



**SCOTT WILSON BUSINESS CONSULTANCY**  
Independent Review  
of  
tie Tender Analysis  
for the  
Tram Infrastructure Tender (ITN) Stage

# REPORT



January 2007



## Scott Wilson Business Consultancy

We work with clients to develop, implement and evaluate projects, programmes and change initiatives to improve performance and reduce risk.

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### Independent Review of Tie Tender Analysis for the Tram Infrastructure Tender (ITN) Stage

*January 2007*

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## 1 INTRODUCTION

- 1.1 First Stage Tenders for the infrastructure delivery contract (Infraco) associated with Phase 1a and 1b of the Edinburgh Tram Project were returned to tie Ltd from the two Tenderers on 12th January 2007. The tie team undertook an analysis of the submissions and a detailed check of the prices. In order to do this a small team of specialists in the various areas of the tender disciplines was brought together.
- 1.2 To maintain probity and provide additional levels of confidence to the funders, it was agreed an independent audit of the work described above would be undertaken, and an independent review team would be appointed.

## 2 INDEPENDENT REVIEW TEAM (IRT)

- 2.1 The Independent Review was undertaken between Thursday 18th and Thursday 25th January 2007 by:
- Keith McMillan FRICS, FFB, MCIQB, MCI Arb
  - from Scott Wilson Business Consultancy's London Office,
  - David Taylor FICE, FIHT
  - from Scott Wilson Scotland's Edinburgh Office,
  - James Laird B.Eng.
  - graduate civil engineer from Scott Wilson Railways' Glasgow Office
- 2.2 In addition to their professional ability and standing, the review team's selection resulted from their independence from any aspect of the project or third party dealing, that could have influenced the outcome of reporting. The review was undertaken in the City Point offices of tie Ltd.

## 3 BACKGROUND

- 3.1 The remit of the Project Team was to provide confirmation of continuing affordability or otherwise of the scheme as a result of the tenders received, there was a requirement for the Project Team to update the Project Estimate based on an analysis of the initial tender proposals, received on 12th January 2007.
- 3.2 The Tenders were analysed to:
- Check that the full scope of the Project was included, by reference to the Functional Specification, Employer's Requirements and Preliminary Design;
  - Identify assumptions and check that they were reasonable;
  - Check the integrity of programmes and methodologies and that they were deliverable;
  - Identify qualifications and their impact on the cost and deliverability of the scheme and integrity of the procurement strategy;
  - Identify suggested improvements and savings proposals and assess their deliverability; and

- Check that tender proposals were arithmetically correct.
- 3.3 Based on this analysis, the prices from each tender were adjusted so that they were directly comparable. The Project Estimate was then updated. Related project overhead, risks and contingency allowances would also be adjusted. An updated Project Estimate Report was then produced.
- 3.4 A dedicated Project Team was set up to undertake this analysis. The sensitive nature of the exercise was highlighted and guidance was given to the team to maintain the necessary level of commercial confidentiality.

## 4 INDEPENDENT REVIEWERS BRIEF

- 4.1 Once the IRT was identified, the following Brief, prepared by Geoff Gilbert – Project Commercial Director, TRAM Project was received. The full Brief is included as Appendix 1 to this report.

*The Project required Scott Wilson to provide an independent review of the updated Project Estimate. The outcome of this review to be set out in a report submitted to the Tram Project Commercial Director. The report is to set out Scott Wilson's view on the:*

- *Analysis and estimate update process adopted by the Project;*
- *Adjustments made to the Project Estimate;*
- *Integrity, consistency, robustness and reliability of the Project Estimate Total and its constituent elements; and*
- *Conclusions and recommendations contained within the Updated Project Estimate Report.*

*Scott Wilson is to present its report to the Project on completion and separately to Transport Scotland. It is understood that, Transport Scotland will use the report as an independent validation of the integrity of the Project Estimate.*

## 5 PROGRAMME

- 5.1 The programme for the preparation of the Project Estimate Update and Scott Wilson's report was:
- Receipt of Initial Infraco Bids – 12 Jan 07
  - Completion of analysis – 17 Jan 07
  - Completion of Updated Project Estimate – 17 Jan 07
  - Preparation of draft Project Estimate Update Report – 18 Jan 07
  - Presentation of draft Project Estimate Update Report to Tram Project Board DPD Sub Committee– 18 Jan 07
  - Finalisation of Project Estimate and Report – 22 Jan 07
  - Finalisation of Scott Wilson Report – 25 Jan 07
  - Presentation of Scott Wilson Report to Tram Project – 25 Jan 07
  - Submission of Tram Project Update Report to Transport Scotland – 26 Jan 07

- Submission of Scott Wilson Report on Tram Project Update Report to Transport Scotland – 26 Jan 07
- Meeting with Transport Scotland to Review Reports (Scott Wilson to attend) – 30 Jan 07

## **6 TENDER REVIEW PROCESS**

- 6.1 A documented process set out in a briefing paper 'Initial Analysis' for reviewing the tenders had been developed by the Project Commercial Director and carefully distilled to the tender review Project Team. The Independent Reviewers were briefed on this process.
- 6.2 From the Project Team, discipline teams were set up to review the following aspects of the Tender:
- Financial / Contractual
  - Programme and Methodology
  - Technical
  - Technical – Scope
  - Financial
  - Arithmetical check
- 6.3 Check lists were prepared by each of the above disciplines to confirm the full scope of the work as detailed in the tender documentation had been included in the tender.
- 6.4 From these checklists detailed 'Initial Analysis Reports' were produced with comprehensive back up in the form of 'Assumption Tables'.
- 6.5 Regular Status Meetings were held with the Project Team where areas of concern were discussed. The meetings allowed information flow across all disciplines, thus providing the necessary level of cohesion and unity to the assessment. The following actions were taken after distillation of the various analysis reports and assumption tables:
- Discussion points clarified by other team member;
  - Discussion points deemed not to have cost implication and closed down;
  - Discussion points deemed to have cost implication, element price adjustment required; and
  - Discussion points to be raised as Technical Query with Tenderer(s).

## **7 PROJECT ESTIMATE UPDATE PROCESS**

- 7.1 On completion of the Tender Review, the Project Estimate was available for updating. This involved:
- Substituting lowest adjusted price from Bidders for current Infraco works estimate

- Adjusting Project Overhead costs – tie and TSS costs
  - Adjusting Direct and Indirect Risk allowances
  - Preparing a Project Estimate Update Report
  - Meeting to review and confirm amended Estimate, Programme and QRA
- 7.2 It was decided that, 'If the figures are within the overall £500m for Phase 1a and £92m for Phase 1b tie will not adjust the totals – but will update to put more in risk and contingency'.
- 7.3 In addition to the Project Estimate, updates of the following were undertaken:
- Programme Update including:
    - Update the Infraco activities for each Phase (or at least milestones) for the validated programme information that tie get back (no change to programme if Infraco milestones for Completion of Construction and for Completion of Trial Running)
    - Consider what overall time risk tie may wish to include
    - Baseline Project Programme

## 8 INDEPENDENT REVIEW PROCESS

- 8.1 The IRT received background papers and attended a detailed briefing session with the Project Commercial Director. Information was made available, firstly by access to a secure room where the returned tenders were held and secondly, via the 'Edinburgh Tram Project Estimate Report collaboration secure web site'. The Commercial Director and Project Team were available during the review.
- 8.2 To complete the exercise, a full range of documents was reviewed. These fell into 3 main categories:
- Group 1:
    - Background documents on which the tender was based.
    - Background documents on which the estimate was based.
  - Group 2:
    - Returned tender documents.
  - Group 3:
    - Papers on which the updated Project Estimate was based.
- A full listing of these documents is included at Appendix 2.
- 8.3 Interviews were held with Project Team Members during the review. The purpose of this was to clarify details abstracted by the Review Team, to assess the Project Team's knowledge of the process and their ability to provide the necessary level of professionalism on which financial decisions would later be based. During the review process the following people were interviewed:
- Geoff Gilbert                      Project Commercial Director
  - Douglas Leeming                TSS Project Director
  - Tom Hickman                      Project Planner

- Bob Dawson                      Head of Procurement
- John Pantony                     Project Estimator
- Nina Cuckow                     Project Risk Manager

8.4 The IRT was impressed with the extent of the knowledge, experience and professionalism shown by the project team, each of whom is clearly an asset to the project.

8.5 The IRT had open access to meetings held by the Project Team during their assessment process. The following meetings were attended:

10.00hrs Thursday 18th January, briefing Project Commercial Director  
17.00hrs Thursday 18th January, full Project Team Meeting

8.6 A close out meeting was held with the Project Director and the Project Commercial Director on 24 January 2007

## **9 INDEPENDENT REVIEW OF TENDER ASSESSMENT**

9.1 The IRT undertook a review of the process as detailed previously in Section 6 of this report. The IRT found this process to be realistic in achieving the required aims, well structured and clearly understood by the Project Team. From attendance at structured meetings, interviews with Project Team staff and audits of the various documentation, there was clear evidence that the process achieved the desired outcomes and this part of the Brief had been satisfied.

9.2 The arithmetical check was undertaken by 2No. graduate engineers. Mistakes were identified and section totals and final tender sums corrected. This information was fed back to the Project Team for the appropriate adjustments to be made. The IRT found this element of the assessment to be satisfactory.

9.3 The examination of the tenders looked into the pricing methodology in order to examine the different ways the two Tenderers had approached the build up to the submitted figures. As would be expected, this revealed that whilst the two bids were exceptionally close to each other in total, and to the tie estimate, they contained areas of differing pricing strategy.

9.4 Whilst these high level comparisons should not be taken to indicate anything other than a different approach to the pricing, they do provide a scope for commercial discussion.

9.5 During the review of the tenders the IRT had several areas of concern that were raised and discussed with the Project Team. Those that were not fully resolved and which the IRT feel could still impact on the Project Estimate are detailed below:



Contractual, acceptance of terms and conditions

- 9.6 Both of the submissions contain extensive comments, alterations and alternative proposals to the Contract Terms and Conditions, as a result of tie requiring a full contract mark up, of what is a bespoke contract. Such wide spread and substantial amendments are far in excess to that normally associated with major schemes, based on standard contract forms. This will require much work to reach an acceptable conclusion.
- 9.7 However, on this occasion, the concerns are partly mitigated by the contract itself. The proposed contract is extremely large and contains many conditions that any contractor would find difficult to accept. For this reason it is understandable that both of the Tenderers has elected to adopt an equally aggressive position. There is no doubt that the Tenderers will accept many but not all of the points to which they currently object. The degree to which the Tenderers are willing to compromise will be the outcome of the negotiations due to be completed by the end of March 07.
- 9.8 The fact that the contractual negotiations will be completed before the commencement of the financial negotiations is most important. It places the onus on the Tenderers to accept terms and conditions that best reflect tie's aspirations and gives a fixed basis for the financial negotiations.
- 9.9 This is a sensible strategy and one which the IRT believes will, albeit with extensive and pragmatic negotiations, produce a workable set of contractual conditions.

Design completion by SDS

- 9.10 The design and associated programme for the tram network is critical to delivery of the project, a fact well appreciated by the Project Team. The design is being progressed for tie Ltd by SDS (Parsons Brinkerhoff) and will be novated to the successful Tenderer. During discussion with the Project Team, the IRT became aware the design is behind programme. The consequence of this with regard to overall scheme programme is obvious, particularly as the 'due-dilligence' period approaches. Lateness of design will have impacted on the quality of design given to the Tenderers to price and will affect tender prices, additionally provisional sums were added to cover lack of detail.
- 9.11 These are facts that are known to the tie management are being addressed in an agreed manner with the designer.
- 9.12 The IRT reviewed the preliminary design issued to the Tenderers. Whilst the IRT recognise the flexibility required by Tenderers, in a design and build environment to suit preferred technology and techniques, (ie structures and Systems), concerns are raised that other critical elements appear to lack definition, notably track / track-bed, roadwork and city-scope.
- 9.13 IRT understands that measures are to be taken to guarantee design is removed from the critical path by resourcing or reprogramming. Priority needs to be given to the track, other high cost items and completing the value engineering exercise.

Track, sufficiency of design

- 9.14 The track form and track bed are key cost items forming in the order of 30% of the tender total and are critical to construction programme certainty. It was recognised by the Project Team that the Employers Requirements in this area were limited due to ongoing development to achieve the optimum design. The Project Team as part of the tender review process made comment on the adequacy of each proposal in this regard and whilst generally tender returns are acceptable and can be further developed to fully conform, there are outstanding issues to be resolved. Of concern to the IRT are various comments throughout the tenders regarding the appropriateness of the current design with both Tenderers offering alternatives, particularly thinner bed construction, which would offer significant savings to Infraco and possible benefits to the MUDFA contract. The IRT has discussed this aspect of work with the Project Team and is assured all effort is being made to complete design and make necessary adjustments to the estimate.

Maintenance liability

- 9.15 The initial proposal for the maintenance of the Infraco installed works was that it would form part of the Infraco tender. Because of time constraints it was decided that this would not be so and the maintenance work would form part of separate negotiations before finalisation of the contract.
- 9.16 One of the Tenderers submitted fixed price bids for the first six years of maintenance and indicative rates for the remainder of the concession. The other Tenderer did not submit any maintenance costs or projections.
- 9.17 From the values submitted by the one Tenderer and allowing for inflation it would appear that the total maintenance cost is going to be in the region of 50% of the capex cost for the installation works. It is therefore of concern to the IRT that not more attention has been paid to the consequences of this matter during the review of the tender submissions, due no doubt in part, to the lack of time available. The IRT understands that maintenance will be examined in greater depth during the forthcoming negotiation period.

Whole Life Costing

- 9.18 In the long term, the consideration of whole life costing has a substantial affect on the final outturn cost of the system. Any effort to reduce installation costs by introducing more economical materials can result in continuing increased cost throughout the operational life of the system. What may appear the least expensive option at tender review will almost certainly produce the highest cost at the end of the concession. Against this must be weighed the need to prevent 'gold plate engineering solutions'.

- 9.19 A pragmatic approach to whole life costing can steer a course that will provide a system that provides a robust solution without incurring unnecessary cost. The IRT understands that this is a subject that receives some attention but it comes as a surprise to the IRT that not more emphasis has been put on a review of whole life costing issues throughout the tendering process.

## 10 INDEPENDENT REVIEW OF PROJECT ESTIMATE

### Previous Estimates

- 10.1 The IRT gave due consideration to the previous estimates, recognising the benefit of the current pricing information contained in the Tenders. The value of a good base on which to build the cost estimate was appreciated by the Project Team and detailed in the Preliminary Design Stage Project Estimate Update produced in November 2006. The high level of accuracy anticipated has proved to be slightly unrealistic with regards to adjusted Tender totals. However, the IRT recognise that these figures will reduce following negotiations and value engineering exercises, bringing them more in line with the base estimate. The IRT therefore, has confidence in the cost base being used to value future variations or additions.
- 10.2 One aspect that assisted in giving the high confidence level was a benchmarking exercise undertaken by the Project Team against the Mersey Tram Project. It should be recognised however, the rates abstracted from this project were tender rather than as built costs. Which, given that at this stage tie seeks to make comparison with the tenders it has received, is a valid exercise. A benchmarking exercise, against comparable as built elements of a completed project, such as the Dublin Tram, to ascertain any variations from tender estimates to as built costs, would give further reassurance. Earlier tie reports suggested that such an exercise would be undertaken.

### Adjustments to the project Estimate

- 10.3 Having reviewed both of the tenders in detail, tie is in a position to make adjustments for items that the Tenderers have indicated they have not priced but which it is known will be required or where the Tenderers have made incorrect assumptions. Adjustments have also been made for any substantial changes that have occurred since the tender cut-off date. In order to complete this exercise, the additional works were estimated using the contractors' comparable figures and reference to Mersey Tram.

#### Reliability of Project Estimate Total and Constituent Elements

- 10.4 In comparison with the tender figures received from the two Tenderers, tie's Base Estimate was between 12% and 17% below the submitted figures. tie examined the main areas of discrepancy, which were different for the two Tenderers. In one tender it was noted that the amount set against Preliminaries was far higher than had been allowed. Both of the Tenderers had valued the structures element much higher than in the tie base estimate. Equally both submitted figures for buildings, which were measurably lower than the base estimate.
- 10.5 These differences merely indicate the vagaries of estimating and the fact that certain costs are taken as part of one element by one estimator and as part of another by a second estimator. The fact that the base estimate was in the same arena as the initial tenders, which are the contractors opening shots for the negotiation phase, is significant.
- 10.6 The price adjustments referred to in 10.3 above serve to increase the two tenders. Against this must be set the savings thought possible to achieve through the value engineering exercises and as a result of negotiations. These are moving targets and it is essential that tie maintains its base estimate, updated to reflect established changes to costs resulting from the tender process and subsequent negotiations.

#### Risk Register

- 10.7 tie maintain a fully populated, detailed risk register. The register is the summation of inputs from the project managers and estimators. It incorporates the usual probability and impact analysis with the output for each line item being fed into Active Risk Manager software. The overall total is then subjected to a Monte Carlo analysis. The resulting P90 figure is then proportioned into the various sub elements. This methodology has been used to produce the risk figure for the Infraco works.
- 10.8 The manner in which risks are dealt with and the handling of the risk register are demonstrations of best industry practice.
- 10.9 Accompanying any risk register is the need for a mitigation strategy, together with a defined way for the strategy to be implemented. This is not so evident at this stage of the tendering process although each project manager is required to produce Treatment Plans for inputting into Active Risk Manager. Additionally, each project manager is expected to prepare monthly status reports on the top 5 risks within his project remit.
- 10.10 The usual 80%-20% rules apply with the most significant risks being reported through the Primary Risk Report. This includes reference to those risks with the soonest impact and all those with Catastrophic Impact Probability.

### Value Engineering (VE)

- 10.11 The project is at a preliminary design stage and as such a value engineering exercise should generate savings. This has been highlighted by the Tenderers, with one suggesting, to suit its methodologies, areas to value engineer savings to the value of £10m. Clear examples are detailed in its tender. In addition the Project Team has commenced a VE exercise and produced a report for review ' Infraco Initial Tender Return Project Estimate Update –Value Engineering.' It would seem from assessment of these two pieces of work, £10m is a conservative estimate and figures closer to £20m may be readily achievable. The IRT recognise the urgency of completing the initial VE exercise with focus on key areas such as; track, depot and structures, to better understand the magnitude of savings.
- 10.12 It is recognised further savings will have to be found, as the current design is refined, the programme phasing reviewed and negotiations undertaken with the Tenderers during the Stage 2 process, in order for the aspirational target to be achieved.

## **11 COMMENT ON CONCLUSIONS AND RECOMMENDATIONS IN 'UPDATED PROJECT ESTIMATE REPORT'**

- 11.1 Having thoroughly reviewed the process and the resulting output reports, the IRT is confident in being able to agree with the following conclusions drawn together by the Project Team:
- Scope, full scope is included in the adjusted tenders;
  - Programme, programmes and methodologies provided by the Tenderers broadly show completion within the specified periods, although further discussions are required on this matter;
  - Engineering, there are no insurmountable issues with Tenderers engineering proposals; and
  - Contract, evidence was produced to suggest Tenderers are prepared to enter a D&C style contract with associated risk transfer as a result of a further period of negotiations.

The Project Team further conclude, with regard to cost savings, there is a reasonable prospect of delivering savings to bring the Infraco costs in line with the Preliminary design estimate. The IRT identify that this would mean generating savings in the order of some 10% of the adjusted tender total, in order to meet the Project Team's updated Project Estimate (cautious).

Whilst the IRT saw early evidence to substantiate this, the ongoing design development and further engagement with Tenderers will give the IRT the necessary level of confidence to endorse this statement.

## 12 OBSERVATIONS

- 12.1 The Edinburgh Tram is a complex multi-discipline engineering project with a total project cost estimate of £592m. of which £264m had been allocated to the Infraco Contract for Phases 1a and 1b. Clearly the time made available to undertake the tender analysis and produce an Updated Project Estimate of such a project was short, allowing only some 11 days. The Project Team were aware that the assessment requested was an analysis rather than a full evaluation of the Tender, even so the IRT consider more time would allow another level of robustness to be applied to the estimate. The fact that this is an on-going process which will last throughout the negotiation phase, ameliorates the consequences of the curtailed review period.
- 12.2 A separate tender competition is underway for provision of the tram vehicles (Tramco) and four tenders have been returned. It is intended that the successful Tramco Tenderer will be novated to the Infraco team. Within the Infraco tenders both Tenderers has formed a relationship with a tram supplier, both of which coincidentally are included in the Tramco tender competition.
- 12.3 The IRT recognise the benefits of a fully competitive process to obtain best value for the Tramco tender. Equally any financial benefits of provision of tram vehicles within the Infraco tender should be fully explored. Other potential benefits should arise from:
- Reduced risk to tie from Infraco;
  - Earlier arrival at Preferred Bidder status;
  - Easier interface management; and
  - Simplified contractual arrangements.
- 12.4 It should be recognised that within the tender provided by "Scoop", a construction and maintenance discount was offered for provision of the JV Partners' vehicle. IRT would have expected the procurement strategy for tram vehicles to be reviewed in light of the Infraco tender returns, once the maintenance elements have been included.

## 13 CONCLUSIONS

- 13.1 The review of the two tenders for the provision of the Infraco services for Edinburgh Tram has been carried out in a professional and well planned manner. Particularly given the short time allowed for undertaking the review. The individual team members have shown an understanding of the project and their roles within the team.
- 13.2 Throughout this report there are matters that the IRT has noted as giving cause for concern. However, it is not considered that any of these are 'show stoppers' or indeed, matters that cannot be adequately addressed throughout the forthcoming negotiation period.

- 13.3 Given the difference between the current adjusted total and the base estimate figure, the IRT considers that there is still an amount of work to be done before it will be possible to have a contract agreed by both parties at a price acceptable to tie and to the funders. Although, it can never be certain at this initial stage, that the targets will be fully met, given the apparent willingness of both Tenderers to come to the table and the obvious willingness of the team to make the effort, there must be a significant chance of this happening.
- 13.4 Having carried out its review, the IRT acknowledges that there is considerable scope for further savings through both value engineering and commercial negotiations. The IRT supports the approach being taken to achieve these savings.

## **APPENDIX 1: INDEPENDENT REVIEWERS BRIEF**

### **EDINBURGH TRAM NETWORK – BRIEF FOR THE PROVISION OF PROJECT ESTIMATE REVIEW SERVICES**

Date: 11th January 2007

#### **1.0 Background**

- 1.1 The Edinburgh Tram Project is tasked with delivering an operational tram network within the city. This network consists of a tramline from Newhaven, through the centre of the city to the airport (Phase 1a) with a line running north west from Haymarket to Granton Square (Phase 1b).
- 1.2 The current status of the project is:
- Business Case Approved by City Of Edinburgh Council in December. Transport Scotland have agreed to provide funding for the delivery of Phase 1a, subject to confirmation of affordability based on the initial tender proposals returned by Infraco bidders. Phase 1b will be reconsidered at a later date.
  - Preliminary Design Work completed
  - Tramco (tram vehicle) Infraco (tram infrastructure) procurement – the tenders for the tram vehicle have been returned and bids for infrastructure will be returned on the 12<sup>th</sup> January 2007.
  - The Infrastructure bids are being sought on the basis of a firm contract for Phase 1a with an option for Phase 1b. This is based on the following programme:
    - Phase 1a – contract award October 2007, completion of construction works July 2010 and delivery into revenue service December 2010.
    - Phase 1b – commencement July 2008, completion of construction works July 2011 and delivery into revenue service December 2011.
- 1.3 An update to the Project Estimate was prepared in November based on the Preliminary Designs for the Edinburgh Tram Network. The total project cost estimate is £592m for both Phases including risk and optimism bias. A copy of the estimate report is included as Appendix A.
- 1.4 To enable confirmation of affordability, or otherwise, the Project Team will update the Project Estimate based on an analysis of the initial tender proposals returned by Infraco bidders.

#### **2.0 Analysis Of The Initial Tenders And Project Estimate Update**

- 2.1 The Initial Tenders will be analysed to:
- Check that the full scope of the Project is included by reference to the Functional Specification, Employer's Requirements and Preliminary Design.
  - Identify assumptions and check that they are reasonable



- Check the integrity of programmes and methodologies and that they are deliverable.
- Identify qualifications and their impact on the cost and deliverability of the scheme and integrity of the procurement strategy
- Identify suggested improvements and savings proposals and assess their deliverability.
- Check that tender proposals are arithmetically correct.

2.2 Based on this analysis the prices from each bidder will be adjusted so that they are on a directly comparable basis.

2.3 The Project Estimate will then be updated substituting the lowest adjusted bid price that the Project Team has confidence is deliverable for the current allowances within the estimate for infrastructure works. Related project overhead, risks and contingency allowances will also be adjusted accordingly. An updated Project Estimate Report will then be produced.

### **3.0 Services Required from Scott Wilson**

3.1 The Project requires Scott Wilson to provide an independent review of the updated Project Estimate. The outcome of this review is to be set out in a report submitted to the Tram Project Director. The report is to set out Scott Wilson's view on the:

- Analysis and estimate update process adopted by the Project.
- Adjustments made to the Project Estimate.
- Integrity, consistency, robustness and reliability of the Project Estimate Total and its constituent elements.
- Conclusions and recommendations contained within the Updated Project Estimate Report.

3.2 Scott Wilson are to present their report to the Project on completion and separately to Transport Scotland. Transport Scotland will use the report as an independent validation of the integrity of the Project Estimate.

3.3 The Tram Project will provide office space at its City Point Offices for Scott Wilson together with access to the Infraco Bidders Initial Proposals, Tram Project analyses of these bids, Project Estimate Update and backup papers. The Tram Project will make available its personnel to answer any questions and queries that Scott Wilson may have and which are necessary for them to deliver the required services.

### **4.0 Programme**

4.1 The programme for the preparation of the Project Estimate Update and Scott Wilson's report is:

- Receipt of Initial Infraco Bids – 12 Jan 07
- Completion of analysis – 17 Jan 07
- Completion of Updated Project Estimate – 17 Jan 07
- Preparation of draft Project Estimate Update Report – 18 Jan 07
- Presentation of draft Project Estimate Update Report to Tram Project Board DPD Sub Committee– 18 Jan 07
- Finalisation of Project Estimate and Report – 22 Jan 07

- Finalisation of Scott Wilson Report – 25 Jan 07
- Presentation of Scott Wilson Report to Tram Project – 25 Jan 07
- Submission of Tram Project Update Report to Transport Scotland – 26 Jan 07
- Submission of Scott Wilson Report on Tram Project Update Report to Transport Scotland – 26 Jan 07
- Meeting with Transport Scotland to Review Reports (Scott Wilson to attend) – 30 Jan 07

## **5.0 Terms And Conditions**

- 5.1 The services provided by Scott Wilson are to be on the basis of the terms and conditions and reimbursement arrangements contained within the Framework Agreement established with tie.
- 5.2 Scott Wilson are to liaise with Geoff Gilbert, the Tram Project Commercial Director, in respect of the delivery of the services.
- 5.3 Scott Wilson and its personnel are reminded that the information and reports that they will be given access to is commercially sensitive and is to be treated as confidential information. Personnel delivering the services will be required to sign confidentiality agreements.

## **APPENDIX 2: LIST OF DOCUMENTATION REVIEWED**

### GROUP 1

Employers Requirements  
Functional Specification  
Preliminary Design  
Preliminary Design Stage Project Estimate Update Report, dated 9th  
November 2006  
Project Scope Document  
Project Scope Checklist

### GROUP 2

Returned tender documents

### GROUP 3

Separate Analysis Reports on technical (scope), technical (engineering),  
programme and methodology, contractual and financial.  
Base Estimate Comparisons and Summary  
Infraco ITN Analysis Summary  
Supporting Assumption Tables  
Overall report on the Initial Tender Analysis  
Updated Project Estimate Report  
Schedules of the assumptions, qualifications and omissions  
Risk Registers and @Risk outputs

