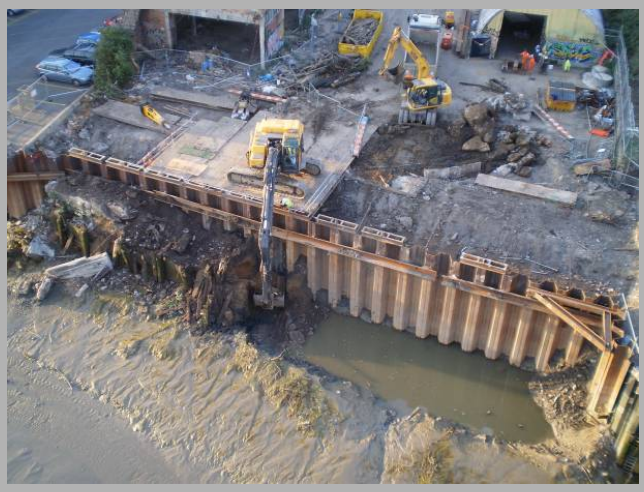
Construction Sector Transparency Initiative (CoST)

Assurance Team Report

Deptford Creek Frontages Package, the Environment Agency

September 2010



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Acknowledgements

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1. Summary

1.1.1 The Environment Agency has constructed the Deptford Creek frontage project to refurbish and replace frontages along Deptford Creek. The decision to construct this scheme followed a detailed assessment of options, including costs and benefits.

1.1.2 The Environment Agency operates procedures for the control of cost, management of the programme of work and monitoring of quality. They have made full and accurate disclosure of documents demonstrating their procedures for awarding contracts for this project and in operating their procedures.

1.1.3 The contractor for this project was selected from a framework list of available suppliers who submitted competitive tenders.

1.1.4 A two stage process was used for the appointment of the contractor. Following the award of contract but before start of construction was instructed, a review of design was carried out by the successful contractor to identify potential changes, and adjustments were made to the price and programme for these changes. This approach has the benefit of getting the contractor's detailed input to the design, and the use of an experienced cost consultant to analyse proposed price changes provides reassurance that the revised contract price is appropriate.

1.1.5 The contract with the contractor is based on the NEC standard contract document for construction in common use in the construction industry. Proper management of the contract in accordance with the form of contract used and the Environment Agency procedures is critical to the success of the project. Programme, quality and cost are generally managed by the Environment Agency in accordance with the requirements of these contracts and their own procedures.

1.1.6 During construction, the Environment Agency motivates the contractor to control costs within the available Environment Agency budget by sharing savings and overruns on the budget with him. This approach is a useful way of controlling costs on such contracts. To ensure that the contractor has a sufficiently challenging target, the number of items which could give rise to a change to this budget during the construction stage was limited.

2. Introduction

2.1 Background

2.1.1 The Construction Sector Transparency Initiative (CoST) is an international multi-stakeholder programme designed to increase the accountability of public sector organisations and construction companies for their construction projects. It will do this by disclosing information at all stages of the construction project cycle, from the initial identification of the project to the final completion.

2.1.2 It is, however, recognised that the disclosure of this information may not be sufficient on its own to achieve greater accountability. This is because some of the information is likely to be complex and not easily intelligible to the general public. For example, there are many reasons for time and cost overruns on construction projects. To ensure that the information that is released is both accurate and available in a form that can easily be understood by stakeholders it is verified and interpreted by experts appointed for this purpose -- the assurance team.

2.1.3 Eight projects have been identified by the UK Multi-Stakeholder Group (MSG) to form a pilot study of operation of this initiative, in the UK. The MSG has divided the 'CoST projects' into two groups of 4 projects referred to as Group A and Group B. The Deptford Creek Frontages Package is one of the chosen Group A projects.

2.1.4 The Institution of Civil Engineers (ICE) is managing the pilot on behalf of the MSG. The MSG directs the implementation of the UK pilot. It consists of representatives from government, the private sector and civil society.

2.1.5 The assurance team appointed by the MSG for this pilot study comprises four senior construction industry specialists, working together to obtain and assess information and provide reports. This report has been prepared by Peter Higgins, the team member who carried out the Deptford Creek information review.

2.1.6 We have included at Appendix 1 a glossary of terms used in the report where they have a particular technical meaning in relation to construction.

2.2 Objectives of the pilot study

2.2.1 The UK pilot has four objectives:

- to learn lessons to help in the development of CoST
- to learn lessons on improving transparency through the disclosure of project information
- to gain an improved understanding of construction project costs amongst public sector clients
- to learn and share lessons on the management and control of publicly-funded construction projects.

2.2.2 The assurance team has been appointed to carry out the following tasks:

- collect the project information
- verify the accuracy and completeness of the information
- report on the extent and accuracy of the information which has been released
- on Group B projects only, analyse the information and make informed judgements about the cost and quality of the project
- on Group B projects only, report on the findings regarding the cost and quality of the project and highlighting any outstanding questions.

2.3 Work carried out on the pilot study

2.3.1 Initially, we held a meeting with the Environment Agency's project manager for the scheme to explain the objectives and procedures for this pilot study. Subsequently, we held a workshop with members of the project team to explain what information was needed and how it would be used.

2.3.2 The International Secretariat had prepared a standard list of material project information to be disclosed on all pilot projects, and we adapted this into a schedule to suit this contract. The International Secretariat had also prepared two lists of disclosures the first list of disclosures would be requested for both Group A and Group B projects; a second list of further disclosures could be requested for Group B projects. The further disclosures would depend on the information that was required to meet the additional Group B objectives. We provided a copy of the applicable schedule to project team members. At the workshop, we identified the information which they held and which was needed to provide the information on the schedule. Jointly with the project team, we reviewed how this information could best be produced to minimise additional work for them.

2.3.3 We assisted the ICE in setting up a computerised data store to receive and store this information, and in establishing the arrangements for providing access to the data store. At the workshop with the project team, we explained how this data store would operate and how access to information and other material would be controlled. We explained how the disclosed information would be used, and what access team members would have to review and comment on reports before publication.

2.3.4 The Environment Agency provided the documents by electronic transfer to the data store. Following our review of the information initially provided, the Environment Agency provided further documents we had identified as necessary.

2.3.5 We reviewed the information disclosed, and held further meetings with the project team to clarify certain matters, verify the accuracy and completeness of information, and to obtain further understanding of how the project was managed.

2.3.6 The schedule of material project information which the Environment Agency was expected to disclose under the pilot study is set out in Appendix 2. We have completed the schedule by identifying the information required.

2.3.7 A detailed schedule of the documents disclosed, with a description of their purpose, is included at Appendix 3.

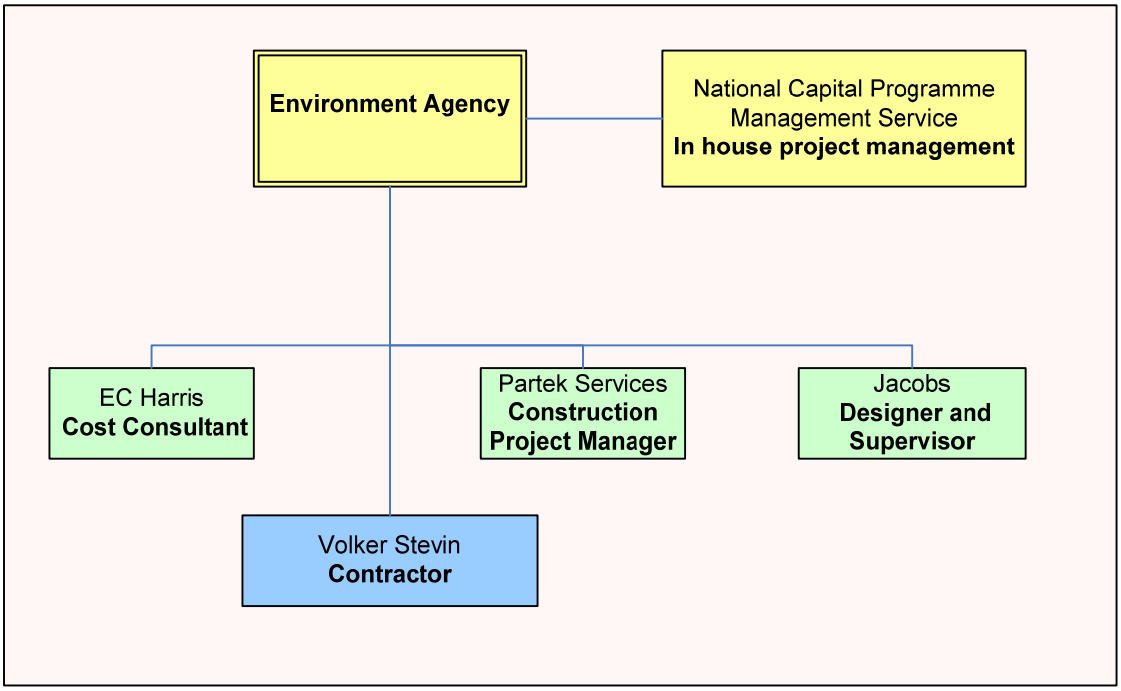
2.3.8 The documents disclosed fall into the following categories.

- General material describing the need for the Deptford Creek scheme, identifying the costs and benefits of various options, and gaining agreement to the funding and programme for the scheme.
- Documents dealing with the selection and appointment of Volker Stevin and the management of their contract.
- Documents relating to the monitoring and control of costs on the project.

2.4 The Deptford Creek project

2.4.1 The Deptford Creek project is an Environment Agency package of critical works on failing tidal defences in Deptford Creek. The project involves refurbishment and replacement of nine frontages located along Deptford Creek, which forms part of the Tidal Thames. The frontages are a critical part of the defences from flooding of the Bermondsey and Deptford areas, and the failure of these defences would leave over 33,000 properties at risk of flooding.

2.4.2 The organisations involved in the project, and their relationship with the Environment Agency, are shown in the following diagram.



2.4.3 Overall management of the project was undertaken by the Environment Agency's specialist, in house, project management service, National Capital Programme Management Service. The Environment Agency has appointed consultants and contractors to design, manage and carry out construction work.

2.4.4 The initial study work was carried out by Jacobs, a firm of consultants with specialist skills in such projects. Jacobs was subsequently appointed to carry out detailed design and to supervise the quality of the construction project. Advice on costing of the scheme was provided by EC Harris, a firm of cost consultants. The contract required a project manager to be identified who would take decisions and assess payments and the like during the

construction stage. This service was provided by Peter Anidjar-Romain of Partek Services Ltd.

2.4.5 Construction of the scheme was carried out by Volker Stevin, who also provided construction input to the design review before construction was started.

3. Validation of documents

3.1 Environment Agency procedures

3.1.1 It is necessary to set out the Environment Agency's procedures for awarding and managing contracts in order to understand the status of documents disclosed by them.

3.1.2 Most of the Environment Agency's work -- including the construction of the Deptford contract -- is awarded to consultants and contractors on their framework panels.

3.1.3 A framework is a selected list of suppliers (consultants or contractors) who will carry out work of a specified nature when instructed by the Environment Agency. To set up a framework, the Environment Agency invites submissions from companies who wish to be selected and who are judged to be capable of carrying out the work. Submissions are marked by the Environment Agency and those scoring the highest are appointed to the framework. The framework agreement will last for a period of time -- typically four years -- following which a replacement framework agreement is set up and fresh submissions are sought and marked as before.

3.1.4 The first stage in a construction project is the preparation of a "Project Appraisal Report" to identify the need for the project and obtain internal authorisation of the necessary funds.

3.1.5 Following approval of the Project Appraisal Report and agreement to proceed with the project, the Environment Agency selects suppliers for the work. This is normally done by obtaining competitive tenders from suppliers selected from the framework, and awarding the work to the supplier offering the best proposal.

3.1.6 For major contracts, a "Contract Award Report" is prepared setting out the basis of the selection of the supplier and seeking authorisation to award the contract.

3.1.7 Award of a contract is normally made using a "Contract Instruction". This is a formal document recording details of the contract and providing approval to the commitment. Other documents will also be significant in identifying the details of the contract. The scope of works -- the "Scope" or "Works Information" sets out the technical detail of what the supplier is required to do. The "Contract Data" identifies the specific contract clauses which will apply.

3.1.8 For major construction work, the Environment Agency's normal approach to the appointment of contractors is to utilise a two-stage procedure. The contractor is chosen using a tender selection procedure where tenderers submit price and quality proposals for the work, based on a draft design prepared by the Environment Agency's consultant. In the first stage, the successful contractor is appointed to work closely with the Environment Agency's consultants to develop the design sufficiently for the price and construction details to be confirmed. The contractor identifies any changes to the price, which are verified and adjusted as necessary by a cost consultant. The second stage, of construction, starts once the price and any other issues had been agreed, and final internal Environment Agency authorisation to start construction has been obtained.

3.1.9 Most Environment Agency work is carried out using the NEC forms of contract -- standard model forms for construction and for design work used widely for construction projects in the public sector. Under these contracts, where a change would have an effect on either the date of completion of the work or the cost of the work, a "compensation event" procedure is followed to obtain changes to prices and programme.

3.1.10 The Environment Agency uses a "target price" basis for payment on major contracts. Under this arrangement, the supplier is paid the cost of the work carried out, and then shares in the savings or cost overruns if this is less or greater than the tendered price for the work. On many projects -- including the Deptford project -- this approach is extended to cover all the

costs within the Environment Agency's budget for the project. In this event, the share of savings or cost overruns are not simply calculated from the supplier's own costs, but from all costs incurred by the Environment Agency on the project. These include the Environment Agency's internal costs and the cost of their consultants, the cost of utility diversions and connections and the costs of land acquisition.

3.1.11 This provides a strong incentive for the contractor to take steps to minimise these costs, as he would have to contribute to any overspend but would gain from any savings. The Contractor's share of any savings or overruns was restricted, to avoid excessive profits for the contractor or the need for an excessive risk premium being added to the prices.

3.2 Project identification and budget

3.2.1 The Department for Environment, Food and Rural Affairs issued two letters in November 2006 stating that they supported the strategic solution to the relevant Environment Agency strategy, ie that the business case for investment was sound, should those frontages meet the condition grade that warranted intervention works. Subsequently, internal authorisation by the Environment Agency was given to carry out an appraisal of options for improvement.

3.2.2 A Project Appraisal Report was prepared in December 2008. This report analysed the state of the Creek frontages, identified the options available for dealing with this problem, considered the costs and benefits of each option and made recommendations for work at each wharf.

3.2.3 The Project Appraisal Report forecast the total cost for the project of £8,830,000, based on construction taking place between July 2009 and July 2010. The construction element was forecast to cost £4,305,000, with consultancy and other costs £865,000. The budget also included an allowance of £1,370,000 for land, £1,130,000 for inflation and a risk allowance of £1,150,000 for unexpected events.

3.2.4 We have been provided with copies of the funding authorisation and the appraisal report, together with copies of the internal authorisation, with signatures, permitting the project to proceed and authorising the release of funds.

3.2.5 Having considered the documents disclosed by the Environment Agency in light of their procedures, we are satisfied that these documents adequately identify the project and the funding for the project.

3.3 Incentive bonus arrangements

3.3.1 Both the Jacobs and Volker Stevin had incentive payments built into their contracts which would result in a bonus payment to them if the project was completed within the Environment Agency's incentive budget. This included all costs incurred by the Environment Agency from the start of the Deptford Creek project.

3.3.2 The incentive budget is set at a figure lower than the full Environment Agency budget for the scheme, to allow some flexibility in case of significant unexpected problems. The incentive budget is fixed at time of tender for the construction contract, but could change if certain defined events which were entirely outside the control of Jacobs and Volker Stevin occurred. It was not considered appropriate to transfer the risk to them as they could only be motivated to manage costs within the budget if they could in some way influence them.

3.4 Volker Stevin appointment

3.4.1 The following documents have been provided in relation to the appointment of Volker Stevin for the construction work.

- Procurement strategy setting out the criteria for selection of tenderers for contracts.
- Specifications (Works Information) and other tender documents for the construction work.
- Tender assessment.
- Contract Award report of 4 June 2009 requesting approval to start construction at a target price of £4,821,971; this was approved on 16 July 2009.
- Volker Stevin's programme of work.
- Details of compensation events.
- Certificate of payment to Volker Stevin.

3.4.2 Three contractors from the Environment Agency framework had been selected to submit tenders for the construction of this project. Tenders were to take the form of a target price for constructing the works together with a quality submission. The quality submission covered such matters as programme, methodology, resources, quality management and risk management.

3.4.3 The appointment of Volker Stevin was made following a tender evaluation of submissions made by the three invited contractors. A score was given to the assessment of tenderers' proposed methodology and approach to constructing the flood defence scheme, which was combined with a score based on the price submitted by each tenderer in the rario 50:50 to give a total score. Volker Stevin received the highest score and was thus awarded the contract at a target price of £4,239,216.

3.4.4 The contract with Volker Stevin provided for payment on a target basis, where the contractor would be entitled to a share of any saving on the budget so long as his construction cost was below his construction target, but would have to share in any overspend on the budget.

Design changes

3.4.5 The design on which tenders were invited was an indicative design which had not been developed sufficiently to provide a fixed price for construction. Indeed, the approach followed by the Environment Agency was to involve the successful contractor in developing an efficient design. There would, therefore, need to be changes during the first phase of the contract whilst design was finalised.

3.4.6 Following the award of contract, the Environment Agency, contractor and consultant carried out a joint review of the indicative design in order to complete the design to a stage where a firm price for construction could be established, This lead to a number of design changes which were agreed between the contractor and the Environment Agency's consultant. Adjustments to the accepted target price were agreed on the advice of the Environment Agency's cost consultant to deal with them; details of the adjustments are given in appendix 4. The revised target price became £4,821,971.

3.4.7 The main design change was to change the type of piling for the sheet pile walls. Following discussions with local organisations affected by the works, a more expensive silent piling

method was adopted compared with the type Volker Stevin had been required to price at tender. The increase in cost was covered by the risk allowance for unexpected events in the budget. Other changes were made to provide for costs not required to be priced in the original tender and to allow for work no longer required to be done by the contractor.

Compensation events

3.4.8 A number of changes (compensation events) occurred during the construction stage. The value of compensation events which has been agreed to date (July 2010) is £480,790. The Project Manager's assessment of events where agreement is outstanding is £164.000. These are summarised in appendix 5. The consequence of these compensation events was to change the forecast final target price to £ 5,466,761.

3.4.9 The following table sets out these changes to Volker Stevin's target for construction.

Volker Stevin initial tender	£	4,239,216
Changes agreed in setting target	£	582,755
Target price at start of construction	£	4,821,971
Agreed changes	£	480,790
Changes not yet agreed	£	164,000
Forecast final target price	£	5,466,761

3.4.10 The Environment Agency used a computer based system for managing the contract. Under this system, all communications were made electronically, including the treatment of compensation events. The documents stored electronically in respect of compensation events include the initial notification of the event, the contractor's assessment, the project manager's acceptance or his own assessment, and copies of detailed build up sheets and other communications.

3.4.11 We have inspected the electronic contract management system for this contract, and are satisfied that appropriate records of each event have been maintained.

3.4.12 We have also been provided with a copy of an internal note to report on three major changes to the contract, compensation events

- Compensation Event number 19 – delays relating to unforeseen obstructions
- Compensation Event number 20 – delays relating to unforeseen tie rods
- Compensation Event number 21 – delays relating to additional temporary works

This provides further substantiation of these major events to brief senior managers on the reasons for and the assessment of the changes.

3.4.13 Two compensation events resulted in the contractor being allowed additional time to complete the work. A total of 48 days additional working time was allowed to deal with the unexpected condition of the existing river defence walls. This had the effect of delaying the completion date until 15 July 2010.

3.4.14 We are satisfied that full and accurate disclosure has been made of the assessment of compensation events on this contract to date.

Programme

3.4.15 At the date of award of the contract to the contractor, work was due to start on a 22 June 2009, and to be completed by 28 May 2010. The contractor's initial programme showed him

finishing early on 16 March 2010. The work was certified complete on 30 June 2010, some 2 weeks before the date fixed in the contract for completion.

3.4.16 In his original programme, the contractor had allowed additional time between the date when he expected to complete and when he was required by the contract to complete. In this way, he allowed some float in case the works proved more time-consuming than he had anticipated. As a result, the contractor was able to complete works by the date required by the Environment Agency despite encountering difficulties for which additional time would not be allowed.

3.5 Project outturn costs

3.5.1 A spreadsheet prepared in March 2010 identifying costs incurred to date and projected future costs on the project until 2015 shows payments made and forecast future costs to completion of the project.

3.5.2 A summary of costs is included in Appendix 6. This shows the approved expenditure from the original project appraisal report and the forecast as at July 2010 of total costs likely to be incurred to completion.

3.5.3 The projected final target price for construction is £5,466,761 and the forecast final cost of construction is projected at £5,330,722. This shows a saving on construction cost of £136,039. The budget for the project used for incentive payment is £8,586,175, and the forecast final cost of the project (all costs, including construction) is £8,497,657. This shows a saving on the budget of £88,518. As the contractor's cost is below his construction target, and the final cost is forecast to be below the incentive payment budget, the contractor would be entitled to a share of the saving. This is currently estimated at £44,259, but will be finally calculated once all costs are known.

3.5.4 We have discussed the disclosed documents with the Environment Agency's project manager, and are satisfied that full and accurate disclosure of the likely outturn costs has been made.

Appendices

1. Glossary
2. Material project Information
3. Schedule of documents disclosed
4. Changes to target price for construction
5. Schedule of contract changes – Volker Stevin contract
6. Table of cost forecasts and budgets

Appendix 1: Glossary

Accountability: CoST's aim is to enhance the accountability of procuring bodies and construction companies for the cost and quality of public-sector construction projects. The core accountability concept is to 'get what you pay for'. The 'you' in this context applies equally to national governments, affected stakeholders and to the wider public.

Audit: A review of procedures to establish whether work has been carried out as anticipated.

Benchmarking: Comparison of performance against other organisations or providers of similar services, particularly those recognised as undertaking best practice.

Budget: An amount of money allocated to a project or scheme

Compensation event: An event at the risk of the Employer, which may change the programme or price for the project if it occurs.

Competitive Tendering: Awarding contracts by the process of seeking competing bids from more than one contractor.

Computerised data store: A centrally located computer on which information is stored and made available to those who have been given access to it.

Construction Sector Transparency (CoST) Initiative: An international multi-stakeholder initiative designed to increase transparency and accountability in the construction sector.

Consultant: An organisation or individual who has made a contract to provide services.

Contract: A binding agreement made between two or more parties, which is intended to be legally enforceable.

Contract Documents: Documents incorporated in the enforceable agreement between the Procuring Entity and the contractor, including contract conditions, specification, pricing document, form of tender and the successful tenderers' responses (including method statements), and other relevant documents expressed to be contract documents (such as correspondence, etc.)

Contractor: An organisation or individual who has made a contract to undertake works, supply goods or provide services.

Contract period: An arrangement for the supply of works, goods or services established for a fixed period of time.

Cost estimate: A cost estimate prepared by the buyer of works, goods or services which provides a benchmark or a basis for evaluation and/or negotiation when tenders/offers are received from tenderers. It also serves as an instrument of project planning and budgeting.

Employer: In the context of the CoST initiative, the Procuring Entity awarding construction and consultancy contracts for the project.

Feasibility study: An evaluation of a proposed project to determine the difficulty and likely success and benefits of implementing the project.

Framework Agreement: An arrangement under which a Procuring Entity establishes with a provider of goods, works or services, the terms under which contracts subsequently can be entered into or called off (within the limits of the agreement when particular needs arise).

Material Project Information (MPI): MPI in this context is intended to indicate that information disclosed on a project is sufficient to enable stakeholders to make informed judgements about the cost and quality of the infrastructure concerned.

Offer: An offer can be the positive answer issued by a tenderer in response to a tender invitation, or an announcement to deliver goods, carry out works and/or services to every or a specific buyer without a specific request or invitation to tender. Also refers to an expression of readiness by a tenderer to enter into a contract.

Procurement: The process of acquiring goods, works and services, covering acquisition from third parties and from in-house providers. The process spans the whole life cycle from identification of needs, through to the end of a services contract or the end of the useful life of an asset.

Procuring Entities (PEs – also referred as clients and contracting authorities): The State, regional or local authorities, bodies governed by public law or associations formed by one or several of such authorities that procure works, goods and services with full or part public funding.

Programme: The projected timing of activities required under the contract.

Quality Management System: Procedures and practices for controlling the quality of the work carried out.

Quotation: A proposed price and programme for work.

Supervision contract: A contract with a consultant to oversee the performance of the contractor on the construction work, to give a level of reassurance to the Employer about the quality of the work.

Specification: Is an essential part of the design, and states how the work should be executed to ensure that it meets the designer's assumptions.

Tender: An official written offer to an invitation that contains a cost proposal to perform the works, services or supplies required, and is provided in response to a tendering exercise. This normally involves the submission of the offer in a sealed envelope to a specified address by a specified time and date.

Tender Documents: Documents provided to prospective tenderers when they are invited to tender and that form the basis on which tenders are submitted, including instructions to tenderers, contract conditions, specification, pricing document, form of tender and tenderers responses.

Tender Evaluation: Detailed assessment and comparison of contractor, supplier or service provider offers, against lowest cost or most economically advantageous (cost and quality based) criteria.

Transparency: In the context of the CoST initiative transparency relates to the disclosure of material project information on construction projects.

Value for Money: The optimum combination of whole-life cost and quality to meet the PEs and user's requirement.

Appendix 2 – Material project Information

Stage of project cycle	List of MPI to be disclosed	Project name: Deptford Creek Frontages Package Procuring Entity Environment Agency
Project identification	Project purpose	To deliver an improved standard of protection from flooding for 33,878 properties in Bermondsey and Deptford flood areas
	Location	Frontages to Deptford Creek
	Intended Beneficiaries	Business and houses that will have risk of flooding reduced.
	Specification	Deptford Works Information
Tender process (main contract for works)	List of tenderers	Birse, Volker Stevin & TVO
	Tender evaluation report	Tender Award Report & Contract Award Report
Contract award (main contract for works)	Name of main contractor	Volker Stevin
	Contract price	£4,821,971
	Contract scope of work	Repair/ refurbishment of tidal river frontages at Deptford Creek
	Contract programme	Start of work 22 June 2009, completion due 28 May 2010
Contract Execution (main contract for works)	Individual changes to the contract which affect the price with reasons	35 compensation events amounting to £480,790; see Appendix 5
	Individual changes to the contract which affect the programme, with reasons	2 compensation events amounting to 48 days; see Appendix 5
	Details of any re-award of main contract	None
Post contract completion details (main contract for works)	Actual contract price	Current forecast of payment for construction £5,466,763
	Total payments made	Current certification £5,115,416
	Actual contract scope of work	As original Works Information amended by compensation events
	Actual contract programme	Completion achieved 30 June 2010

Documents to be disclosed	Disclosure status
Feasibility study	Project Appraisal Report
Financing agreement	DEFRA letters of 22 November 2009
Project evaluation reports (on completion and on-going)	Monthly exception reports

Appendix 3 – Schedule of documents disclosed

Document title	Subject of document
Definition and budget for project	
Deptford Defra approval letter Bermondsey	Approval of strategy dated 22 November 2006
Deptford Defra approval letter Deptford East	Approval of strategy dated 22 November 2006
Deptford Form A (Feasibility)	Seeking approval to carry out appraisal of options for improvement. Dated 29 October 2007.
Deptford Form A approval sheet	Approval of application dated 14 November 2007
Deptford Project Appraisal Report	Report on options and seeking approval of expenditure of £8,830k for improvement works. Dated 15 December 2008.
Deptford PAR approval sheet	Approval of application dated 29 October 2008
Contract for construction (Volker Stevin)	
Deptford procurement strategy	Criteria for selection of tenderers for contracts
Deptford Contract Data	Conditions of contract and contract specific data
Deptford Works Information	Specification for construction work. Dated April 2009.
Deptford Contract Programme	Contractor's programme of work. Dated 6 July 2009
080728 Deptford mini bid evaluation	Analysis of tenders for the construction contract
Deptford Contract Award Report	Report on outcome of design development stage and agreement of target cost for construction, seeking approval to award contract. Dated 4 June 2009.
Deptford Contract Award approval sheet	Approval of application dated 16 July 2009
Deptford ECC tracker issue 41	List of contract communications. Dated 24 May 2010
100712 Deptford ECC tracker rev 42	List of contract communications. Dated 12 July 2010
Deptford Compensation Events 01-10	Project Manager valuation of compensation events
Deptford Compensation Events 11-20	Project Manager valuation of compensation events
Deptford Compensation Events 21-30	Project Manager valuation of compensation events

Deptford compensation event assessments	Not explaining the reasoning and assessment method for compensation events 7, 8 & 9. Dated 1 February 2010
Deptford latest payment certificate	Amount due to Volker Stevin for construction work up to 13 May 2010
Deptford latest programme	Contractor's updated programme of work. Dated 7 May 2010
Project outturn cost	
Project Exception Report No 17	Summary report on progress dated 24 February 2010
Project Exception Report No 18	Summary report on progress dated 15 March 2010
Project Exception Report No 19	Summary report on progress dated 20 April 2010
Deptford Project Cost Forecast	Record of costs to date and forecast future costs dated 1 May 2010
100714 Deptford Cost tracker	Record of costs to date and forecast future costs dated 1 June 2010
100518 Deptford pain gain calculator	Assessment of project costs and cost share
100713 Deptford pain gain calculator	Updated assessment of project costs and cost share

Appendix 4 – changes to target price for construction

Tendered price		£ 4,239,216
Design additions		
	Additional Costs associated with silent method of piling	£ 663,000
	Replacement Concrete Slab for the introduction of Temporary work to allow a reduction in ground level behind new sheet piles	£ 81,000
	Drainage detail added to reduce pressure behind sheet pile wall	£ 95,000
	Ground Anchor Option introduced at Ash and Kent as an alternative to cantilevered sheet pile wall.	£ 158,000
	Temporary works platform added for demolishing frontages	£ 63,000
	Additional No Fines concrete to terrace area	£ 140,000
	Additional Prelims for extended programme from 24 weeks to 33 weeks	£ 126,000
	Additional Timber Fenders required	£ 150,000
	Additional Site Security including CCTV	£ 68,000
	Disposal of Hazardous material (not included in mini bid). Exact quantities to be ascertained on site.	£ 277,000
	Miscellaneous changes	£ 110,569
Omissions		
	Omit procurement of steel (by EA)	-£ 1,314,954
	Omit tree clearance (by others)	-£ 33,860
Total value of changes		£ 582,755
Agreed target price		**£ 4,821,971**

Appendix 5 – Schedule of contract changes – Volker Stevin contract

Date	Subject	Value	Time (days)	Value not yet agreed
21-Aug-09	Implement CCM system	£ 11,389.00	0	
21-Aug-09	Subcontract order with WYG for ground investigation	£ 14,838.00	0	
27-Aug-09	Delayed start of 1 week	£ 1,000.00	0	
27-Aug-09	Additional costs associated with dealing with obstructions	£ 4,900.00	0	
27-Aug-09	Works increased at Harts and Phoenix Wharves	£ 1,300.00	0	
09-Sep-09	Additional two soil samples	£ 650.00	0	
12-Oct-09	Asbestos survey on Thanet Wharf	£ 954.56	0	
09-Dec-09	Provision of 2 no inclinometers	£ 12,198.99	0	
28-Jan-10	Revised works at Harts and Phoenix Wharves	-£ 5,677.00	0	
23-Oct-09	Provision of 1 no inclinometers	£ 5,758.00	0	
Pending	Removal of trial piles installed at Ash and Kent		0	£ 17,348
Not used				
09-Dec-09	Mark up of 4% to be added to target	£ 52,598.00	0	
Not used				
28-Jan-10	Disposal of asbestos material	£ 2,000.00	0	
11-Feb-10	Crack widths greater than scheduled	£ 17,787.00	0	
Pending	Advising that increase in engineering resources required to meet additional surveying requirements.		0	£ 47,435
26-Feb-10	Apply anti graffiti protection to concrete faces	£ 8,841.93	0	
16-Mar-10	Condition of existing frontages worse than expected	£ 183,335.54	38	
16-Mar-10	Removal of existing tie rods	£ 108,781.69	10	
16-Mar-10	Additional work to rectify failed section of frontage	£ 31,287.62	0	
09-Jul-10	Issue of revised specification for Phoenix Wharf.	-£ 3,694.00	0	
24-Mar-10	Instruction to supply navigation markers	£ 7,521.12	0	
24-Mar-10	Revised capping beam	£ 6,468.79	0	
26-Apr-10	Production of as built drawings	£ 4,009.00	0	
Pending	Depth of gravel at Saxon Wharf greater than detailed in works information.		0	£ 15,000
Pending	Timber king posts uncovered within excavation for Hilton back of wall drainage		0	£ 16,284
07-May-10	Ash Kent Wharf – Revised Waling Beam	£ 864.00	0	
14-Apr-10	Additional welding and weld testing due to revised anchor design	£ 8,662.10	0	
Pending	Advising that further obstructions uncovered in drainage trenches at Saxon and Hilton.		0	£ 25,565
Not used				
29-Jan-10	Advising that grout for ground anchors A1 - A15 in excess of three times theoretical value allowed for within Keller Ground Engineering Target Cost quotation.	£ -	0	
09-Jul-10	Issuing revised detail for back of wall drainage at Hiltons no terrace section.	-£ 1,357.00	0	
Pending	Provide fielded panels in concrete L walls for community art project.		0	£ 10,540
09-Jul-10	Providing details for surface water drainage and reinstatement at upstream end of Hiltons Wharf.	£ 6,373.00	0	
Pending	Instructing VS to raise cheque to facilitate payment of Contractor carrying out works at Sun and Theatre Wharves.		0	£ 20,628
Pending	Extra reinft to Brookmarsh boundary wall -Saxon			£ 1,200
Pending	New PSRA site signage on mooring/falls from height			£ 10,000
	Totals	**£ 480,790**	**48**	£ 164,000

Appendix 6 -- Table of cost forecasts and budgets

Construction contract costs		
Target price at start of construction	£ 4,821,971	
Agreed compensation events	£ 480,790	
Forecast value of other compensation events	£ 164,000	
Target price at July 2010		£ 5,466,761
Payment for work to July 2010	£ 5,310,460	
Forecast further payments	£ 20,262	
Forecast final cost at July 2010		£ 5,330,722
Saving on target		£ 136,039
Total project budget		
Initial incentivised project budget	£ 7,963,175	
Increase due to employer's retained risk events	£ 623,000	
Revised incentivised project budget		£ 8,586,175
Forecast total project cost		£ 8,497,657
Saving on budget		£ 88,518
Contractor share of saving		**£ 44,259**

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