

Construction Sector Transparency Initiative (CoST)

Assurance Team Report

M40 Junction 15 (Longbridge) Bypass the Highways Agency

September 2010



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Members of the Assurance Team are:

Richard Bayfield, FICE FCI Arb, Independent Consultant
Peter Cousins, MICE FCI Arb, Independent Consultant
Robert Crease, FICE FCI Arb, Director Robert J. Crease & Co Limited
Peter Higgins, FICE FCI Arb, Director pdConsult Ltd

Members of the MSG are:

Bob McKittrick, Chairman
Rachel Chandler, Costain and the Civil Engineering Contractors Association
Noel Foley, Happold Consulting and the Association for Consultancy and Engineering
Malcolm Hankey, Civic Trust Awards
Chandrashekar Krishnan, Transparency International UK
Sarah Bloom, the Department for International Development
Simon Morrow, the Royal Institution of Chartered Surveyors
Doug Sinclair, Highways Agency
John Tracey-White, the Royal Institution of Chartered Surveyors

Observers to the MSG are:

Rob Hall, Environment Agency
Andrew Savage, Broadland Housing Association
Colin Wilby, Durham County Council

The Secretariat for the MSG are:

Salima Hernandez, Institution of Civil Engineers
John Hawkins, Institution of Civil Engineers and CoST International Secretariat

Finally, thank you to the following individuals who provided the information for this report:

Doug Sinclair, Finance Director, Highways Agency
Stephen Coe, Project Manager, Highways Agency

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1. Summary

- 1.1.1 The Highways Agency is improving the M40 at Junction 15 by a combination of new road construction and by widening existing roads within a 1 mile radius of the M40. The decision to construct this scheme followed a detailed assessment of options, including costs and benefits. The site works began in 2008 and are due for completion in late summer 2010.
- 1.1.2 The Highways 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 with clear evidence of a transparent approval process. However some draft documents have never been marked as “final” or “approved” and this is an area where “processes” could be improved.
- 1.1.3 The contractor for this project was selected following the submission of competitive tenders based around quality rather than price. This was because a strategic decision was made for “Early Contractor Involvement” in which a contractor also designs as well as builds the project.
- 1.1.4 This approach has the benefit of getting the contractor's detailed input to the design, and the use of an experienced cost consultant to negotiate an initial target price and any subsequent changes to it. This approach also has the benefit of ongoing reassurance that any changes to the contract price are appropriate through the cost consultant's close involvement with the project.
- 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 Highways Agency procedures is critical to the success of the project. Programme, quality and cost are generally managed by the Highways Agency in accordance with the requirements of these contracts and their own procedures.
- 1.1.6 During construction, the Highways Agency motivates the contractor to control costs within the available 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.
- 1.1.7 Moreover for this method of procurement to work the contractor and Highways Agency work on a transparent “open book” basis sharing full financial information of both cost increases and savings. For example the contractor's proposal to use local sources of fill material (by negotiating with local land owners) saved approximately £6 million pounds as against the alternative cost of bringing fill to the site. Under more conventional forms of contract this saving would have been entirely to the contractor's account rather than being shared for the benefit of both the contractor and the public purse.
- 1.1.8 We have also discussed with HA staff the major Compensation Event No.17 which relates to delays caused by a major utility company. The financial consequences are currently being negotiated with the contractor who is claiming **over £4.1M**. In order to fulfil a commitment to local residents the project was started early on site and before major service diversions involving a major utility company had been undertaken. Therefore costs are higher than would otherwise have been the case.
- 1.1.9 Much project information has been put into the public domain via the HA web site (www.highways.gov.uk) as part of the project's communications strategy. However public relations is not the same as disclosure which is central to this report.

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 M40 Junction 15 Bypass scheme is one of the chosen Group A projects.
- 2.1.4 The UK pilot is led by the UK CoST Multi-Stakeholder Group. It is supported by the Department for International Development, the Department for Business, Innovation and Skills, and the Treasury. The Institution of Civil Engineers (ICE) is managing the pilot study on behalf of the UK CoST Multi-Stakeholder Group.
- 2.1.5 The assurance team appointed 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 Richard Bayfield, the team member who carried out the M40 Junction 15 Bypass information review.

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 On each of the projects in the pilot study, 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 Highways 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 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 Highways Agency and its project team provided the documents by electronic transfer to the data store. Following our review of the information initially provided, the 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 project information which the Highways 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 M40 J15 Bypass 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 Morrisons and the management of their contract.
- Documents relating to the monitoring and control of costs on the project.

2.4 The M40 Junction 15 Bypass project

2.4.1 There are actually 2 different projects that were awarded as one contract namely the A45/A46 Tollbar End Improvement and the M40 Junction 15 Longbridge Improvement. These 2 projects are separated by a distance of about 10 miles. This report is limited to the M40 and only M40 documentation has been provided (except for example the tender documents which combined both projects).

2.4.2 The M40 Junction 15 Bypass project is a Highways Agency package of improvements to ease traffic flow at the M40 Junction 15. The works comprise a combination of new road construction including bridges and culverts together with the widening of existing roads within a 1 mile radius of the M40.

2.4.3 The M40 Junction 15 is a strategic junction on the Motorway and Trunk Road network, which enables traffic to turn off the M40 onto the A46, towards either Coventry or Stratford-upon-Avon. It is also a key node in the secondary A45/ A46 link between the M40 and the M1. Over 75,000 vehicles per day use this junction, and the resulting congestion causes significant delays and at times forces traffic to queue back onto the M40 motorway, causing further delay on the motorway, and creating a risk of high-speed collisions. Public Consultation on the scheme took place in November 2001, and the preferred route was announced in July 2003.

2.4.4 Morrison Construction Services Ltd/Hyder Consulting was appointed as Contractor on 27th May 2005 under the Early Contractors Involvement (ECI) form of Contract. The original ECI Supervisor was White Young Green (WYG), who had undertaken the designer role prior to the contract award. Following the award of a new design services framework contract in 2006, WYG were replaced by Arup who has continued in this role through the construction phase.

2.4.5 Morrison Construction Services Ltd/Hyder Consulting were responsible for the design and construction of the works.

2.4.6 Following the award of the ECI contract to Morrison/Hyder a large 'nationally important' bat roost was discovered within close proximity of the published scheme. The decision was taken to develop an alternative alignment, rather than spend considerable time and resource moving the roost. Following extensive optioneering a new preferred option was published, and presented to the public at an exhibition held in November 2005.

2.4.7 Following the publication of draft Orders in July 2006, the local village objected to the new proposals, as the proposed bypass had been moved closer to them than the original preferred route, published in 2003. However no one questioned the need for improving the capacity of the junction. Consequently the proposed scheme was subject to a Public Inquiry in March 2007. The Inspector reported his findings on the Public Inquiry to the Secretary of State for Transport at the end of June 2007.

2.4.8 The Secretary of State's Decision to proceed with the scheme was announced on the 20th December 2007, and the statutory orders required before the scheme could be constructed were published on the 11th January 2008.

3. Validation of documents

3.1 Overview of documentation

3.1.1 A comprehensive set of documentation has been provided by the project team which goes back to 2003. These documents cover most of the major decisions pertaining to the project including the appointment process of the Contractor. The documentation is extensive and in some instances documents marked “draft” have been clearly acted upon by all parties. This has meant that some documents have been “approved” by email and there is clear evidence of this transparent approval process. However some draft documents have never been marked as “final” or “approved” and this is an area where “processes” could be improved.

3.2 Highways Agency procedures

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

3.2.2 A framework is a selected list of suppliers (usually consultants) who will carry out work of a specified nature when instructed by the Highways Agency. To set up a framework, the Highway 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 agency against published criteria. Those scoring the highest are appointed to the framework. The framework will last for a period of time – typically four or five years, following which a replacement framework is set up and fresh submissions are sought and marked as before.

3.2.3 The Agency has a consultants framework for major projects. The consultants for the M40 project were selected from the major projects framework.

3.2.4 The selection of a contractor was initially via an open invitation through the “Official Journal of the European Union”, more commonly known as “OJEU”.

3.2.5 New highway schemes are assessed in three stages. Stage 1 corresponds to a feasibility study or an assessment of the need and possible options for a scheme. Stage 2 corresponds to a pre-public consultation assessment, or route selection. This includes preliminary assessment of a number of route options. Stage 3 corresponds to assessment of the preferred route prior to commitment to construct the scheme. This is a more detailed assessment focused on the preferred option. The requirements of a Stage 3 Assessment are to identify clearly the advantages and disadvantages, in environmental, engineering, economic and traffic terms, of the preferred route.

3.2.6 Under the Early Contractor Involvement (ECI) procurement strategy, a contractor is appointed following completion of Stage 1 and 2, after a tender process. The intention of ECI is to engage the Contractor early in the design and Statutory Process in order to bring more innovation and buildability to the design and construction methodology, resulting in time saving and improved value to the HA.

3.2.7 By using this approach, the contractor contributes significantly to the Stage 3 assessment. During this stage, two reports are made: i) the Stage 3 scheme assessment report, which explains the scheme development and covers the engineering, economics and traffic issues associated with the scheme and is provided to allow both statutory bodies and the public to comment on the proposals and ii) the Environmental Statement, which covers all environmental aspects. The stage 3 assessment report was published in March 2006.

3.2.8 Stage 3 also incorporates the publication of draft Orders, the Public Inquiry process, preparation of Compulsory Purchase Orders, the Secretary of States Decision, value engineering detailed design and target cost approval.

- 3.2.9 Under ECI the agency works together with the contractor to develop and agree a "target price" basis for payment on major contracts. Under this arrangement, the Contractor 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 agreed target price for the work.
- 3.2.10 Stage 4 (the final Stage) starts with the approval to commence construction works and also the construction of the Works.
- 3.2.11 For major contracts a "Tender Assessment Report" is prepared to recommend the tender for acceptance.
- 3.2.12 Most 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.

3.3 Budget share Arrangements

- 3.3.1 As noted above the supplier is paid the actual cost of the work carried out, and then shares in the savings or cost overruns if this is less or greater than the agreed target price for the work adjusted for compensation events which occur and which are at the agency's risk. These risk events are called compensation events or "CE's". For this project there is a graduated "bonus" share as follows:

Outturn cost as % of target price	Contractor's share percentage
Less than 90%	15%
From 90% - 100%	20%
From 100% - 110%	50%
From 110% - 120%	35%
Over 120%	20%

- 3.3.2 Thus if the outturn cost is 95% of the target cost then the Contractor will receive 20% of the 5% saving which equates to 1% of the target cost. On the other hand if the outturn cost is 105% of the target cost then the Contractor will contribute 50% of the 5% excess which equates to 2.5% of the target cost.

3.4 Project identification and budget

- 3.4.1 A scheme brief costing exercise dated **22nd September 2004** identified a scheme cost of **£57.2M**.
- 3.4.2 A "stage 3 scheme assessment report" was prepared in **March 2006**. This report analysed the preferred route in some detail and included a summary of cost estimate of **£64.325M**. We note this key report is marked as "draft" status but we understand that it was treated as final by all participants within the project.
- 3.4.3 A scheme estimate of **£71.4M** was published on **20th September 2007**.
- 3.4.4 Funding for the M40 J15 Bypass scheme was primarily provided by the Department for Transport who provided all but £6.225M of the funding. The £6.225M was split £5.925M and £300k. The £5.925m was provided by a "development" fund (i.e. a fund which contributed to the project in view of the benefits the new scheme will bring and that contribution was made as part of the planning requirements for the scheme (the technical title is a "section 278" contribution). The other £300k was a Highways Agency NDD (Network Delivery and Development) contribution for specific work which the NDD asked to be incorporated.

- 3.4.5 A signed funding request for **£69.300M** out of the total budget of **£75.225M** was made by the agency on the **20th February 2008**. This form notes third party contributions of £5.925M. The Bill of Quantities dated 20th February 2008 has at line 6169 an item described as “Severn Trent Contribution” - £5.925M.
- 3.4.6 The target cost breakdown prepared by Arup on the **22nd January 2008** shows a target cost of **£53.320M**, however VAT, contingency, land, early design and other costs of **£21.861M** take the overall scheme cost to **£75.182M**.
- 3.4.7 The **target cost** by reference to the HA notice to proceed to construction of the 14th March 2008 records **£52,810,649.44**. This figure is rounded to **£52.810M** by reference to the tracker spreadsheet.
- 3.4.8 The project report of **April 2010** reports a revised HA scheme budget of **£77.14M** and a current forecast outturn cost of **£78.50M**. This report notes that Revised Department for Transport funding is £70.915M, it is apparent that £6.225M of funding is provided by different source(s) which leaves a potential shortfall of just over £1M. However we are aware that this potential shortfall is being addressed in accordance with the agency's procedures.
- 3.4.9 Having considered the documents disclosed by the agency in light of the agency's procedures, we are satisfied that these documents adequately identify the project and the funding for the project.

3.5 Morrison appointment

- 3.5.1 The following documents have been provided in relation to the appointment of Morrison.
- Specifications (Works Information, conditions of contract) and other tender documents for the construction work.
 - Tender Assessment Report” which recommended “Morrison/Hyder” for appointment as contractor on the scheme using “Highways Agency best value procurement guidelines”.
 - Contract Award letter.
 - Conditions of contract 9th March 2006.
 - Works information 9th March 06.
 - Supplementary Information 9th March 2006.
- 3.5.2 A procurement strategy document discussing rationale for an ECI contract has not been provided but the tender and selection processes indicate a structured and professional procurement process.
- 3.5.3 Five contractors had been selected to submit tenders for the construction of this project. Tenders were to take the form of a quality submission. The quality submission covered such matters as programme, methodology, resources, quality management and risk management.
- 3.5.4 Morrisons scored the highest mark on the different quality criteria, and was awarded the ECI contract.
- 3.5.5 The tender submitted by the team of Morrison and Hyder was evaluated, in accordance with the stipulated evaluation criteria and concluded to be the highest scored compliant quality submission. The tender assessment report records the salient details and outcome of the tender process. The successful delivery partner is notified in an “acceptance of offer” letter. A Highways Agency “Contract Award Certificate” records the primary details of this Contract.

In this instance it was signed by the Agency's Procurement Officer who has authority to act on behalf of the Secretary of State for Transport.

- 3.5.6 The contract award letter has annexed to it a "form of agreement" by deed. 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.
- 3.5.7 The following documents have been provided in relation to the finalisation with Morrison of the agreed target cost construction work.
- Detailed bill of quantities.
 - Morrisons programme of work.
 - Certificates of payment to Morrisons.
- 3.5.8 The contract with Morrisons provided for payment on a target basis which has been described in more detail at section 3.3 of this report.

Design changes

- 3.5.9 The main design change was to use local fill rather than to import material from Oxfordshire. The precise saving has yet to be finalised but is understood to be something above £1M.

Compensation events

- 3.5.10 The April 2010 project report records that 52 compensation events occurred during the construction and have been submitted to date, of which 43 have been agreed up to 30th April 2010. The events are summarised in Appendix 4.
- 3.5.11 The events which have been agreed total £865,584.02, whilst those which have not yet been agreed amount to £4,204,679.00.
- 3.5.12 The consequence of the agreed compensation events was to change the target price to **£53.676M** (refer to Appendix 4).
- 3.5.13 The Highways 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.
- 3.5.14 We have inspected the electronic contract management system for this contract, and are satisfied that appropriate records of each event have been maintained.
- 3.5.15 We have also discussed with HA staff the major Compensation Event No.17 which resulted from delays caused by a major utility company. The financial consequences are currently being discussed with the contractor who has requested an increase to the target price of **over £4.1M**. These additional costs have been incurred because this project was started before major service diversions involving a major utility company had been undertaken. It is understood the early start was made in order to meet a commitment made to local residents for the scheme to start as soon as possible, albeit with the risk of such delays.
- 3.5.16 We are satisfied that full and accurate disclosure has been made of the assessment of compensation events on this contract to date.
- 3.5.17 The assessment of some compensation events is incomplete, and further adjustments to the target price are likely to be agreed for those events. The current costs forecasts at appendix

5 are based on a worst case scenario with the full amount quoted by the Contractor being agreed for each Compensation Event.

Programme

- 3.5.18 The relevant programme at the start of construction of the contract by the contractor, shows work was due to start on 15th February 2008, and to be completed by 15th July 2010. The instruction to proceed was issued on 14th March 2008 and work started on site on 17th March 2008. The project report of April 2010 reports an estimated completion date of 20th August 2010.
- 3.5.19 In view of the significant compensation events on this contract it seems likely that efforts have been made by the contractor to recover lost time and to complete the works in the summer of 2010 as was envisaged when the contract price and programme was agreed in February 2008.

3.6 Project outturn costs.

- 3.6.1 A spreadsheet prepared in April 2010 identifying costs incurred to date and projected future costs on the project until 2011 shows payments made and forecast future costs to completion of the project, this is included at Appendix 5.
- 3.6.2 The target cost breakdown prepared by Arup on the **22nd January 2008** shows a target cost of **£53.320M** (subsequently revised to £52.81M) , however VAT, contingency, land, early design and other costs of **£21.861M** take the overall scheme cost to **£75.182M**.
- 3.6.3 The project report of **April 2010** reports a revised HA scheme budget of **£77.14M** and a current forecast outturn cost of **£78.50M**. The April 2010 control form at Appendix 5 shows a current forecast of **£78.78M** (this minor discrepancy may be due to the different dates on which these reports were prepared).
- 3.6.4 There are currently discussions ongoing over the value of the compensation events which when agreed will affect the target price (and therefore the profit share), meanwhile the current forecast (April 2010) reports a **negative profit share of £454K**. We note the current "Ministerially approved budget" (MAB) is **£77.81M** which provides little tolerance for further compensation events. We also note the project will be complete soon and the financial reports have been made on a "worst case" basis. We are also aware of a current funding application to bridge any shortfall.
- 3.6.5 We have discussed the disclosed documents with the Highways Agency's project manager, and are generally 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. Schedule of contract changes – contract
5. 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: M40 Junction15 Procuring Entity: Highways Agency
Project identification	Project purpose	To provide relief from traffic congestion at M40 junction 15 in accordance with the relevant targets in the <i>Highways Agency 10 year National Roads Strategy</i> .
	Location	M40 Junction 15 (Longbridge) Bypass Off B4463, Nr Sherbourne, Warwick CV35 8AE
	Intended Beneficiaries	Road users, local residents and non-motorised users (The new bypass has a pedestrian underpass near the River Sherbourne to improve access to the public footpath and bridleway network).
	Specification	Design Manual For Roads and bridges (DMRB)
Tender process (main contract for works)	List of tenderers	1. Nuttall, MouchelParkman 2. Carillion, Capita Symonds 3. Sir Robert McAlpine/Geoffrey Osborne JV, WSP 4. Morrison, Hyder 5. Interserve, Parsons Brinkerhoff
	Tender evaluation report	A46 WMJIP Final Tender Assessment Report.doc dated April 2005
Contract award (main contract for works)	Name of main contractor	Morrison Construction Services Ltd /Hyder Consulting
	Contract price	Agreed target cost is £52.810M (c.f. £53.3M Target Cost per Arup 22/1/08 giving total scheme cost of £75.2M including VAT, contingency and other costs)
	Contract scope of work	Design and construction of an off-line (by-pass) route for the A46 to the west of the junction, on a new bridge over the M40. The new bypass route extends from Coplow Wood, south of Junction 15, to the A4189 Hampton Road over-bridge to the north of the interchange.
	Contract programme	Contract Award = 26 May 2005 – Contract start on Site = 17 March 2008 Contract completion date = 20 August 2010
Contract Execution (main contract for works)	Individual changes to the contract which affect the price with reasons	54 No Compensation events to date which are included at Appendix 4

Stage of project cycle	List of MPI to be disclosed	Project name: M40 Junction15 Procuring Entity: Highways Agency
	Individual changes to the contract which affect the programme, with reasons	Compensation Event No 17 - delay and disruption as a result of a major utility company non performance and extended completion of their works amounting to a prolongation claim of 13 weeks and an adjustment to the target price of £4.1M Compensation Event No 9 - For Adverse Weather in Aug 2008 amounting to 4 days
	Details of any re-award of main contract	None
Post contract completion details (main contract for works)	Actual contract price	Scheme Total £78,781,298 – but subject to final negotiation which may reduce this figure
	Total payments made	Certified payment to the contractor as at 26-04-10 is £62,895,324.31 (this includes £6,593,796 of costs during the scheme development which are outside the target price for the construction phase)
	Actual contract scope of work	As per original Works amended by compensation events
	Actual contract programme	Planned completion date is 15 July 2010 (as at April 2010)
Documents to be disclosed		Disclosure status
Feasibility study		Project Appraisal Reports
Financing agreement		Project Appraisal Reports Financial authorisation reports
Project evaluation reports (on completion and on-going)		Monthly reports

Appendix 3 – Schedule of documents disclosed

Filename / Document title	Subject of document
Definition and budget for project	
M40 J15 Annex 01-10-07.xls	MP Scheme Cost Summary Form - Annex 1 version 1.2 issued 4-4-07 Ministerially approved budget (MAB) is £77.81M
Annexe 1 1 2 Borrow pit 10 Oct (2) 071011.xls	MP Scheme Cost Summary Form - Annex 1 version 1.2 issued 4-4-07
General Tender Queries..xls	HA doc recording Tender questions (no 1-110) and HA responses
M40 J15_TPI Entry Sub from DfT RP to SofS 230603_Annex E_AST.doc	Annex E - Assessment of Environmental, safety, economy, accessibility and integration impact - cost estimates range from £40.2M - £54.1M
M40 Jn 15 PICG headline paper 22-10-07 .doc	Scheme Estimate Change A HA doc - reporting an increased cost estimate of £70.9m [Q2 06] on the M40 Junction 15 (Longbridge) Bypass
M40-Scheme-Assessment.doc	Scheme Assessment Report Extract ".....1.1.2 Purpose of this Report: The Stage 3 Assessment Report documents the scheme assessment in environmental, engineering, economic and traffic terms. It is provided to allow both statutory bodies and the public to comment on the scheme proposals."
M40_Phase_1B_Draft in MS.mpp	A programme detailing Scheme Administration And Management Process (Summary Tasks)
SchemeBrief-finalamended22.9.04.doc	Scheme Brief - RCTPI DATE Q3 2001.
A46 WMJIP Award certificate.doc	Highways Agency Contract Award Certificate - Scheme title is "A46 West Midlands Junction Improvement Package"
Annex A - Stage 3a ICF Process - Request For Approval M40 jn15 Nov 07.xls	Major Projects Request For Approval (Stage 3A) – revised cost estimate requiring (internal) approval
Annex B - ICF Process - Cost Increase Approval Template V2 PICG Nov 07.xls	Cost Increase Template and Scheme Forecast Template The scheme estimate = £70,918,717.32 and revised funding request = £71.1M
Annex C - ICF Process - Risk Template M40 J15 Nov PICG.xls	Risk Register and financial Risk estimate
Annex D - ICF Process - Key Approvals M40J15 PICG - Nov.xls	Record of SSR Approvals (up To June 07) Note entry under row 19 "The PICG costs are based on a Bill of Quantities issued in August 2007. These have been reviewed/spot checked by Arup/HA and seen to be robust. Target Cost to be agreed later this year. (November/

Filename / Document title	Subject of document
	December 07)"
Appendix A - S278 - Excerpts from GVA Grimley report.pdf	A briefing document recording Planning permissions and funding issues - March 2004
Appendix C - M40 Original Scheme Brief.pdf	M40 Junction 15 Improvement – original scheme brief including gross scheme cost estimates signed off (by HA and DfT) and dated 31st March 2004
Draft M40 BRIEF - 2-06b.doc	Draft Scheme Brief 2/06. Contains high level project objectives and programme dates.
090807 Financial Authorisation HAv3.doc	HA Financial Authorisation Requirements dated 7th August 2009 A generic (non site specific) doc containing details of; financial authorisation and internal Highways Agency financial governance.
Contract for Early Contractor Involvement (incl Design and Construct) - Morrison	
080215 Construction Prog Rev 00 080222.pdf	Approved Contract Programme Rev 00 dated 15-02-08 doc ref no 4236
2007_10_18 C04236 _TC_Rev 017 080222.pdf	A programme entitled "Target Cost Review: Borrow Pit Option" issued 18-10-07 for HA review
HARM Result graph for contractors risk 071121 080116.pdf	Contractors Risk - Risk Management - Cost v Risk Analysis dated 21-11-07 Comment: attachment to e-mail-Target Price Documentation 080225.htm (risk allowance = £2,431,161 max scheme cost = £5,062,156)
HARM Result graph for HA risk 071121 080116.pdf	HA Risk - Risk Management - Cost v Risk Analysis dated 21-11-07
HARM Result table for contractors risk 071121 080116.pdf	HA Risk Management schedule of Contractor Risks dated 21-11-07
HARM Result table for HA risk 071121 080116.pdf	.HA Risk Management schedule of HA Risks dated 21-11-07
M40 J15 Annex Target 04-02-08 FINAL 080220.xls	Final Target Price Spreadsheet dated 4-2-08 The MAB is now £74.67M (section 14c).
Final Programme Ref M40J15-TO2 update for 8 Dec 2004.mpp	Project Programme
M40 - Project Management Plan - July 06.doc	Scheme Title: M40 Junction 15 (Longbridge) Bypass
M40 BOQ to JMc 20th Feb 080220.xls	Priced BOQ from Morrisons to Arup dated 20-02-08
A46 WMJIP contract awd letter.pdf	Highways Agency "acceptance of offer" letter dated 26th May 2005 addressed to Morrison Construction Services Ltd
A46 WMJIP Final Tender Assessment Report.doc	A46 West Midlands Junction Improvement Package - Tender Assessment Report dated April 2005

Filename / Document title	Subject of document
Vol 3 - Supplementary Information 9 March 06.pdf	Vol 3 (prepared by White Young Green) dated 17th Nov 2004 - Supplementary Information
Vol 2 - Works Information 9 March 06.pdf	Vol 2 (prepared by White Young Green) dated 17th Nov 2004 - Works Information
Vol 1 - Conditions of Contract 9 March 06.pdf	Vol 1 (prepared by White Young Green) dated 17th Nov 2004 - Form of Tender - Form of Agreement by Deed - Contract Data Parts 1 and 2 - Conditions of Contract
Vol 0 - Instructions for Tenderers 9 March 06.pdf	Vol 0 - HA doc (prepared by White Young Green) dated 17th Nov 2004
Project outturn cost	
Project Report April 2010	Summary report on progress dated April 2010 presented at board meeting no. 19
HA Change Control Tracker	HA Change Control Tracker dated 30 th April 2010, File name "1004 M4J15 CE Tracker HA v4.xls".

Appendix 4 – Schedule of agreed contract changes

	Initial target cost	£52,810,649.44
CE Ref.	Details of Compensation Event	Agreed Amount £ (a blank indicates matter still under discussion)
1	Starting Detailed Design before the Notice to Proceed was authorised.	0.00
2	Removal of NRTS costs from the Target Cost, as they are paid directly from the HA	-691,154.43
3	RIB Cost Capture System - CE as directed by N Hopcraft . E-mail 18-8-08.	15,905.83
4	TM Attendance for NG GAS during their SU diversion on the A46 Warwick Bypass S/B carriageway.	88,633.80
5	Additional Bus Stop on A46 Stratford Road (N/B) as requested in Inspectors Recommendation/ Decision Letter.	22,810.85
6	TM Attendance for STW during their abortive SU diversion on 2nd/ 3rd August on A46 Warwick Bypass N/B carriageway.	841.11
7	Speed Enforcement Camara's on the M40 Jn 15 - 1 yr operation. Started 9/08	318,528.66
8	Additional Fencing for Mr Wyatts Off Site Planting - complete 4th face of planting.	1,566.37
9	Delays due to weather in August 08 - based on weather records.	153,150.20
10	Additional TM attendance for STW during their SU diversion across the A46 Warwick Bypass - N/B carriageway - programmed Nov 08 - costs for STW to repay HA.	52,570.19
11	Removal of Asbestos Water Main - completed in 14-8-08	5,852.01
12	Carriageway crossing for Nat Grid Gas due to clash with water main and revised depth level for existing gas main. Additional depth requires thrust bore	47,665.18
13	Inclement weather during May. Details to be confirmed from Met Office relating to rainfall.	459.69
14	Weather delay for July 2008	7,825.15
15	Detailed Design of Bridge Pier Protection for Structures 3 & 4.	45,792.46
16	Removal and replacement of section of crash barrier at Hampton Lane - N/B carriageway - STW to reimburse these costs.	2,121.80
17	Delay cost due to STW non-performance diverting W2 and W6 (not yet agreed but Contractor claiming £4.1M)	
18	Direct costs associated with STW assistance by MCL	21,342.75
19	Change in standards for pavements IAN 101/07 & 102/07	90,320.02
20	Additional visit for tree removal due to late instruction	1,455.08
21	Relocation of Structure 14 due to clash with existing gas main	629.41
22	Undertaking earthworks operations during non earthworks season to mitigate STW delays	
23	Diversion for traffic access on the B4463 due to gas strike / leak	384.45
24	Production of Carbon Footprint calculations to provide 1/4ly returns to the HA. IAN 114/08 Sept 08 refers.	23,659.78
25	Mid term SGAR 6 preparation	10,148.83
26	Change in accommodation works for Mr A J Clay.	9,727.56
27	Increased cost of fuel due to change in tax statute.	1,679.88
28	Flooding of works at Structure 1.	7,176.93

29	Site Clearance for NRTS.	1,009.89
30	Removal of Silane treatment from the works.	-13,125.66
31	Weather delay for February 2009	
32	Structural Assessment for St 2	9,950.12
33	Provision of Traffic Management for BT	16,823.24
34	TM for NRTS	70,561.28
35	Pier Protection - Construction	407,358.11
36	Delays due to weather in July 09 - based on weather records.	
37	Provision of GSM cards for remote monitoring to mitigate BT cable diversions	5,682.76
38	Additional materials provided to BT	0.00
39	NRTS work delaying main contract works to 25/5/09	0.00
40	Remote monitoring and interface with existing streetlighting system	
41	Costs associated with the design and construction of screen barrier for Tournament Fields estate east of the A46 north of J15	88,358.85
42	Capacity and condition of cross carriageway pipe at North tie in	
43	Design checks on temporary BT chambers 'chimneys' to verify adequacy for incorporation within the permanent works when abandoned.	
44	Additional requirement for uplift in planting arrangements to be installed around the Sherbourne village.	1,106.06
45	Inadequate compacted fill to BT trenches effecting safety barrier	
46	November 2009 adverse weather.	
47	Amendment to Fruit Farm bellmouth access	4,489.69
48	Associated costs with the Bypass Opening Ceremony	4,215.23
49	Hardened concrete footpath from Sherbourne to bus stop	
50	Gas main in B4463 delaying the works, excavation open and gas leak.	29,569.97
51	Fencing at W8 due to Balfour Beatty damage	490.92
52	January 2010 adverse weather.	
53	Adverse weather February 2010	
54	Deletion of layby A46 southbound	
	Additions / omissions agreed to 30th April 10	£868,584.02
	Revised target cost	£53,676,233.49

Appendix 5 -- Table of cost forecasts and budgets

**Control Forms - ECI CONTRACTS
503 (Part 2.1) Financial Statement 2**



Scheme : **M40 Junction 15 (Longbridge) Bypass** Report N^o: **59**
 Project Manager under the Contract: **Stephen Coe** Assessment Date: **Apr-2010**
 Contractor **Morrison Construction Ltd** PIN N^o: **A103165**
 Date of Award of Contract: **27-May-2005** Scheme Budget : **53,934,000**

Section	Planned Start date	Planned Completion date	Anticipated/Actual Start date	Anticipated/Actual date of Completion
Phase 1	27-May-2005	1-Dec-2008	27-May-2005	7-Jan-2008
Phase 2	15-Mar-2008	8-Aug-2010	17-Mar-2008	18-Oct-2010

1.	Total of Prices for Phase 2 (excluding disputed Compensation Events)	53,676,234
2.	Disputed Compensation Events	4,204,679
3.	Early Warnings and Potential Liabilities	150,000
4.	Forecast Final Target for Phase 2 (sum of lines 1, 2 & 3)	58,030,912
5.	Forecast Final Spend Phase 2 (excluding Contractors share)	58,939,775
6.	Estimated Contractors share (+ve or -ve)	- 454,431
7.	Forecast Final Spend Phase 2 with Contractors Share (sum of lines 5 & 6)	58,485,343
8.	Forecast or Actual Final Spend Phase 1 (excluding Design Bonus)	6,593,796
9.	Estimated Design Bonus	-
10.	Forecast or Actual Final Spend Phase 1	6,593,796

11.	Brought forward the sum of lines 7 and 10	65,079,140
12.	Forecast Final Ancillary costs	847,071
13.	Forecast Final Cost for HA Agents (after Award of Contract)	1,993,345
14.1	Forecast Final Cost of Statutory Undertakers	3,479,583
14.2	Forecast Final Cost of Rail Authority, Local Authority etc.	-
15.	Residual Risk	59,320
16.	Non Recoverable VAT	5,338,356
17.	Land	1,047,688
18.	Prep & Supervision for TPI entry to Award of Contract	936,795
19.	Other Adjustments	
20.	INDIVIDUAL SCHEME TOTAL	78,781,298

Complete below when final bonus is determined, if more than one scheme in a Contract package then enter appropriate proportion of the Package's Final Bonus.

21.	Final Bonus	
22.	CONTRACT TOTAL	78,781,298

DRE JV

CoST UK Secretariat
Institution of Civil Engineers
1 Great George Street
London SW1P 3AA

CoST@ice.org.uk

