycle/pedestrian links. This support includes but is not limited to the preparation of specific deliverables and supporting documentation, attendance at meetings and design review sessions.
- 2.4.23 The team will need to validate the preferred option produced as part of the feasibility work and submit the programme for how the validation process will be structured including a schedule of proposed or required changes to the scope. The validation process shall include a finalised scope plan, clearly indicating the extent of the project, including clearly setting out the boundaries of landings and relevant approaches.
- 2.4.24 The Consultant shall ensure that the bridge design and urban realm design, including connections, is progressed in accordance with the project design vision and principles which can be found in Appendix A of this document. The overarching ambition for the link, which is set out in the vision document, is to:

“...create a piece of high quality civic design that ties the walking and cycling network together on both sides of the river: enabling, promoting and celebrating active travel in line with the Mayors Healthy Streets Vision”
- 2.4.25 The project can be considered as three main elements – the bridge structure, the landings on either side of the river and the approaches/connections.

The Bridge

- 2.4.26 The consultant team will be required to provide an exceptional design for the preferred option for a pedestrian and cycle bridge connection which makes a positive contribution to the river environment and provides a safe, convenient, enjoyable and attractive link for both sets of users.
- 2.4.27 The architects will need to work closely with the engineers (and other service providers) to produce a design to the appropriate RIBA stage as stated in Section 2.8 and the Consultant shall submit a deliverables schedule of what is required in order to meet this stage in addition to specific Employer's requirements within this Scope.



2.4.28 As part of the design, the consultant team will need to provide:

- a. The typology of the bridge, although the feasibility work suggests it will either be a swing or lifting bridge depending on the exact alignment/location, taking into account any PLA requirements and consents
- b. Size/scale/massing: height of bridge elements above mean high water springs (MHWS), including any towers associated with the bridge support or linked to the operating structure, width and length of the crossing with any associated development (e.g. operational building)
- c. Layout: deck configuration, layout with details of how the two modes of use will be accommodated and the structural landing points. The bridge design must comply with the requirements of the Disability Discrimination Act 1993 and shall be fitted with fully compliant lifts, ramps and or stairs
- d. An elegant and attractive design for the bridge itself, the lifts, stairs, ramps and connections of the bridge with the landing point(s). This should include, but should not be limited to, the structural loading calculations and spans
- e. Operating mechanism: detail of the operating bridge, mechanisms, and energy sources. Details of emergency evacuation will also be needed
- f. Appearance: External built appearance of the entire structure including the architectural design, materials/finishes, lighting, protection etc.
- g. Bridge utilities that will be required

The Landings

2.4.29 The landings are a key element of the bridge design and on both sides of the river will need to be incorporated into an existing urban context, reinforcing the existing sense of place and identity or creating an event where this is lacking.

2.4.30 For the preferred option, the consultant team will need to:

- a. Identify the area required for the landing zone, giving due regard to the immediate context whether that is an existing built environment or landscaped area. The land take for the required works should also be identified, including the work sites. It should be noted that the ownership of these areas may vary and any subsequent variation will be the responsibility of the Consultant.
- b. Carefully consider any heritage or other constraints for the landing, including trees, privacy impacts and the general impact of structure on the immediate area. The presumption will always be to preserve mature trees where possible.
- c. The optimum way to spring from/ land on the landing zone, resulting in a minimum of disturbance to the immediate context, including, where possible, avoiding the removal of existing trees.



- d. Consider and design the step free access from the bridge approaches on both sides of the river.
 - e. design the public realm within the immediate vicinity of the landing point, with careful consideration of the access arrangements to/from the bridge structure for pedestrians and cyclists, avoiding points of conflict or mitigating these where they may occur, and the links to the existing network.
- 2.4.31 The designs should include landscape proposals with an appropriate palette of high quality materials, tree planting, lighting and appropriate street furniture.
- 2.4.32 Given the opening nature of the bridge, the designer will need to consider an appropriately sized holding area for cyclists in the event of an opening at a busy time and integrate this seamlessly into the public realm near the landing point.
- 2.4.33 There may be an opportunity for some retail associated with this provision. The Consultant shall ensure that any retail spaces are designed in accordance with The Employer's retail design standards and that suitable and sufficient services such as power, water and drainage are included.

The Approaches

- 2.4.34 The Consultant team will need to consider the wider connectivity of the bridge and landing zones to the network of streets and spaces within the wider context of the bridge. The extent of these areas beyond the river crossing landing points may be influenced by the landing design itself and a number of options may need to be developed for the urban realm in terms of the extent of connections for onward journeys needed and scale and design of these connections. This should form part of the feasibility validation.
- 2.4.35 The Employer will provide a high level study illustrating the wider connections to the landings zone but the detail of those connections will need to be produced by the Consultant, having due regard to relevant guidance relating to the public realm including Streetscape Guidance (2015), the London Cycle Design Standards (2014), SuDS in London: A Guide (2016) and the Healthy Streets Guidance (2017).
- 2.4.36 The overarching objective of the urban design, landscape and architecture work stream is to develop the design for the above elements of the scheme to support a future Transport & Works Act Order (TWAo) application. Design development shall take into account all new infrastructure required by the scheme including the landing points, any other changes to the pedestrian links and the surrounding urban realm.
- 2.4.37 The work will culminate in the production of a Design and Access Statement, which will form part of the body of evidence for a future TWAo submission. Photo-realistic visualisations will be required for this document and to inform public consultation on the scheme and these viewpoints should be proposed by the consultants, and agreed with the Employer and submitted as part of the bid.
- 2.4.38 The Consultant shall consider the following requirements



- a. Within the designs and visualisations developed, relevant scheme design, streetscape and other relevant policies must be taken into account. Where departure from existing policies is recommended a clear justification must be provided and sufficient documentation to satisfy legal requirements
- b. The designs must have regard to the existing areas' character, heritage and sense of place
- c. The Consultant should identify opportunities to improve the landscape at each location, creating safe, convenient, accessible and attractive spaces which contribute positively to the area
- d. The public realm at each location shall be designed to become more active and vibrant as a result of substantially higher footfall/ cycle usage. This must also improve the quality interchange between transport modes and onward travel
- e. The Consultant shall also produce design boards and/or scale models (if required) to demonstrate the impacts of the proposals to stakeholders. Ongoing engagement with the project team and other stakeholders will continue to be required as part of Expert Witness Task
- f. A detailed plan of the urban realm shall be developed in co-ordination with local development frameworks and the requirements of the Local Authorities.

Environment

- 2.4.39 The Consultant is expected to work collaboratively with the Employer and with other consultants as listed in Section 3.3 to identify necessary design detail and information to support the Environment work stream. The Consultant will subsequently provide these details to meet the programme.
- 2.4.40 The Consultant will support the Environment work stream Consultant to develop design related mitigations to environmental impacts.
- 2.4.41 The Consultant is expected to develop the design in accordance with the Project Specific Sustainability Strategy which is currently being developed and provide input into the Sustainable Design Considerations Log.
- 2.4.42 The Consultant shall support the development of the following documents
 - a. Environmental Statement
 - b. Code of Construction Practice
 - c. CEEQUAL Assessment (including all recent updates in Version 5)
 - d. Sustainability assessment
 - e. Equalities Impact Assessment
 - f. Energy statement



Transport Planning

- 2.4.43 The Consultant shall design a scheme that ensures the access routes are fully designed to provide safe access of sufficient capacity
- 2.4.44 The Employer has the following requirements with regard to Transport Planning:
- a) The Consultant is to ensure there is close working between the design and transport teams to make sure that there is sufficient transport capacity, for example, sufficient width on the bridge, stairs and ramps, number and size of lifts etc.
 - b) The landing points are critical to the off-site tie-ins. There will need to be some design work of the land around the landing points (i.e. beyond the bridge ramp itself, to ensure that access routes to/from it are safe and of sufficient capacity). Some of this could be public highway, some other public land (e.g. parks) and some is private (e.g. Thames Path, hotel land, and Canary Wharf Estate) depending on the single preferred option. The designers will need either to have the ability to undertake these works, or to work with other designers, to ensure that these designs work seamlessly together.
- 2.4.45 The above design elements will need to be completed for The Employer to model any changes proposed, which will need to be reported in an outline Transport Assessment at next public consultation. The Consultant will need to establish the lead-in times for this work from the Town Planning Support and adjust their design programme accordingly.

Town Planning

- 2.4.46 The Employer will manage the TWA0 submission and any other consent submissions. However, the Consultant will work closely with the Employer to understand the town planning issues that would influence the design and respond accordingly. The Consultant will, as far as possible, produce a design that meets all relevant national, regional and local planning policy, although the Employer will be responsible for identifying the relevant planning policy.

Land and Property

- 2.4.47 The Consultant will identify the land requirements to construct and operate the crossing, including (but not limited to) permanent and temporary land requirements, restrictive covenants and utility diversions. The Consultant will support the Employer to prepare documentation and plans related to compulsory acquisition.
- 2.4.48 It is likely that the Consultant will be required to support the Employer from a design perspective by providing plans and supporting meetings.

2.5 EA4 –Stakeholder and Engagement

- 2.5.1 The Employer will manage stakeholder engagement and stakeholder communications. The Employer has a stakeholder engagement strategy and communications plan. The



Consultant shall provide technical support to the Employer at most regular stakeholder meetings to support “buy in” to the project.

- 2.5.2 The Consultant will assist the wider project in the compilation and active management of the Project Stakeholder Management Plan and ensure all relevant statutory and non-statutory bodies have been identified. The Employer shall ensure that the Consultant is informed prior to any stakeholder meetings to enable them to attend if deemed appropriate. Where the Consultant attends they will be required to minute all meetings with external stakeholders.
- 2.5.3 To minimise risk of objection through the TWAO application the Consultant should support the Employer in addressing design related stakeholder comments prior to application submission and during the TWAO process. The Consultant shall have the ability to liaise effectively with appropriate representatives from key stakeholders such as Local Authorities, the Department for Transport, Port of London Authority, Historic England, the Environment Agency, Natural England, Marine Management Organisation and other bodies as required.
- 2.5.4 The Employer’s communications team have a matrix/database of stakeholders that will be used to determine key meetings. The Employer will inform the Consultant of any required attendance. The Consultant should allow for attendance at key stakeholder meetings on an ad hoc basis of four per month.
- 2.5.5 The Consultant shall provide input into the development of the overall project consultation strategy and ensure appropriate resources are available to support this strategy through to submission of the application for powers. The consultation strategy is managed by the Employer’s Communications Lead.
- 2.5.6 The Consultant shall allow for various consultation exercises with both ‘prescribed’ and ‘non-prescribed’ bodies (as defined in the appropriate Environmental Impact Assessment Regulations). The current project timetable details a minimum of two ‘public’ consultation exercises (although this is subject to change) and the Consultant shall provide input into them and others as appropriate. This could include producing plans, images or providing resources to attend events.
- 2.5.7 It is imperative that all engagement with statutory bodies is robustly planned, properly recorded with actions fed back into the project team. Any subsequent actions shall be documented by the Consultant for review by the Employer.

2.6 EA5- Design and Build Contract Support

- 2.6.1 The Consultant must ensure the design sufficiently developed to set the performance requirements for a Design & Build contract (including architectural design).
- 2.6.2 The Consultant is to provide the technical performance requirements for the Design & Build tender stage for the river crossing. The development of the performance requirements should focus on de-risking and refining aspects of the design; the following are given as examples;



- a. Openable bridge providing clear access to the requirements agreed with the Port of London Authority through evidence and risk based negotiation – The Employer to agree with the support of the Consultant.
- b. Openable bridge that can be parked at a fail-safe position so as to remain open to river traffic in the event of mechanical/hydraulic failure
- c. Approaches and means to allow access to the bridge for pedestrians, cyclists and persons of reduced mobility (PRM), including waiting areas
- d. Requirements for the build phase of the project
- e. Bridge operation and maintenance requirements
- f. Reliability, availability and maintainability performance requirements
- g. Systems integration – integration of new systems into the Employer's control network and the Port of London control centre

The above list is not exhaustive.

2.6.3 The Consultant will support the development of key documentation for the Design and Build contract and ongoing support through the design and build phase.

2.6.4 The Employer will procure the Category 3 checker independently and the Consultant will co-operate with the Category 3 checker.

2.7 EA6- Cost Estimating Support

2.7.1 The Consultant is to provide estimating support to the Rotherhithe to Canary Wharf Crossing project, under the direction of the Employers Estimator for the project. This is to include:-

- a. Preparing a detailed estimate for the works, based upon the outline/ reference design
- b. Development of and information gathering for the detailed estimate based upon the outline/ reference design during the preparation of the design
- c. Provision of costings to support option selection/refinement
- d. Provision of life cycle cost for the proposed works, including gathering input from others, including asset managers and experts within the Employer's organisation and externally
- e. General estimating support to the project as required and instructed by the Employer.

2.7.2 The Consultant shall carry out work in accordance with the specification as set out in Section 4 and in accordance with the requirements of the Employer's Estimator.



2.8 Deliverables

These are an indication of the Deliverables under this commission but this is not a definitive list.

EA1	Deliverable	Definition	Responsibility	Anticipated RIBA stage
EA1.1	Programme and Tasks	Sets out all activities against dates in MS Project format	The Consultant	Partial Stage 4
EA1.2	Risk Register, Issues Log and Hazard Logs	Captures all risks, issues and hazards associated with the scheme to allow these to be managed and mitigated.	The Employer- The Consultant will be required to provide input.	Partial Stage 4
EA2	Deliverable	Definition	Responsibility	
EA2.1	Provide support to the planning Consultant on the production of design and access statement for TWAO submission	Provide support to the planning Consultants work streams on the production of design and access statement for TWAO submission	The Consultant	Partial Stage 4
EA2.2	Support in agreeing legal agreements with interested parties	It is commonplace with a TWAO process for the applicant to enter into legal agreements to resolve objections and other issues – for example, S106 agreements and Land and Works Agreements. Often these require additional design work to resolve the issue.	The Consultant	Partial Stage 4
EA2.3	Plans required for TWAO (suggested but not limited to)	Location and key plan for the scheme.	The Consultant	To end of Stage 3
EA2.4	Works Plans & Sections. Will show Limits of Deviation (LoD) etc.	Plans- horizontal sections. Sections- vertical slice, showing limits of deviation (LOD) etc.	The Consultant	Partial Stage 4
EA2.5	Land plan(s).	Different plans may be needed for different levels and will show limits of land (and/ or subsoil) to be acquired permanently or used temporarily i.e. Limits of Land to be Acquired or Used (LLAU) and land required for protective works.	The Consultant	Partial Stage 4



EA2.6	Traffic Regulation plans	Maps of a scale not smaller than 1:2500 on which the path, way or track concerned, and, in the case of a diversion, the new path, way or track, is clearly delineated.	The Consultant	To end of Stage 3
EA2.7	Planning direction plans for approval and/or information	Plans- Details of location/alignment & function for all different levels; Sections; Elevations details (incl. materials) for all above ground work if applicable.	The Consultant	Partial Stage 4
EA2.8	Landscaping Strategy	Provides the strategic landscape context and vision of the scheme, description of any specific areas of landscaping interest and how they will be treated during construction and operation of the scheme. Covers topics ranging from woodlands and grasslands to trees and hedgerows.	The Consultant	Partial Stage 4
EA2.9	Operational Management Plan	Report for the TWAO outlining how the crossing will be operated and maintained. Information to be drawn from the approved operational and maintenance concept reports.	The Consultant	Partial Stage 4
EA3	Deliverable	Definition	Responsibility	
EA3.1	Operational Concept Report	An approved concept for the operational processes, organisation and roles of the crossing to be prepared. The purpose of this is to provide a complete and detailed description of how the final crossing will be operated. This will be used to support the detailed design, whole life cost projections, training needs analysis, training manuals and 'train the trainer' service for operators.	The Consultant	Partial Stage 4
EA3.2	Constructability Report	Report on the review of constructability of the single option design and the provisions to be made for future maintenance.	The Consultant	Partial Stage 4



EA3.3	Maintenance Concept Report	An approved Maintenance Concept for the maintenance processes, organisation and roles of the crossing. The purpose of this design is to provide a complete and detailed description of how the final crossing will be maintained. This will be used to support the detailed design, whole life cost projections, training needs analysis, training manuals and 'train the trainer' service for maintainers. This maintenance concept will be used to support the development of maintenance service specifications.	The Consultant	Partial Stage 4
EA3.4	Capacity analysis report	The Transport Planning Consultant shall provide the successful Consultant with demand modelling outputs. The successful Consultant will produce a report that reviews the projections for demand and demonstrates how the final design will perform in terms of journey times and queuing under a range of scenarios.	The Consultant	To end of Stage 3
EA3.5	Reliability report	A report of a review of the design and its component systems to project the level of technical failures that require an emergency or corrective response.	The Consultant	To end of Stage 3
EA3.6	Air navigation risk assessment	To be undertaken by the CAA and facilitated by the Consultant to an agreed process.	The Consultant	To end of Stage 3
EA3.7	Wind modelling and loading assessment	To be undertaken by the Consultant including wind tunnel testing of the bridge profile.	The Consultant	To end of Stage 3
EA3.8	Construction and Logistics Management Plan	A plan consisting of sequencing and duration of the final scheme including risk reporting, environmental impact, temporary and permanent land	The Consultant	Partial Stage 4